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**An Investigation of the Prevalence and Impact of
Organisational Learning in UK Police Forces**

VOLUME I

STEPHEN HARVEY RITCHIE

**A thesis, comprising two volumes, submitted
in partial fulfilment of the requirements of
The Robert Gordon University
for the degree of Doctor of Philosophy**

**This research programme was carried out with the support of a
Fellowship from the National Police Leadership Centre, Bramshill**

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Stephen Harvey Ritchie

Doctor of Philosophy

**An Investigation of the Prevalence and Impact of Organisational Learning
in UK Police Forces**

Abstract

This research aims to inform the relevance of Organisational Learning (OL) to policing management practice by investigating its impact and prevalence in UK policing. In the prescriptive literature, OL is propounded as an important aspect of effective organisations that needs to be leveraged. The field of OL is found to be diverse, lacking empirical work, and in need of suitable research techniques. To focus the research, a specific example of OL is proposed in performance management (PM) practice.

The PM literature shows the theoretical foundations for practice are underdeveloped. This research addresses this by combining these two fields. As a result, practical data is made available to support an examination of OL and a theoretical basis for PM is developed. In the absence of a suitable model to structure data collection, a new OL model of PM is derived from the literature.

A Critical Realist position is adopted which aims to identify the nature of the phenomena underlying OL.

Three case studies with UK Police Forces, which involved fifty-two interviewees, were undertaken during 2008. A pilot case study was undertaken in Scotland, with the follow-up case studies in England and Northern Ireland. The data from interviews is analysed in NVivo using a range of coding techniques. Using the results from these case studies, the provisional OL Model of PM is tested and developed further.

PM practice is found to involve the creation of knowledge and the creation of action and the relationship to organisational purpose is highlighted. Six elements of the OL process are defined as Attention, Analysis, Advising, Adjusting, Affecting and Achieving. Dimensions influencing PM practice in the cases are identified.

The outcomes of the research indicate relevance to policing management practice, as well as to the wider fields of PM practice and OL theory.

Keywords: Organisational Learning; Performance Management; Critical Realism; Case Study; UK Policing;

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Glossary and Acronyms

ACPO	The Association of Chief Police Officers
ACPOS	The Association of Chief Police Officers in Scotland
APACS	Assessments of Policing and Community Safety
APR	Annual Performance Review
BCU	Basic Command Unit
HMIC	Her Majesty's Inspectorate of Constabulary
HMICS	Her Majesty's Inspectorate of Constabulary in Scotland
HO	Home Office
HR	Human Resources
NIM	The National Intelligence Model
NPIA	National Policing Improvement Agency
OL	Organisational Learning
PM	Performance Management
PPAF	Policing Performance Assessment Framework
PSNI	Police Service of Northern Ireland
PSU	Police Standards Unit
SCDEA	Scottish Crime and Drug Enforcement Agency
SOCA	Scottish Organised Crime Agency
SIPR	Scottish Institute for Policing Research
SPC	Scottish Police College
SPPF	Scottish Policing Performance Framework
SPSA	Scottish Police Services Authority

Conventions

Although not proper nouns, for ease of reading, throughout this thesis terms derived to specifically mean an object within the thesis are distinguished by capital letters. For example, the Research Problem can be distinguished from any research problem. Apart from the Research Problem, this is primarily used for the Research Questions, the Case Study or Case Studies.

Contribution of this Research

The following list indicates outputs the author has produced or contributed to in the course of this doctoral research:

- IQPC Policing Performance Management Conference 2005, presentation / discussant.
- ACPOS Performance Management Seminar 2006, presentation.
- SIPR Workshop 2007, discussant.
- SIPR Annual Conference 2007, presentation.
- SIPR PhD Student Event 2008, poster.
- SIPR Annual Conference 2008, poster.
- IQPC Policing Performance Management Conference 2009, presentation.
- SIPR researchers group 2010, input on practical research contributions.

Draft papers have been submitted to British Academy of Management Conferences:

- Belfast 2006
- Harrogate 2008

Regular inputs have been provided at the Scottish Police College to:

- Strategic Command Course
- Senior Leadership Development Programme

In terms of practical application of the research, the researcher played a key role in a national project with the Scottish Government to develop the Scottish Policing Performance Framework. At the completion of the project in 2009, this contribution was acknowledged by Patrick Shearer, the Chief Constable of Dumfries and Galloway Constabulary and President of ACPOS.

This research also made a significant contribution to the development of a business intelligence warehouse for Grampian Police during 2005 to 2007. This acted as a proof of concept and pilot for the whole of Scotland.

Work is on-going with ACPOS and police forces in Scotland to develop a means of assessing PM practice.

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1-1 ORGANISATION OF THE CHAPTER

The following table (Table 1-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Problem.

Content	Relevance to Research Problem	Comment
Introduction	Introduces the reader to the nature and the context of the research.	The reason behind the research
The Research Problem Research Aims and Objectives	Defines the Research Problem and introduces the objectives in undertaking this research project.	Increasingly refines the approach using different techniques at each level.
Method and Contribution	Explains the approach taken to address the Research Problem and the contribution to knowledge and practice.	Practice driven research
Organisation of the Thesis	Explains the structure and content of the thesis	

Table 1-1 - Organisation of the Chapter

The aim of this Chapter is to establish the basis, objectives and methods adopted in this research as well as to familiarise the reader with the structure and content of this Thesis.

1-2 INTRODUCTION TO THE RESEARCH

This section describes the rationale behind the research, the context in which it occurs, as well as the scope of the research.

1-2.1 Rationale

The researcher is a serving police officer with Grampian Police, one of eight Forces in Scotland, and one of fifty-two in the UK. Over the past eight years, he has gained considerable practical experience through contributing to strategic developments with Grampian Police as well as at a national level. He has also supported a performance

management project involving collaboration between ACPOS and the Scottish Government.

This doctoral programme has been funded and supported by a fellowship from Bramshill, the home of the National Police Training Centre. This fellowship scheme is aimed at encouraging senior police personnel to register with a University to conduct research directed towards the solution of policing problems. The award was made on the basis that the research contributes to improving the effectiveness of policing performance management.

The driver behind this study is that Organisational Learning (OL) is propounded as an important aspect of management in organisations and as something to be leveraged (see Chapter 3). Police Forces are uninformed regarding the relevance of OL and this research starts to address this by examining its impact and prevalence (see Chapter 2). The basis for this research then is to understand the prevalence and impact of OL on policing management practice in the UK.

Given the broad, indistinct nature of OL (discussed in Chapter 3), an exemplar of OL is required in order to focus the research. Other than its identification in the literature (e.g. Huber, 1991), the reason for the choice of performance management (PM) practice as the focus is largely opportunistic. The earlier introduction of PM practice to policing in England and Wales had resulted in pressure for the police service in Scotland to follow suit (see Chapter 2) and the practice of PM was therefore a topical problem within UK Policing. This problem was seen as potentially benefitting from being considered from the perspective of OL.

The need to give more weight to rigorous research that solves managers' problems, that is practice oriented research, is an current issue (Ghobadian, 2010). This research can clearly be seen as addressing a relevant and current issue in policing. The second part of the literature review (see Chapter 4) establishes the foundations of PM practice and establishing its relationship to OL.

The researcher has been directly involved in developing PM practice, both in Grampian Police and in Scottish policing. This has involved managing a project to implement a management information system to monitor performance, and a collaborative project between ACPOS and the Scottish Government to develop a national policing performance framework.

Whilst experience in the field is a positive attribute, the potential for bias has been constantly apparent to the researcher. This can influence through the process of developing concepts, undertaking the data gathering and completing the analysis, and every effort has been made to minimise this. Whilst the avoidance of bias in research is fundamental, it is viewed that the benefits compensated for this. This is especially the case where the aim is the development of practice oriented theory. The researcher has strived to maintain an awareness of potential bias and to take this into account in addressing the Research Problem.

The other side to this experience was the access to individuals at an early stage, the support of APCOS in gaining access to Forces to undertake Case Studies, the acceptance as a knowledgeable individual while conducting interviews, access to ‘restricted’ meetings and reports, as well as the ability to ‘think on the hoof’, adapting to the different circumstances and knowledge of interviewees.

From the perspective of Grampian Police, this research provides personal development for a member of staff and as well as practical outcomes of relevance to policing across the UK. The Scottish police service have provided a proportion of the time to undertake the research, facilities, as well as support for access to research material and enabling case studies to be undertaken.

During the period of study, the author has been a member of the British Academy of Management (BAM) and has attended, and presented development papers, at the annual conference. BAM workshops on content analysis, grounded theory, and performance management research have also been attended. Also member of the Performance

Management Special Interest Group of BAM and has attended SIG workshops. These have provided valuable feedback on PM and OL research issues, as well as contact with leading UK researchers in these fields.

The author has also been a member of EGOS (the European Group for Organisational Studies) and attended annual conferences in Bergen (2006), Vienna (2007), and Barcelona (2009). The 2nd International Doctoral School on Organizational Learning “Knowing in Practice: How to Study it?” held in Trento, Italy, was also attended. This was hosted and contributed to by significant authors in the OL field (e.g. Elkjaer, Gheradhi, Antonacopoulou, Orlikowski, and Bruni). This opportunity developed a deeper understanding of the nature of OL and provided a solid foundation in which to develop the research process.

Practitioner performance management conferences are regularly held and the author has been a regular attendee at national conferences since 2006. Contributions to these have been as follows:

- IQPC, Police Performance Management Conference, London, January 2006’. Presentation “Performance Frameworks and Organisational Learning” and discussion panel member.
- ACPOS Performance Management Seminar, Scottish Police College, 27th/28th July 2006. Presentation and Workshop “Performance Management Systems”
- IQPC, Police Performance Management Conference, London, Feb 2009 – Presentation “Performance Management: Findings from Case Study Research”

These have provided valuable feedback on developing ideas, as well as a degree of validation for the concepts developed.

The Scottish Institute for Policing Research (SIPR) was established after the commencement of the research process. Although this research is not formally sponsored by SIPR, the author has been welcomed at the SIPR annual conferences and workshops and has presented

on research progress, early findings from this research, and on the need to deliver practical outcomes from policing research. Workshops and conference inputs are shown below:

- SIPR Workshop - Leadership and Partnership: Exploring Ideas and Creating Connections, April 2007. Discussant - The Challenges of Developing Leaders
- SIPR Conference, September 2007. Presentation – “Learning from Performance?”
- SIPR PhD Student Event 2008. Poster – “Organisational Learning from Police Performance Management”
- SIPR Conference 2008. Poster – “Using an organisational learning perspective to understand and improve performance management in the police service”

Being associated with SIPR has provided valuable links to other policing researchers as well as a vehicle through which access to Police Forces has been facilitated.

Contributions have also been made to Senior Leadership Development Programme at the Scottish Police College. These cover the following topics:

- Performance Management Practice
- The National Intelligence Model and Performance Management

Discussions with attendees have also helped to validate the approach taken and the relevance of the research.

1-2.2 Scope of the Research

The principals underlying the concept of OL are derived from the literature in Chapter 3, whilst Chapter 4 reviews the PM literature.

Three areas in which learning may be identified are cognition, potential behaviour, and actual behaviour (Tsang, 1997). Learning may occur in any one of these areas or in a combination of these. This is represented in Figure 1-1.

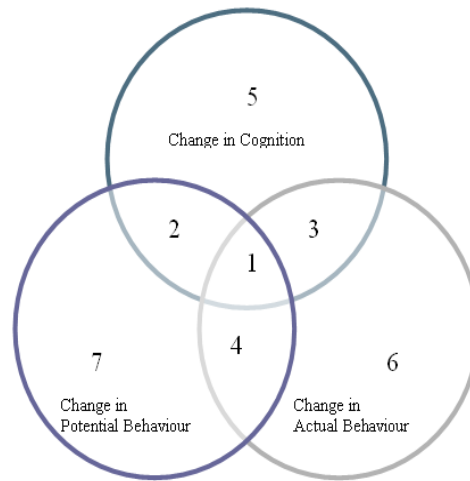


Figure 1-1 - Areas of Learning. Source: After Tsang, 1997

This research adopts a behaviourist perspective to OL in that actual behaviour may change or the potential for new behaviour may be created. Although it is acknowledged that difficulties exist in establishing link between what is learned and behavioural change (Tsang, 1997) or knowledge and action, it is viewed that it is even more difficult to establish changes in cognition.

It will be shown that the practice of PM provides a clear and accessible example of an OL mechanism. As such it provides a medium through which OL can be accessed to provide greater understanding about the structures, mechanisms, and influences on practice.

The variables that intervene in OL, the way in which it contributes to firm performance and in what circumstances are identified as areas requiring future research (Lyles and Easterby-Smith, 2003, p644). As will be seen from the literature review, it is apparent that the relationship between OL and organisational performance is not simply that one affects the other but that they are different aspects of the same thing.

This research focus is on the general practice of strategic performance management (as distinct from managing individual performance). Strategic PM is aimed at delivering

organisational level objectives. This focus ensures that organisational level learning and individual learning associated with individual performance are not confused.

A wide variation in qualitative approaches are found and Chapter 5 explains why NVivo (QSR International Pty Ltd, 2007) is used to organise the data collected from Case Studies. Although often confused as a method of analysis, NVivo is clearly established as a tool with which to manage and manipulate data. To minimise repetition during later Chapters, Appendix A clearly explains the manner in which NVivo was deployed.

The scope of the theory ultimately developed in this thesis is PM practice within the three case studies undertaken. It is proposed that the findings are likely to be applicable to other police forces in the UK. This is based on the prescribed nature of PM practice in the England, and the author's experience of practice in Scotland.

The findings also have implications for the broader context of OL. As PM is viewed a subset of OL, any explanation of OL must be able to account for this. The findings and implications for both OL and PM theory and practice are discussed in Chapter 12.

1-3 ADDRESSING THE RESEARCH PROBLEM

The strategy for answering the Research Problem, and how this has been developed, is discussed more fully in Chapter 5 - Research Method. In this section, a brief overview is provided of the process of reducing the research problem to a set of aims and objectives, which are addressed through the research method and more specific research questions.

Here, the nature of the Research Problem, the Research Objectives, and the process for developing Research Questions are introduced.

1-3.1 The Research Problem

The research problem was defined and agreed during the application process for the Bramshill Fellowship in 2004. The research problem relates to the relevance of OL to police management practice and the aim of this research then is to shed light on this. It is proposed that the relevance of OL can best be approached by determining its presence within policing management practice and the nature of its influence, that is, through understanding its prevalence and impact.

The learning organisation literature (e.g. Senge, 1990, Garvin, 1993, Goh, 1997) and the prescriptive OL literature (e.g. Nevis et al., 1995) advocate the importance of OL in terms of gaining competitive advantage. To the public sector and in particular the police, where competitive environments are less relevant, a competitive advantage is less relevant than a strategic advantage. This is seen as highly desirable and a likely outcome of OL (see full discussion in Chapter 3).

Understanding its prevalence and impact necessitates understanding the nature of OL and how it operates. However, the OL literature (see Chapter 3) generally focuses on the problems of its existence and its application, little detail is found in relation to how OL operates and how it could be observed in practice. As discussed above, the general nature of OL implied a more specific example of practice would be needed to enable the research to be conducted. This indicates a new model is needed and this research addresses this (see Chapter 6).

An examination of the prevalence of OL implies a quantitative approach to examine its presence across a representative sample of Forces in the UK. However, at the outset of the research it was recognised that without some exploratory work, OL practice could not be sufficiently defined to allow such an approach. This research therefore fulfils that initial assessment of what OL is and how it can be identified in practice. Based on the outcomes of

the research and the nature of practice in UK policing, the research is able to predict the likely presence of OL practice.

The literature describes an impressive range of factors likely to impact on the effectiveness of OL. However, Chapter 6 describes why these cannot be directly applied to the specific circumstances of PM practice in Police Forces. Therefore, to address this, the research develops a pilot approach to assess the nature of factors and then compare these across cases to establish a set of ‘dimensions of influence’. From this, an assessment is made about the ways in which OL is influenced and the extent to which learning is completed at an organisational level.

1-3.2 Research Objectives

	Objective	Related Chapter
i.	To understand the public policy and management context of performance management within the UK Police Service in the differing national contexts of England and Scotland	Chapter 2
ii.	To identify within academic literature and published practitioner material the nature of OL and the nature of PM. To critically examine the relationship between performance management and organisational learning	Chapter 3 & Chapter 4
iii.	To identify how the research problem can be addressed and the ontological and epistemological issues	Chapter 5
iv.	To develop a provisional theoretical model of OL based on the relevant literature	Chapter 6
v.	Design a pilot case study to analyse the performance management approach and to undertake that case study in at least one UK Police Force	Chapter 7
vi.	To design and undertake further case studies with Forces in other areas of the UK to revise, refine and validate the new performance assessment approach through critical analysis of the results	Chapter 8 Chapter 9 & Chapter 10
vii.	To develop theory, based on the evidence from PM practice, regarding the underlying nature of the OL process, its causal factors, and the influences on it. Based on this new and more integrative understanding of the underlying nature of performance management, the prevalence and impact of OL can be proposed.	Chapter 11

Table 1-2 - Research Objectives. Source: Derived by author.

To address the Research Problem outlined above, the objectives of this thesis are derived as shown in Table 1-2.

This set of objectives ensures the problem is comprehensively addressed and that the focus remains on OL in the context of policing management practice in the UK.

1-3.3 Developing the Research Questions

The research path adopted can be summarised as shown in Table 1-3. This shows increasingly detailed questions that were developed to address the Research Problem (level 1) and how these were addressed by the literature, the development of a provisional model, the case studies, and the outcomes of the research.

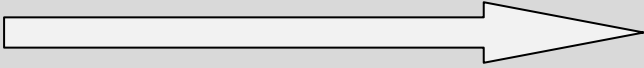
Research  Direction						
Level 1	Level 2	Level 3	Literature	Model	Case Study	Outcome
What is the relevance of OL to policing practice in the UK?	What is the prevalence of OL?	When is OL complete?	PM as example of OL	OL Model of PM	Test of Model	PM Model of OL
			Productive Action	How Action is based on performance based Knowledge	Test of knowledge based action	Theory of Completion of OL
	What impact does OL have?	What is nature of OL in PM?	Models of OL	The elements of PM process	Test of Model definitions	Theory of Process of OL
			Identified Factors	The underlying drivers for Process The factors influencing flow	Dimensions of influence identified	Theory of Influences on OL

Table 1-3 - Summary of Research Path. Source: Derived by author.

Chapter 6, describes how, having developed a hypothetical model from the literature, a set of research questions is established. These questions address the specific aspects of the model that required to be explored and tested. The Research Questions are shown in Table 1-4. They are contextualised by the two areas of the Research Problem, namely prevalence and

impact. The relationship between the questions and the areas of theory development are also shown in the table.

The form of these Research Questions makes them unsuitable for use direct application to interviewing case study participants. From experience, it is viewed that the specific nature of the terms used and the direct form of the questions would be likely to skew responses towards fulfilling the question rather than an unbiased description of the reality of the interviewee. A set of interview questions are therefore developed to allow the interviewee to describe the process. Those questions allow the user to describe their experience of practice around PM processes (see Chapter 6).

	Research Questions	Comment	Theory
Impact	RQ1. How is knowledge created within PM practice? RQ2. How is action created within PM practice? RQ3. Does performance knowledge influence organisational behaviour? RQ4. What is the nature of elements within each case?	Description of Elements and flow	Process
	RQ4. What is the nature of elements within each case? RQ5. In practice, what factors influence the PM process?	Description of Drivers, Factors, Relationships	Influences
Prevalence	RQ7. Which factors influence the completion of OL? RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?	Evidence of OL outcomes	Completion of OL

Table 1-4 - Summary of Research Questions. Source: Derived in Chapter 6.

This approach of refining each level until a suitable format for data collection is found, is underpinned by the Critical Realist position adopted (see Chapter 5). Ultimately a clear chain of evidence is provided, linking the findings to the Research Problem.

1-4 METHOD AND CONTRIBUTION

Chapter 5 develops a strategy to address the Research Problem. Here, the main aspects of that strategy are described. Also, the outcomes in terms of contributions to knowledge, contributions to practice, and originality are outlined.

1-4.1 Research Strategy

Critical Realist Position

The choice between quantitative or qualitative methods has often been seen as the basis for a rather simplistic choice of Positivist or Social Constructionist ontology. This simplistic choice is rejected in favour of adopting a Critical Realist perspective (Bhaskar, 2008, Sayer, 2000, Archer et al., 1998). This reassesses the underlying nature of scientific discovery and proposes a more natural retroductive method of drawing conclusions (Miles and Huberman, 1994). The introduction of this third option contributed to a more critical stance to understanding the phenomena of OL.

Qualitative or Quantitative

At the outset of this Research it was envisaged that the prevalence and impact of OL could be establish through a broad survey of Police Forces across the UK. However, as the literature review progressed, the researcher's concept of OL developed from the practitioner literature was replaced by a problematic and much less distinct concept within the academic literature. The absence of detail meant that a quantitative method, which is dependent on a high level of detail, especially in the form of the Research Questions, became impractical.

Case Study

A Case Study method (Miles and Huberman, 1994, Yin, 2003) is adopted both to collect data and provide a structure to data analysis. Chapter 5 describes the benefits and

drawbacks of this choice but essentially, the potential to collect rich data facilitated the further development of theory. Ensuring the validity of constructs derived from this approach is a key theme throughout the thesis and Eisenhardt's steps (Eisenhardt, 1989) are adopted to support this.

Thematic Content Analysis and QDA

As well as involving multiple case studies, this research considers the different ontological levels of OL theory and PM practice. It is argued that in such a complex situation qualitative data analysis software (QDA) comes into its own (Richards, 2005). QDA enables the effective management of the data and allows one set of data to be efficiently analysed from differing analytical perspectives. This enables theoretical outcomes as well as rich descriptive and explanatory results across multiple case studies.

The use of QDA is often associated with content analysis techniques, which are considered to involve a structured analysis of the meaning of language used by interviewees (e.g. Krippendorff, 2004). However, a wide range of coding techniques are identified in the literature (summarised in Table 1-5). Within this research, multiple coding techniques were applied, as was appropriate to the nature of the concept and the data being considered.

Coding Technique	Description	Source(s)
Descriptive Coding	Summarising in a word or short phrase the topic of, rather than the content, of a section of data	(Saldaña, 2009, Miles and Huberman, 1994)
Attribute Coding	Embedding specific attributes of the interview	(Saldaña, 2009, Bazeley, 2007, Miles and Huberman, 1994)
Simultaneous Coding	Applying multiple coding to single sections of text	(Saldaña, 2009)
In Vivo Coding	Literal or verbatim coding from the terms used by the participants themselves	(Saldaña, 2009, Charmaz, 2006, Glaser and Strauss, 1967, Strauss and Corbin, 1990)
Magnitude Coding	Adding to an existing code to indicate intensity, frequency, direction or evaluative content	(Saldaña, 2009, Miles and Huberman, 1994)
Evaluation Coding	Focus on patterned observations or	(Saldaña, 2009)

	participant responses of attributes and details that assess quality	
Versus Coding	Identify in binary terms the individuals, groups, social systems, organisations, phenomena, processes, concepts, etc., in direct conflict with each other.	(Saldaña, 2009)
Thematic Coding	Allocating text to themes, either etic or emic	(Saldaña, 2009, Boyatzis, 1998, Rubin and Rubin, 1995)

Table 1-5 - Coding Techniques. Source: Literature as cited

The application of these techniques to this research is described in Appendix A.

The QDA software used in this study is NVivo 8 (QSR International Pty Ltd, 2007). NVivo supports conclusion-drawing through the use of facilities for building provisional relationships, developing and testing these through modelling, and using memoing to capture ideas develop and how these develop over time.

1-4.2 Knowledge, Practice and Originality

The Research Problem is practitioner oriented, as is the intended role of the research. However, this practice oriented problem is addressed by contributing new theory and evidence to support it.

Contribution to Knowledge

The research provides a significant contribution to knowledge through providing a new theoretical model of the knowledge creation and action creation aspects of OL. This differs from existing models of OL (e.g. Crossan et al., 1999, Daft and Weick, 1984) which focus on the ‘stocks and flows’ or knowledge aspects.

As well as providing a theoretical model, this research has contributed to its validation through three case studies of management practice in UK policing.

The existing PM literature tends to focus on the choice and nature of performance indicators (e.g. Kaplan and Norton, 1992, Neely, 2005). The application of OL to the field of PM is

relatively new and continuing to develop (see Antonacopoulou, 2001, Greve, 2003, Radnor, 2007, Stringer, 2004). This research makes contribution to this field by providing empirical evidence based on such an approach, and provides a new perspective on PM based on the OL Model of PM (see Chapter 6). The findings have the potential to inform the development of performance management thinking and procedures.

Early findings in the form of development papers have been presented at academic events (as discussed in the Introduction). Further submissions are intended on completion of this thesis.

Contribution to Practice

As this research is supported by Bramshill in order to address ‘practical policing problems’, it should make a significant contribution to this. This research explains the relevance of OL to Police Forces through a practical example of PM activity.

Chapter 12 describes how the outputs from the research are being applied to policing through developing a means of raising awareness of the nature of PM practice and aiding Forces to assess the presence and nature of influences on the PM process.

As well as the final outputs of the research, the research process has already influenced through the researcher, the Scottish Policing Performance Framework (SPPF) and the deployment of a significant management information system project in Grampian Police.

Findings have been distributed through practitioner events and will also be submitted tendered for publication.

Originality

A number of factors contribute to the originality of this thesis. These include combining the OL and PM fields through the use of an OL approach to examine PM practice, the

development of an OL Model of PM, and the examination of policing management practice. Each is now outlined briefly.

Early work on organisational learning (OL) focused on “exploratory” learning (Crossan et al., 1999, Huber, 1991). More recent research has shown that performance management processes are also forms of organisational learning (Moynihan, 2005, Stringer, 2004, Sun and Scott, 2003, Otley, 1999). At the commencement of this research, there was little practical application of OL theory to PM practice evident in the literature. This work makes an original contribution to this.

Within the literature, PM models largely focussed on the need to frame sets of performance measures to make them more meaningful, or to meet specific roles (Kaplan and Norton, 1992, Neely et al., 1995, Kennerley and Neely, 2000, Martinez et al., 2004). Little consideration was given to the context within which performance management worked within the organisation. This has been addressed by this work.

The first Scottish Institute for Policing Research Annual Report (2007) advised that academic research into UK policing and Scottish policing in particular, is relatively rare. There is a need to support public sector with well-founded theory in order to support more effective practice. This research makes a rare contribution to that.

1-5 ORGANISATION OF THIS THESIS

This thesis comprises eleven chapters that describe the identification of the Research Problem, the approach adopted to address the Research Problem, the development of hypothetical model, the collection and analysis of data, and the conclusions drawn as a result of that process.

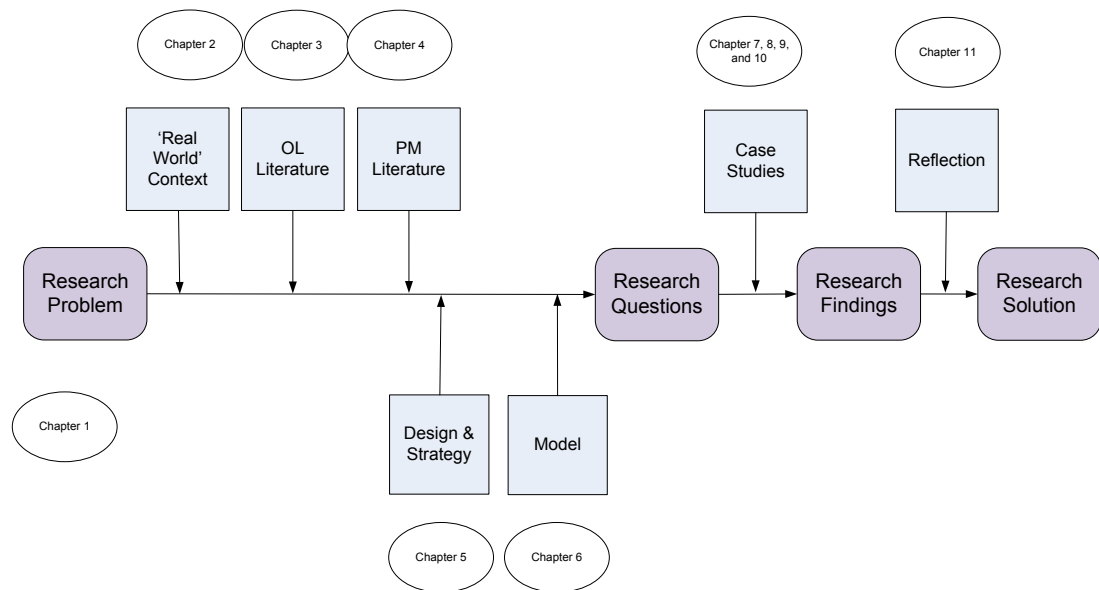


Figure 1-2 – The Research Journey. Source: Author Derived

The research journey from problem to solution is outlined in Figure 1-2.

Expanding on Figure 1-2, Table 1-6 below describes the content of the thesis chapters and briefly summarises the contributions made by each chapter to the research process.

Chapter	Chapter Content
Chapter 1	Identifies the research journey, from problem to solution (represented in Figure 1-2)
Chapter 2	Discusses the context in which the research is conducted.
Chapters 3	Reviews the OL literature and established the nature of the learning as an outcome and a process. The wider field of Organisational Knowledge, Cognition and Learning Theory are considered to provide context.
Chapter 4	Reviews the PM literature and examines the nature of PM as a process.
Chapter 5	Identifies an appropriate Ontological and Epistemological position from which to examine the phenomena. Identifies a strategy to data collection and analysis that will address the problem.
Chapter 6	Derives a provisional OL Model of PM from the literature to structure the data collection and analysis. Derives a set of Research Questions.
Chapter 7	Describes a Pilot Case Study and examined the data from the perspective of the Research Questions.
Chapters 8 & 9	Within-case analyses of two more Case Studies.
Chapters 10	Cross-case case analysis of all three cases.
Chapters 11	Summarises the analysis process and its findings, discussing these in the light of the extant literature and considering the implications for policy and practice in UK policing.

Table 1-6 - Structure of this Thesis. Source: Derived by Author.

1-6 REFLECTION

The Critical Realist literature (Bhaskar, 1989, Archer et al., 1998, Sayer, 2000, etc) propounds the benefits of a reflexive, critical stance in assisting the researcher to stand back from the problem and view the whole. In this spirit, each chapter of the thesis concludes with a short reflection on the research process and what, with hindsight, could have been done differently. This process has provided a useful tool.

The application of your own skills and experience are easily overlooked and the author's experience in the field has provided a challenge when writing up this thesis. Many aspects of policing and PM practice, which are obvious to the researcher and the practitioner

communities, have had to be explained to the reader. However, this thesis is aimed at a wider audience and it has aimed to find a balance between clarity and verbosity.

This thesis is not seen as a conclusion to the research, but rather part of the process of reflection. It has been useful to collate all the arguments together in order to provide a solid foundation for developing the work further. Experience and findings from the conduct of the cases, much of which can never be capture within a single thesis, have provided useful insights to practice and raised a wide range of questions that the author would like to address in the future. The research into OL and PM will continue, with the wider implications of the data already collected being considered.

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2-1 ORGANISATION OF THE CHAPTER

The following table (Table 2-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Problem.

Content	Relevance to Research Problem	Comment
The Structure of UK Policing	Provides a description of the context in which the research problem is to be investigated	Assumes PM as example of OL
Policing in Scotland, England and Wales, and Northern Ireland	Considers the varying structures in place across the UK, the drivers for these, and the relevance to the field in which the research problem is to be investigated.	
UK Public Sector Reform	Examines drivers for the presence of performance management and their implications for practice	PM is interesting and relevant area for research
Comparison Of The UK Contexts	Considers the impact of the differing positions and how this impacts on the research problem	Requires data from different areas of UK
Updating the Context	Provides an update on the changes that have occurred since the research commenced.	Highlights the pressures on practice

Table 2-1 - Organisation of the Chapter

This Chapter aims to provide an overview of the nature of policing management practice, consider whether this is a suitable medium in which to conduct the research and the implications for the research process.

2-2 INTRODUCTION

This Chapter introduces and describes the context of the management of performance in UK policing. The varying practices of performance management (PM) across the police Forces

in the UK, the drivers for this variation, are considered and conclusions regarding the implications for the research are drawn.

The context in the three areas of the UK and the stakeholder perspectives are examined in detail and contrasted.

This chapter was written at the outset of the research, and represents the context at that time. A section is included at the end of the Chapter to provide an update on how the context has changed since the research started.

2-3 THE STRUCTURE OF UK POLICING

Before looking at the differences between policing across the UK, we first consider the similarities.

Throughout the UK the nature and structure of policing has strong similarities. Across the UK, policing is organised through individual Forces, each headed by a Chief Constable. There are fifty-two geographical Police Forces in UK (i.e. excluding British Transport Police and the Civil Nuclear Constabulary). Forces are subdivided into operational areas. These operational areas are generally termed Basic Command Units (BCU) in England and Wales, or Divisions in Scotland and Northern Ireland. Each area is further broken down into sub-divisions, sections and beats.

The structure of policing is predominantly hierarchical and rank based. The ranks include range from Constable to Chief Constable. An attempt in the 1990's, to flatten the management structure, failed.

Policing across the UK can be said to involve three main roles, operational policing, investigation and crime management, and specialist policing such as roads policing. These roles are supported by departments such as Community Support and Criminal Justice, each specialising in related tasks, as well as back officer functions such as HR, and Finance.

Forces are staffed by both police officers and police staff. Officers are warranted to fulfil justice functions such as arrests, etc. Outside of operational policing, the increasing proportion of police staff is challenging the traditional hierarchical structure but it largely remains intact. Police staff are increasingly filling specialist roles such as forensics, communications as well as the traditional administrative roles and can also hold positions at executive level, such as Director of Corporate Services, and be members of the chief officer associations ACPO and ACPOS.

2-3.1 Policing Scotland

This section introduces the structure and nature of policing in Scotland to provide context to the research. In particular, the tripartite governance arrangements and the performance perspectives of the various stakeholders and parties involved are discussed.

Key

1. Central Scotland Police
2. Dumfries & Galloway Constabulary
3. Fife Constabulary
4. Grampian Police
5. Lothian & Borders Police
6. Northern Constabulary
7. Strathclyde Police
8. Tayside Police



Figure 2-1 - Geographical Force Areas in Scotland. Source (ACPOS, 2003)

2-3.1.1 The Police Forces of Scotland

The Scottish police service comprises eight geographical Police Forces (as listed above) and a number of support agencies. The eight geographical forces, the geographical area, population and staffing are shown in the Table 2-2 and Table 2-2 below. Each geographical Force has a Chief Constable who is responsible for the operational aspects of policing within their Force area.

Force	Population (2005 Estimate)***	% Pop.	Area (sq km)	% Area	Pop. Density (per sq km)	Net Grant Earning Expenditure 2005 **	% of Total
<i>Central Scotland Police</i>	284710	6%	2643.4	3%	848	44894755	5%
<i>Dumfries & Galloway Constabulary</i>	148340	3%	6426	8%	23	27213199	3%
<i>Fife Constabulary</i>	356740	7%	1324.9	2%	269	57229066	6%
<i>Grampian Police</i>	525930	10%	8735.9	11%	1166	86534378	9%
<i>Lothian & Borders Police</i>	902330	18%	6455.7	8%	2501	173895786	18%
<i>Northern Constabulary</i>	281550	5%	31187	40%	52	51695718	5%
<i>Strathclyde Police</i>	2205460	44%	13625	17%	7373	458035348	47%
<i>Tayside Police</i>	389740	8%	7527.4	10%	2452	73282115	8%
Scotland	5094800	-	77925	-	65	972780365	-

Table 2-2 - Force relative area and population. Source: Data as cited

Sources:

** (Her Majesty's Chief Inspector of Constabulary for Scotland, 2006)

*** (General Register Office for Scotland, 2007)

The size of Forces in Scotland varies considerably. Strathclyde, being by far the largest force represents approximately 48% of policing in Scotland with 44% of the Scottish population but only 17% of the area. In contrast, the smallest Force is Dumfries and

Galloway with 3% of the staff, covering 8% of the area and 3% of the population. Northern Constabulary cover 40% of the area of Scotland but only 5% of the population and with only 5% of the staff.

These differences arise from a number of reasons including the historical development of local forces being amalgamated at the time of regionalisation in Scotland in 1975. Since the reorganisation of local government in 1996, the boundaries of forces remained the same but the governance of the Force now fell to the various local authorities within their borders.

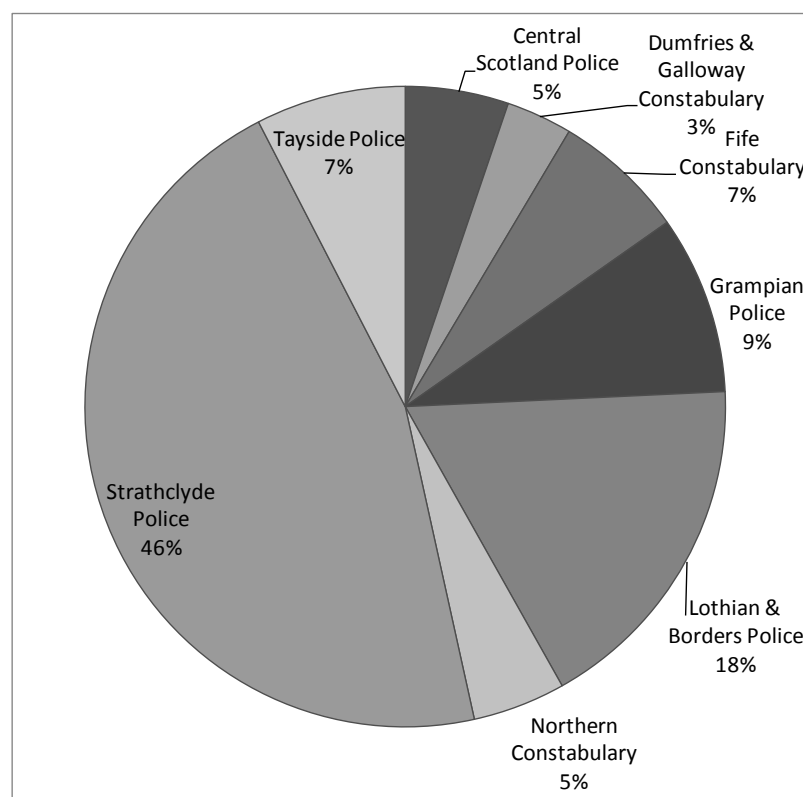


Figure 2-2 - Relative Force staffing levels. Source: Adapted from HMICS (2006)

From the data in Table 2-3, it can be seen that significant changes in staffing levels have occurred since 1998. Despite this, partly due to the dominant influence of Strathclyde Police on the overall figure, the relative size of Forces has varied little.

Funding arrangements are agreed by the Scottish Executive and informed by information supplied by ACPOS and HMIC. The expenditure on Forces is also broadly in line with the staffing levels and populations although Strathclyde Police would appear, based on these

figures, to have higher expenditure than would be expected. This reflects greater levels of social deprivation present there.

<i>Force</i>	<i>Force Strength 1998*</i>	<i>% of Total 1998</i>	<i>Proportion Police/Total Staff 1998*</i>	<i>Force Strength 2006 **</i>	<i>% of Total 2006</i>	<i>Proportion Police/Total Staff 2006**</i>	<i>Increase Strength 1988 to 2006 %</i>
<i>Central Scotland Police</i>	924	5%	76%	1221	5%	72%	32%
<i>Dumfries & Galloway Constabulary</i>	647	3%	68%	781	3%	65%	21%
<i>Fife Constabulary</i>	1108	6%	77%	1566	7%	66%	41%
<i>Grampian Police</i>	1668	8%	72%	2109	9%	64%	27%
<i>Lothian & Borders Police</i>	3752	19%	72%	4119	18%	68%	10%
<i>Northern Constabulary</i>	992	5%	66%	1097	5%	64%	11%
<i>Strathclyde Police</i>	9255	46%	79%	10742	46%	72%	16%
<i>Tayside Police</i>	1566	8%	73%	1773	8%	65%	13%
<i>Scotland</i>	19910	-	75%	23408	-	69%	18%

Table 2-3 - Staffing of the Eight Police Forces in Scotland. Source: Data as cited

Sources:

*(Her Majesty's Chief Inspector of Constabulary for Scotland, 1998)

** (Her Majesty's Chief Inspector of Constabulary for Scotland, 2006)

The proportion of police officers to police staff is also shown in Table 2-3. Comparing the proportion in 1998 and 2006, the effect of a “civilianisation” drive can be seen. The civilianisation programme is intended to replace functions previously carried out by police officers, with police staff. The logic for this programme is that police staff are generally less expensive to recruit and train and each one frees up an officer to return to “front line” operational duties. Across the whole of Scotland the change represents a six percentage point change (approximately 1400 staff) over the eight years.

From a performance perspective, the differences between the eight forces, in terms of social composition, as well as staffing and geography, make comparison difficult and in need of more sophisticated data than is currently available. Forces do submit quarterly data regarding crime, licensing, staffing, etc., to HMIC and the Scottish Executive. However this data lacks the contextual information needed to create a proper comparison.

Within the Forces, at present, there are around thirty different command units, or divisions. These largely represent the thirty-two local authority areas. It is envisaged that at some point in the future, police performance data will be collected at this level, enhancing the potential for meaningful comparison and delivering greater local accountability.

The extent to which PM practice is supported at force level varies considerably. At the start of 2006, Tayside Police have had a well established performance monitoring process in place for three or four years, Grampian Police had abandoned PM in favour of managing its work processes but were actively pursuing a management information system to support better decision-making, while Strathclyde has been approaching the problem from an objective and risk oriented approach. Without any clear PM strategy from ACPOS, Forces were largely following their own preferences in how PM was used.

A broad range of groups have both an interest and influence on policing in Scotland. The following sections outline the main groups and identify their various perspectives on policing performance. These sections are not intended to be exhaustive as to try to identify all groups affected by policing policy would be time consuming and unproductive. The focus here is to identify the primary groups involved in developing and influencing policy development in relation to PM.

2-3.1.2 Tripartite Governance in Scotland

The Police (Scotland) Act 1967 provides for the tripartite system of sharing of legal responsibility for policing between Scottish Ministers, Police Authorities, and Chief Constables. While Scottish Ministers retain overall responsibility for policing policy, Police

Authorities or Joint Police Boards are responsible for setting police budgets and ensuring that best value is attained for the public purse.

The Chief Constables

The Chief Constable alone is responsible for police operations. While police authorities appoint the Chief Constables (subject to the approval of the Secretary of State), neither police authorities nor the Secretary of State have power to direct Chief Constables on enforcement of the law or on the deployment of police officers. The Chief Constable has a duty to comply with instructions from the Lord Advocate, the sheriff principal or the appropriate prosecutor in relation to offences and prosecutions. Efficient and effective use of “the resources placed at his disposal by the police authority” is a matter for the Chief Constable.(Donnelly and Scott, 2002)

The Chief Constable has a legal requirement to submit to the police authority an annual report on the policing of the force area (Her Majesty's Inspectorate of Constabulary for Scotland, 2005). This is also copied to the Scottish Parliament. In line with the Justice Charter, this report is also published and made readily available to the public. It not only gives an account of the policing of the area during the past year in terms of statistical results, but also comments on the performance of the force against objectives and targets set by the Chief Constable for that year.

Despite the differences in policing across the border, the transfer of staff at executive level is relatively common (Donnelly and Scott, 2005). This cross fertilisation of ideas does not appear to have encouraged Scottish Policing to rapidly adopt procedures from south of the border.

The Police Authorities

Each Force is maintained by a Police Authority or Joint Police Board (where the force covers a number of local authority areas) (Local Government in Scotland Act, 2003). Joint

Police boards now maintain six of the Scottish Forces: Northern Constabulary, Central Scotland Police, Grampian Police, Lothian & Borders Police, Strathclyde Police, and Tayside Police. Only Dumfries & Galloway and Fife Constabularies are directly administered by the councils for their geographical areas. Joint Police Boards are composed of representatives of each council in the force area.

The main responsibilities of the Police authorities are to set the budget for the force and provide the Chief Constable with the resources (manpower, building and equipment) necessary to police the area adequately and efficiently; and appoint officers of the rank of Assistant Chief Constable and above.

Police Authorities and Boards receive an annual report from their Chief Constable. This report has historically contained crime data as well as resources and financial data. Most Forces in Scotland are moving to a position where a wider range of performance information is reported annually and to the provision of regular updates on performance during the year. Audit Scotland expects Statutory Performance Indicators to be reported to Police Boards but there is no other standardisation of reporting across the Forces at present. The introduction of the Scottish Policing Performance Framework will influence this position but the outcome of this is not yet clear.

It can be seen that Police Authorities and Boards have an interest in the performance of Forces. They can be seen as an external stakeholder and as having greatest interest in the financial performance of the Force for which they have greatest responsibility. The move by the Scottish Executive to improve governance structures is likely to change the situation over the coming years.

Scottish Executive

Within the Scottish Executive, the Justice Department is responsible for the police service in Scotland, as well as criminal justice including criminal justice social work. Forming one of the three members of the tripartite governance of policing, the Justice Department fulfil the

responsibilities of Scottish Ministers for administration of an efficient police service. During the period of development of the new performance approach for Scottish policing, the Justice Department was headed by Cathy Jamieson MSP.

The Scottish Executive view of performance is expressed within a letter from Robert Gordon, Head of the Justice Department to the then head of ACPOS on working together to develop enhanced PM arrangements for the Scottish police service:

“Ministers want these arrangements to strike an optimum balance between assisting managers throughout the police service to provide more responsive policing to communities; and improving local and national accountability through the generation of robust performance information which also underpins scrutiny of the service under the forthcoming Spending Review”. (Gordon, 2005, p1)

This intention for PM can therefore be seen as - to assist management decision making; to influence to what functions resources are deployed; to support accountability; and to justify expenditure.

2-3.1.3 Other Stakeholders

From the various practitioner literature, (Association of Chief Police Officers in Scotland, 2003, Her Majesty's Inspectorate of Constabulary for Scotland, 2005, Scottish Executive, 2005, Newburn, 2003, Donnelly and Scott, 2005) other stakeholders in policing are identified as:

- The Public
- Audit Scotland
- Scottish Police Convenors' Forum (Association representing members of Police Authorities)
- The Association of Chief Police Officers in Scotland (ACPOS)
- Her Majesty's Inspectorate of Constabulary for Scotland (HMICS)
- The Scottish Police Services Authority (SPSA)
- The Scottish Crime and Drug Enforcement Agency (SCDEA)
- The Criminal Justice System

Like many public sector organisations, this represents a significant number of stakeholders. Concentrating on the groups directly contributing to policy, it is not an exhaustive list and does not include stakeholders such as the various staff associations.

Many of these organisations are engaged in a formal exchange of performance information. The public, who are also represented by Audit Scotland (Scottish Executive, 2004), are informed of policing performance through the publication of Annual Reports, as well as quarterly performance information published by Forces.

Analysis of stakeholder positions

As in many public sector organisations, the number of stakeholders, provides a complex situation where organisational goals become the result of numerous and competing interests of those stakeholders. This is further complicated by the tripartite system of responsibility.

Whilst clearly reflecting the nature of political rhetoric, a recent comment by David McLetchie MSP sums up the current situation and indicates the nature of the relationship, and the tensions that exist, between the various parties:-

“The principle of operational independence is jealously guarded by police officers, as we have seen in their hostile response to the limited powers of direction and guidance that the Executive has proposed in the Antisocial Behaviour etc. (Scotland) Bill.” (Scottish Parliament Official Report, 2004)

The various perspectives of stakeholders in relation to performance have been summarised and are shown in Table 2-4. This table shows the sometimes complimentary and sometimes competing nature of the performance perspectives. Local versus national considerations can be expected to provide a constant tension in the development of a single approach to performance.

Stakeholder	Policing Perspective	Performance Perspective
Public	Engagement in the role and outcomes from policing	Achieving a safe environment
Audit Scotland	Providing accountability to the public for delivery of best value	Providing the information to reassure the public
Police Convenors	Ensuring sound governance of individual Forces	Providing for the needs of the electorate and balancing competing demands for resources.
ACPOS	Cooperating to agree common strategic direction and maximise the benefits of shared approach across Scotland for the delivery of policing for individual force areas.	Primarily interested in achieving the aims of policing. Establishes best practice for achieving aims. Wishes to demonstrate the good service policing provides.
Forces	Ensuring the management of performance is delivered in a manner that supports the most efficient and effective policing	Meeting need to demonstrate level of service provided. Using information to improve decision making and processes.
Scottish Executive Justice Department	Ensuring the delivery of public service in line with needs of political drivers	Ensuring value for money from policing as a public service. Ensuring the outcomes of policing support government.
HMIC	Providing an oversight mechanism, independent from political views, with regard to the efficiency of Forces.	Receives performance information. Makes recommendations regarding the development of policing management skills.

Table 2-4 - Stakeholder Perspectives in Scotland. Source: Author derived

The UK Government's approach to public service reform is intended combine top down performance management; pressure from citizens, competitive provision; and measures to build the capability and capacity of civil and public servants and central and local government (Prime Minister's Strategy Unit, 2006). The Scottish Executive has adopted a different approach to implementing this in Scotland. This approach has created significant pressure for change from the Scottish Executive and a strong response from ACPOS towards demonstrating its commitment to reform. It is anticipated that developments after the 2007

Scottish Parliament and local authority elections will provide a spur to police boards and authorities to become more actively engaged in this reform process.

2-3.1.4 Discussion on PM in Scottish Policing

ACPOS are in a difficult position with regard to PM. While it sets national policy and wishes to take a national approach to performance of policing, there is a conflict with the position of individual Chief Constables who wish to retain independence to deliver locally appropriate solutions.

Achieving improvement at an organisational level has been the focus of police managers for the past few years. Management models such as EFQM have been examined, and used, but never successfully fully integrated into standard policing practice. Perhaps as a direct result of the “professionalism of policing” and the subsequent introduction of strategic management skills, the need for improved monitoring of strategy delivery is inevitable. At a time, when there are competing demands on the police service to meet the ever higher expectations of the public, and the spectre of spending reviews, the need to understand the performance of Forces is as relevant as the need to demonstrate value for money or efficiency.

The development of the Scottish Policing Performance Framework (SPPF) is providing an opportunity to develop a performance culture appropriate to the needs of Scottish policing. A danger is that this framework leads the development and the culture becomes driven only by the framework.

Another criticism of PM approaches relates to the ability of performance measures to accurately reflect actual performance of an organisation. This coupled with limited capability of organisations to interpret information meaningfully and come to correct conclusions about appropriate action will make the whole process of PM less certain. This is where a review of the process from the perspective of OL could provide valuable insight.

2-3.2 Policing in England and Wales

Forty-three geographical forces operate within England and Wales. This section describes the structure and nature of policing there and considers the performance perspective of some of the key stakeholders.



Figure 2-3 - Police Forces of England & Wales. Source: NPIA (2010)

2-3.2.1 The Police Forces

As at 31 March 2005, there were 223,426 staff working in the police service in England and Wales. With 142,795 police officers in England and Wales, that represents sixty-four per cent of this total (Home Office, 2005). The Forces covering geographical areas are shown in Figure 2-3.

2-3.2.2 The Tripartite System of Governance in England and Wales

Home Office	Local Authority	Chief Constable
Determines key national policing objectives. Produces annual policing plan and presents it to parliament.	Responsible for maintain effective and efficient force.	Responsible for direction and control of the Force
Directs police authorities to establish performance targets. Can require a police force to take remedial action if HMIC judges the inefficient or ineffective	Determines local policing priorities. Produces a three year strategy consistent with National Policing Plan.	Responsible for operational control
Determines cash grant to police authorities	Determines arrangements for public consultation	Drafts local policing plan in conjunction with local authority
Approves appointment of chief constables	Established as precepting body responsible for budgeting and resource allocation.	Responsible for achieving local and national policing objectives
Issues statutory codes of practice and directions to police authorities	Responsible for the appointment and dismissal of the Chief Constable (subject to ratification by the Secretary of State). Can require suspension or early dismissal on public interest grounds.	Responsible for resource allocation
Issues statutory codes of practice to Chief Constables		Chief Constables and Deputy Chief Constables on fixed term contracts
Has authority to order amalgamations		

Table 2-5 - The Tripartite System in England and Wales. Source: Adapted from Mawby and Wright (2005)

As in Scotland, policing in England and Wales is governed by a tripartite system, in this case established under the Police Act, 1964. This was implemented following a Royal Commission on Police, which was intended to address problems that had arisen caused by disputes between Chief Constables and Police authorities. The 1964 legislation has since been updated (by the Police and Magistrates Courts Act, 1994 and the Police Reform Act, 2002) to update the roles and responsibilities within this tripartite system, as detailed in Table 2-5.

2-3.2.3 Police Authorities

A police authority is an independent body made up of local people. Prior to the Police and Magistrates Courts Act (1994), Police authorities had little substantive influence. Since then they have become increasingly important through their role of issuing a “policing plan”.

The Police Act (1996) establishes the responsibility of the Police Authority to maintain an efficient and effective force for its area. The Police Act (1996) also provides that the Secretary of State may direct police authorities to establish levels of performance, that is, performance targets to be aimed at achievement of objectives.

The Association of Police Authorities was set up on in 1997 to provide guidance and support to individual police authorities and represents them at a national level.

Police Authorities are key users of performance information. It provides a readily available means monitoring activity and outcomes of policing. Within a performance framework (e.g. PPAF) performance data can give an oversight of how the Force strategy is working. Standard information collated across Forces also provides a larger context in which to consider the data. This enables Police Authorities to hold Forces to account.

2-3.2.4 Chief Constable

The Chief Constable is the professional head of the Police Force with responsibilities for the direction and control of the Force established by the Police and Magistrates’ Courts Act (1994). Like all in the public office of constable, they have “Constabulary independence”, that is, they are “a servant to none other than the law”, they bear full responsibility for their actions and do not work on orders of others (Flanagan, 2008).

Chief Constable must have regard for local policing plan approved by police authority, are responsible for achieving local and national policing objectives, and from a performance perspective, Chief Constables are accountable both to the Police Authority and the Home Office for the performance of their Force (Home Office, 2001).

2-3.2.5 The Home Office

The Home Office is the lead government department for immigration and passports, drugs policy, counter-terrorism and police (Home Office, 2010). It determines key national policing objectives and issues statutory codes of conduct for Chief Constables and Police Authorities. For the Home Office, improving performance, identifying and responding to community expectations and increased focus on intelligence led policing have been key priorities within a more centrally determined performance framework and performance regime (Brooks, 2007).

It has been argued that political interest has increased Home Office involvement in policing since 1960's with Michael Howard (1993-97) and David Blunkett (2001-05) being the clearest examples of Home Secretary with keen interest in policing (Walker, 2005).

Within the private sector, performance improvement is driven by competition (Kaplan, 1983). Within the public sector this drive to improve competitiveness does not occur naturally. To drive police reform, the Home Office have introduced an artificial competition through providing a means of comparison across all 43 forces in England & Wales. This artificial competition is enabled through the provision of standard data sets across all forces and the comparison of performance at force and BCU level (Barton, 2003).

2-3.2.6 Other Stakeholders

Outside the governance structure, as in Scotland (see Table 2-4), a number of stakeholders in policing and the performance of policing can be identified. As these do not vary significantly they are not reproduced here.

2-3.2.7 Discussion on PM in England & Wales

The public reform agenda, through its centralisation policy, has reduced Force level control over policing but has attempted to exercise more control over BCU activity through performance reporting at this level.

Criticism of this centrally imposed performance approach includes the failure to account for environmental factors such as local deprivation. A proposed solution for this is the inclusion of wider community wellbeing factors such as “real estate values”, “public utilisation of common space”, “commercial activity”, etc. (Loveday, 2006). These types of measures would help to provide a more comprehensive contextual element. However it appears the fundamental problem is the oversimplification of performance information, for example, the reduction of performance information to a simple number so that league tables can be provided to the public.

2-3.3 Policing In Northern Ireland

Unlike England and Scotland, there is only one Police service for the whole of Northern Ireland. Following the recommendations of the Patten Commission, the Police Service of Northern Ireland (PSNI) replaced the Royal Ulster Constabulary in November 2001. Their performance approach is largely influenced by developments driven by the Home Office in England and Wales. Its unique situation has produced an approach that is dominated by the need to build public confidence through accountability.

As at April 2007 police numbers in Northern Ireland were 7,244 Police officers, 888 Part time police officers and 2701 police staff (Police Service of Northern Ireland, 2007). Although still considerably higher per head of population than England and Wales, or Scotland, numbers have reduced considerably over the past decade.



Figure 2-4 - PSNI Divisions. Source: Police Service of Northern Ireland (2010)

PSNI operate through eight operational Divisions (see Figure 2-4) each led by a Divisional Commander of Chief Superintendent rank.

Whilst the RUC was previously considered a Home Officer Force, the creation of the PSNI has revised this situation. The PSNI now see themselves as independent of the Home Office, although as they are only one Force, it is difficult for them to separate themselves completely from the support this provides.

The political situation in Northern Ireland has changed considerably in recent years through devolution. However, although an area of dispute, in 2007 policing is still an issue reserved by Westminster.

PSNI are overseen through a system of accountability structures including the Police Ombudsman for Northern Ireland, the Northern Ireland Policing Board and, at a local level, by District Policing Partnerships.

From a performance perspective, improving the availability and dissemination of criminal justice data is an important aim of the Northern Ireland Office (Northern Ireland Office,

2006). Performance information is seen as a key tool in engaging the public of Northern Ireland with their Police Service. As such, the focus is different to those already discussed, with data being a means of holding senior police officers to account.

2-3.4 Impact on Conduct of Research

Structures and policies are different in different areas of the UK. As a result practice varies. This suggests that findings will vary and that this variation will need to be accounted for. However, within each area, there are similarities in practice; for example, all forces in England are subject to similar centralised pressures regarding practice. This means that results from one Force may be translatable to others in the same area.

2-4 UK PUBLIC SECTOR REFORM

Developments in UK over the past thirty years help to provide context to later discussion. This section briefly discusses these developments and the current nature of policing. This thesis does not explore the historical development of policing.

“The Government recognises that policing is, in some respects, necessarily different to other public services. But the debate around further reform of policing needs, nonetheless, to be seen within the important context of the Government’s wider strategy on public service reform. The Prime Minister has set out four principles of public service reform, to deliver services better designed around the needs of their customers – namely, national standards, devolution and delegation, flexibility and expanding choice. Clearly, with the police service, there are some specific additional principles which are of critical importance, such as the engagement of communities and a commitment to partnership working, which are equally as fundamental as the four principles listed above. Our programme of police reform, like the Government’s wider agenda of public service reform, will build on all of these key principles in order to deliver improvements” (Home Department, 2004).

Over the past thirty years, successive governments have continued to increase expenditure on policing. Figures shown earlier (see Table 2-2) demonstrate an 18% rise in the staffing

levels of Forces in Scotland since 1988. Some forces have seen rises in excess of 30%. The situation is similar in England and Wales.

The reasons for the growth in the service is attributed to the societal perception of its role (Newburn, 2003). Historically, policing was seen as the answer to crime, and crime levels were seen to be rising. However the increase in expenditure on police has not been met with a corresponding decrease in crime levels. This is now leading to more informed debate about the nature and causes of crime.

During the last 25 years, both conservative and labour governments have invested in policing, however changing political circumstances have led to greater debate around governance and accountability. This in turn has led to more emphasis on PM on the one hand and consideration of ethics and human rights on the other (Newburn, 2003).

The past thirty years as also seen increasing police professionalism. Leadership and strategy have been introduced and are now well established in police training. The introduction in 2007 of a policing diploma as the basis for promotion, replaces a law based exam. The benefit of this professionalism of the service is debated by some. An example of this debate is the conflict between “street cops” who meet the demands for service from the public and the implementation of management control systems by external agencies and “management cops” (Collier, 1997). The issue here is how new management and leadership skills are applied at the “sharp end”, and how skills absorbed by staff on management courses address a persistence of culture. This research, by aiming to underpin the application of PM practice with sound theory, may ultimately contribute to this professionalism.

The focus of policing is responding to a changing environment with fraud and cyber-crime becoming new forms of criminality, and national security high on the agenda resulting in significant resources being diverted to deal with this. Historically, in Scotland, policing has been founded on a policy of “public good” (Dinsmore and Goldsmith, 2005). Its roots are more proactive than the development of policing in England and Wales which was largely

founded on the model of the Metropolitan Police. The strong focus on a non-crime role of protecting the community is less easy to consider from a PM perspective and its introduction has a potential for damaging police and public relations if misused.

Public sector organisations are increasingly under pressure, not only to improve their performance, but also to be able to demonstrate such improvement through effective performance measurement (Wisniewski and Olafsson, 2004). This has stemmed from the introduction of the Labour government's reform agenda which introduced the 'Best Value' initiative in 1997. This legislation requires local authorities to demonstrate that they meet the needs of local communities, citizens and customers, but also deliver continuous performance improvement, value-for-money, efficiency, and effectiveness.

Improved police performance is central to the Government's vision of better public services. Over the past few years Performance Management, driven by a Police Reform policy has become a major part of managing police forces south of the border. There is a background of two decades of attempts to implement reform within the Police service in England and Wales (Barton 2003). This reform process effectively started with the 'Report into the Brixton Disorders' (Lord Scarman 1981). With increased resources being directed towards policing manpower and in the face of little impact on crime (Walker 2005), the focus of attention became "value for money" within policing. In the 1990's, the Audit Commission introduced a number of performance indicators to be used across the police service in order to monitor "performance" and value for money. The Modernising Government White Paper (Cabinet Office 1999), which strengthened the emphasis on monitoring and managing performance both at organisational and individual levels, reinforced this. The Local Government Act (1999, Part I, Section 3), placed an onus on a Police Authority to "make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness". This trend has continued into the next decade.

A white paper by David Blunket, the then Home Secretary, *Policing a New Century: A Blueprint for Reform* (Home Office 2001) mentions performance on one hundred and nine occasions in the one hundred and fifty-seven page document. This White Paper introduced the Police Standards Unit (PSU) which provides the Home Office with a means of monitoring and tackling performance issues directly at Command Unit level within Forces. The White paper also paved the way for the Police Reform Act (2002) which introduced statutory duty on the Home Office to oversee effectiveness and not just efficiency. The Police Reform Act (2002) triggered a wave of managerial and organisational change initiatives in England and Wales (Collier 2005).

In response to this policy, Police Forces in England and Wales at the behest of the Home Office, introduced extensive PM structures in the form of a Policing and Performance Assessment Framework (PPAF). This has been implemented across all Forces in England and Wales and involves a major investment in compatible IT system.

The increased availability of (apparently) comparable performance information led to comparative performance measures being introduced. Quanta, and iQuanta (its web based equivalent), were developed to allow Forces and Police Authorities to compare performance measures of BCUs against national statistics and a group of other BCUs chosen on similarity. iQuanta is now seen as the national tool for monitoring police performance in England and Wales (Association of Police Authorities, 2004).

2-4.1.1 A Comparison of the UK Contexts

For cultural fundamental differences are evident in management practice within Scotland and England (Mutch, 2006). To understand how these may affect the research, it is therefore important that the relative policy and management contexts are understood. The main areas of difference are governance approaches, the extent of centralisation, approaches, and uses of performance frameworks, and the role of performance management.

2-4.1.2 Governance Arrangements

A number of differences can be discerned between the roles and responsibilities north and south or the border. These include:

- The national policing plan for England and Wales is set by the Home Secretary. In Scotland, APCOS establish national objectives through the application of a strategic assessment (based on the National Intelligence Model).
- Chief Constables in England and Wales are held accountable for the delivery of national and locally agreed policing objectives.
- In England and Wales forces are assessed and judged on their performance. Formal routines are established for dealing with “underperforming” forces.
- Police Boards in Scotland are composed of elected members only, whereas in England and Wales Police Authorities are more highly skilled and have a much greater involvement in determining local priorities and in holding Chief Constables to account.
- ACPO whilst a significant body, does not have the same degree of freedom as ACPOS to decide national policing priorities and approaches.
- In Northern Ireland, policing objectives are derived at a local or district level and then fed in to the Policing Board where they are agreed.

In summary, the degree of centralised control over policing is far greater in England and Wales than in Scotland, whereas in Northern Ireland the focus local involvement. The drivers for these differences can be seen in the historical development of policing in these countries, the differing nature of government, and different relationships between the various stakeholders.

2-4.1.3 The Framework Approaches and Uses

The primary driver for the development of performance frameworks both north and south of the border has been shown as public sector reform and the resulting need to provide greater accountability to stakeholders. The Home Office and the Scottish Executive have taken different routes to delivering this reform.

Overall, south of the border there is a well developed policing assessment framework and a consistent approach to the management of performance across England & Wales. The approach is strongly centralised and this is intended to increase the control of policing by government bodies. Considerable resources are expended by the Home Office in exercising this control.

The focus of the performance framework in England & Wales can be seen as assessment. This is clearly indicated in the names used – Policing Performance Assessment Framework (PPAF) and Assessments of Policing and Community Safety (APACS). The concept of challenge is evident in the development of the framework and underpins its use. The purpose of PPAF and APACS is to enable centralised monitoring of the relative performance and to enable intervention, or the threat of intervention. This maintains overall control of a wide range of policing activities within the Home Office.

The use of the Scottish Policing Performance Framework (SPPF) is designed around a set of high level objectives that describe the desired goals of policing from the perspectives of the parties involved in its development. The aim is to channel behaviour towards the achievement of those goals. The use of centralised data is seen as aiding understanding and being a trigger for identifying areas where improvement can be made. This is the current intention of the framework development; its actual use remains to be seen.

The intention of the SPPF, whilst different from the centralised assessment of England and Wales, could be said to enable self-assessment by Forces. Similarly, APACS can be seen to have moved a small distance from purely assessment towards enabling improvement.

2-4.1.4 Conclusion regarding the UK Contexts

For England and Wales, performance has continued to move up the political agenda. Over the past fifteen years the emphasis has moved from the relatively subdued “national objectives” of the Police and Magistrates Courts Act (1994), to the tighter managerialism of the Police Reform Act (2002), to PPAF and the “iQuanta” data league tables backed up by the real threat of engagement and intervention by the Police Standards Unit (Neyroud, 2006).

PM in England and Wales has become an essential element of their management practice. It is instilled in the way forces operate and centralised government and police authorities take an active role in monitoring performance. In Scotland however, the need for performance information is not driven by a centralised control mechanism, but rather by a desire by forces to improve through better use of information. Some Scottish Forces remain sceptical that the development of performance culture is centralised control by a back door.

2-5 CONCLUSIONS RE POLICING CONTEXT

The purpose of this chapter was to provide an overview of the nature of policing management practice, identify the implications for the research and consider whether this is a suitable medium in which to conduct the research.

This chapter has provided a brief introduction to the historical, geographical and policy context of policing within the UK. This provides a context in which the remainder of the research can be considered and understood. Within this conclusion to the chapter the relevance of the proposed research, the relevance of the varying policy and management contexts to the research programme are considered and some initial outline propositions for to be further examined in the literature review are detailed.

2-5.1 Policy Context

From the discussion in this Chapter, a number of influences on policing policy can be derived. These can be summarised as the existing institutional structures, public expectation, political expectation, and the considerable tradition of policing in the UK. These are collated and represented in Figure 2-5. This influence on policy is eventually reflected in practice.

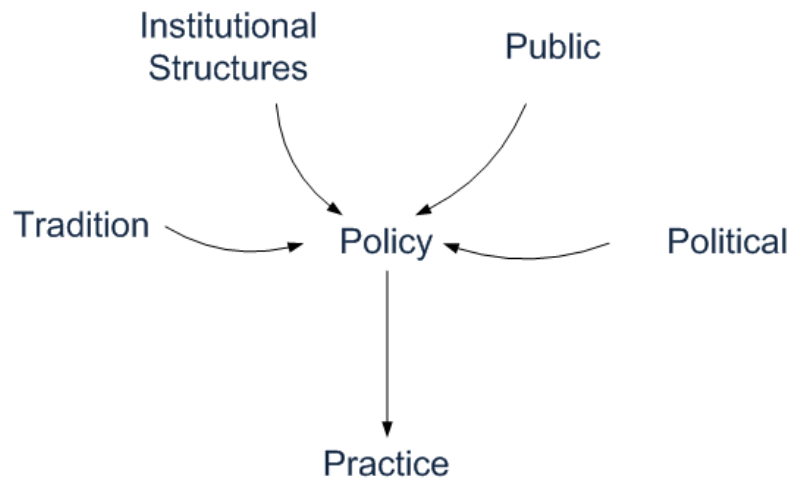


Figure 2-5 - Policy Influences. Source: Author derived

It has been shown that the primary driver for introducing PM in policing across the UK has been public sector reform and the subsequent police service reform. Public sector reform is described as to deliver services better designed around the needs of their customers, whilst police service reform also includes the engagement of communities and a commitment to partnership working (Home Department, 2004). This is largely a political influence, although the public influence would also be present through representative groups such as the Audit Commission (or Audit Scotland).

The subsequent centralisation of power has required the production of greater amounts of information as a means of controlling individual forces. Whilst centralisation is not so prevalent in Scotland, it is still present. ACPOS however, through working with the Scottish

Government have retained a greater degree of freedom with regard to how PM will be implemented.

The on-going development of a PM culture in Scotland is a major driver for this research. The need to develop a greater depth and breadth of knowledge about the role and operation of PM is recognised amongst APCOS members. While the specific topic of the research is seen as delivering a longer term aim of advising the “fine tuning” of PM in policing, the current rate of development requires the rapid expansion of expertise in the field. The research is being undertaken at a time when rapid development is underway in Scotland and it is recognised that the approaches taken in England, Wales and Northern Ireland do not provide a suitable template for this development. Both the Scottish Executive and ACPOS are trying to find appropriate solutions that ultimately provide better service to the public.

The use of the National Intelligence Model (see John and Maguire, 2004) within Scottish forces has focused practice towards the use of a control strategy. This is used to direct the activities of staff towards the aims and objectives of the Force or division. Performance as a learning tool is an emerging area of development and has the potential to deliver a significant change in performance thinking. This research aims to provide a theoretical basis that justifies continued effort into development of thinking and application of this approach. Until this approach is deployed and evidence gained as to its impact on the achievement of objectives, conclusions cannot be drawn as to its effectiveness.

2-5.2 Research Implications

Although a developing field, there is only a small body of research on PM and a small proportion of this relates to the police service. The current policy focus on performance is creating a significant academic interest in the field.

Rather than a shortage of prescriptive solutions to PM (which abound in the management literature, this research proposes to consider the theoretical foundations of performance

management. The perspective of OL is proposed as a valid tool with which to examine PM practice and which may shed light on more effective PM practice. It is anticipated that the pressure for learning approaches to be available within England & Wales will develop and that ultimately this research will impact directly on the remainder of the UK Police Service.

As has been shown, PM practice varies across the UK, with E&W being highly centralised and prescribed, Scotland undergoing an evolutionary development, and PSNI having a strong need to engage with its public. PM is topical, current and relevant and at the forefront of senior officer's minds. The issue is that OL is not recognised as a factor.

It will be shown in Chapter 3 and Chapter 6, however, that PM practice is a suitable medium through which to examine OL.

2-6 UPDATING THE CONTEXT

This Chapter was largely written at the outset of the research in order to provide an informed position as to the relevance and context of the research. This provided a valuable foundation on which to develop the research approach. Since that time the context of Policing across the UK has remained relatively stable.

Rather than rewrite the Chapter with current information, to provide a more accurate picture of the developing context, it has largely been left as it was written. This section provides a brief update on what has changed in the intervening period and this contrast serves to highlight the nature of the changes.

Key areas of change during the course of the research have been

- a) The development of the National Policing Improvement Agency (NPIA) in support of the Home Office Forces.
- b) The introduction of the Scottish Police Services Authority (SPSA) in Scotland.
- c) The change of Scottish Government in 2007.

- d) The deployment of the Scottish Policing Performance Framework in Scotland.
- e) The increased pace of officer recruitment to meet a political aim of 1000 extra police officers in Scotland.
- f) The establishment of the new Scottish Police Board.
- g) The change from PPAF to APACS in England and Wales.
- h) Falling reported crime and increasing “detection rates”.
- i) The continuing rise in anti-terrorism as a role of policing.
- j) Change of UK government in 2010.

Anticipated pressures for change are:

- a) Changing crime patterns arising from social change triggered by the financial crisis.
- b) Changes in staffing levels and the response to public demand.
- c) The pending impact of the changing financial situation on both crime and policing through cuts in the public sector.
- d) The elections for the Scottish Government in 2011.

Although confidence of Home Office in policing is rising, there is public scepticism about what policing has achieved (O'Connor, 2010). This may be attributed to result influences such as gaming behaviour within Forces (Radnor, 2007) in order to improve standing in artificially created league tables, e.g. iQuanta (Police Standards Unit, 2005). The end result of PM practice being, Forces are getting better at making the figures look good.

However, at the time of completion of this thesis, the world financial crisis and the subsequent impact on the UK economy is projected to have a significant impact on public sector budgets, including those for policing. Public spending cuts are unavoidable (SOLACE (Scotland), 2010). The actual influence and the degree of cutbacks will be a subject for the newly elected government but ACPOS are making plans based on anticipated cuts in real terms of around 12% over three years. This has focussed minds on the need for real performance, and the need for efficiency and productivity to underpin this.

The Audit Commission (and Audit Scotland) have warned that public services are expected to maintain service delivery during this period (CIPFA / SOLACE, 2009).

The result of decreased funding is likely to be reduced staffing and reduced levels of service. To maintain core policing functions, resources will need to be reallocated towards ‘front-line’ activities. The drive for PM will become the maintenance of efficiency, rather than continually improving figures. This could ultimately lead to more demand for learning from performance information; however, the political need for accountability may continue to drive management behaviour that reduces learning (see Chapter 7 and 11).

In addition, the emphasis of the new government suggests a radical change (see quote below from Theresa May, the incoming Home Secretary). It remains to be seen what this means in practice.

“...We want to replace the big government, bureaucratic accountability that has been grown in recent years...

...where police officers are forced to answer to politicians through a range of inspections, targets, gimmicks and performance indicators...

...with democratic accountability that reflects the fact that not all communities in our country are exactly the same and have the same policing needs...

...where you are accountable to the people you serve. ...” (May, 2010)

A greater awareness of the nature of PM will assist Forces to identify and address issues affecting practice.

2-7 REFLECTION

The policing performance perspective is worthy of a thesis on its own, but this is not the role of this thesis.

This was the first stage of building the research process, and has been considerably trimmed for the purpose of this Chapter. Throughout this period of this research, the Policing context has changed, both in the nature of PM and in terms of the impact of the world financial

crisis. It would have been interesting to develop the changing environment further, but at the time of writing this is still very uncertain and it would therefore have been comprised largely of speculation.

This Chapter tries to situate the reader as to the context of PM. It would have been good to develop the OL context, but as explained in Chapter 1, there is much less understanding of the term or its implications. This research intends to address this by clarifying the relationship between the two concepts.

Being so close to the on-going development in PM practice, makes it difficult to pinpoint exactly what the situation is at any given time. The Government may be leading in new agendas, while Chief Constables are trying to incorporate change, and staff on the front-line are just getting used to the last initiative. I've been fortunate to have a view of all these positions at once, even if this does make summarising the position difficult.

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3-1 ORGANISATION OF THE CHAPTER

The following table (Table 3-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Problem.

Content	Relevance to Research Problem	Comment
Introducing Organisations	Discusses the context in which the research problem occurs.	Includes wider view of organisations, not just police.
Foundations of the Concept of OL	Considers the basis for the concept at the core of the research problem	How does it arise, what does it mean
Learning Theories and Organisations	Examines contribution of learning theories and implications for research strategy	Behaviourist, Cognitive and Social theories
The Wider Field of Learning and Knowing in Organisations	Places the research topic in the wider theoretical context	
Debates in the OL Field	Considers criticism of OL and their implications for the research	
OL as a Process	Introduces OL as a process and considers impact on research	Learning verb or noun, outcome or process
Conclusions Regarding the Nature of OL	Establishes a position from which the research can proceed	

Table 3-1 - Organisation of the Chapter

The aim of this Chapter is to consider the Organisational Learning (OL) literature and identify key aspects of the OL concept.

This Chapter must be considered alongside Chapters 4, which considers the PM literature, and Chapter 6, which reviews the models of OL in the extant literature.

3-2 INTRODUCTION

This research aims to bring together two distinct concepts, OL and Performance Management (PM). These subjects are described in two distinct sets of literature. For this reason, the literature for each concept is considered in separate chapters. This chapter (Chapter 3) considers the OL literature whilst Chapter 4 considers the PM literature.

To address a need identified in the Research Method chapter (Chapter 5), a further specific review of literature relating to models of OL is provided later (Chapter 6).

IN the context of the research problem, the aims for this chapter can be summarised as:

- To identify the nature of the OL concept and the context in which it may occur.
- Establish the support for concept of OL and the debates within the academic literature.
- To understand the wider context of knowing and learning in organisations.
- To build a clear definition of the OL concept upon which this research will be based.

To determine the implications of the above for this research, this review commences by establishing the nature of the organisation.

3-3 INTRODUCING ORGANISATIONS

OL cannot be examined in isolation, but must be considered in the context of the nature and functioning of the organisation. This section establishes the nature of the organisation and its components.

While the term “organisation” is used in many ways and in many different disciplines, within organisation theory the definition provided by Robbins represents the commonly accepted position:

“A consciously coordinated social unit, composed of two or more people, that functions on a relatively continuous basis to achieve a common goal or set of goals” (Robbins, 1996, p5).

The existence of organisations over time, the role of the conscious coordination, and specific goals or “purpose” are emphasised by Stinchcombe.

“A set of stable social relations deliberately created with the explicit intention of continuously accomplishing some specific goals or purposes” (Stinchcombe, 1965, p143).

These two definitions raise the question as to how organisations coordinate over time to achieve their objectives. Time implies a non-stable environment and changes in member’s views and goals. An organisation must cope with these changes or adapt to continue to achieve its purpose.

It is the organisation’s ability to use information to guide this adaptation, retain the experience it gains, and use this towards the achievement of the organisation’s purpose, or “learning” that is the subject of interest.

Organisations are comprised of a relatively stable set of components and some of these are now discussed.

Organisations are predominantly based on collections of individuals. Argyris (1999) considers the notion of an actor doing something on behalf of the organisation. Organisations may be seen as being a social unit that has been established for the explicit purpose of achieving certain goals (Blau and Scott, 1966, Stinchcombe, 1965).

The idea of benefit is also closely associated with organisations. This benefit can variously be delivered to members, owners or managers, customers or clients, or the public, or to

various combinations of these (Blau and Scott, 1966). The relationship between the individual and the organisation as based on inducements and contributions (March and Simon, 1958). The inducements are seen in terms of payment or wages, and contributions seen work from workers, fees from clients or capital from investors.

These perspectives indicate the relevance of the “common” goal. It is this “common” element that brings people together to create some benefit that cannot be achieved by an individual alone, and which identifies the organisation. The organisation, as a construct of human cooperation delivers something that cannot normally be achieved by an individual.

Individuals are subject to a range of influences and a range of, sometimes competing, drivers, psychological, social, or economic for example (Daft and Weick, 1984). The acceptance of the organisations requirements (that is, effort or behaviour) is balanced against the rewards offered by being a member of the organisation (for example, monetary, achievement of benefits)(Morgan, 1997). In consideration of these benefits a member, or “actor”, can be seen to act in a certain way “on behalf of” the organisation.

Larger organisations consist of sub-communities that themselves operate as organisations. Sub-units can be defined as those which have a clear purpose and can operate towards the aims of the larger unit, consistently over time.

The range of types of organisations may be defined by the nature of their goals, e.g. economic, protective, associative, public sector, or religious (Mullins, 1985). These goals, while remaining relatively static at the general level, may be constantly under scrutiny and adjustment by members of the organisation as the environment around it changes. This also means that the resulting benefits for members will constantly be in a state of flux as the goals, more or less, meet with their personal objectives. It is argued that this results in a constant state of becoming for the organisation as it moves between cycles of sense-giving and sense-making (Gioia and Chittipeddi, 1991).

Power and politics are also identified as a driver for the nature of organisations and in particular for the transformation of knowledge (Lawrence et al., 2005). The role of leadership is to enable this constant knowledge creation (Nonaka et al., 2006) in support of continued delivery of goals or purpose.

What is missing from the common goal type of definition is any mention of function or structure for achievement of those goals. While these may not be explicit, the cooperation of individuals to achieve a common aim, especially over-time, suggests the presence of modes of working that achieve the cooperation, that achieve the functioning over time towards the objective.

As well as consisting of people, Handy (1985) describes the “organisation” as having work and structures, as well as systems and procedures. These elements are seen as “interacting”, in that an effect on one has an effect on the others. This occurs “within an environment”, in that an organisation does not exist in isolation.

Continued organisational existence implies adaptation of the structures and procedures to changing goals, changing benefits and a changing environment. This requires a constant flow of individual knowledge towards the adaptation of routines and procedures. The creation of new rules and procedures requires the knowledge of individuals to be converted into ways of working towards the achievement of the organisations goals or aspirations. The organisation, as a social unit, creates its rules and procedures for accomplishing the tasks necessary to achieve its goals.

This conscious coordination of activities of two or more persons can be seen as operating as systems within the organisation (Barnard, 1938, 2005). This systems view of the organisation is useful in comprehending that organisations are not a collection of individuals, but a collection of systems in which individuals are involved.

From the discussion above it is concluded that an organisation is comprised of individual actors, involved in systems of sustained practice of consciously coordinated activities,

towards specific goals or “purpose”. This is the context in which OL occurs. The inclusion of these in an understanding of OL is seen as vital to fully understanding this concept.

3-4 THE FOUNDATIONS OF THE CONCEPT OF ORGANISATIONAL LEARNING

This section examines the foundations of the concept of OL by tracing the roots of the term within the published literature and considering the meanings of the components of the term in more detail. The classic works that provide a platform for the concept are identified. Upon this foundational material the development of the field and the variations in the use of the term can be considered.

Several attempts have been made at categorising the range of perspectives and types of OL research (Vera and Crossan, 2003, Tsang, 1997, Shipton, 2006, Sun and Scott, 2003). These reviews have proposed various typologies and, in general, are two dimensional. This section reviews the various definitions of OL and considers some of the main ideas and themes that are present within the OL related literature.

While there may be some authors, or individual works, that can be simply categorised into one quadrant of a two dimensional typology, this cannot represent the actual variety within the field. The reasons for this diversity are now considered and conclusions drawn about an appropriate position for this research.

Through examining the development of the field over the last half century, classic and foundational works in the literature can be identified (Easterby-Smith and Lyles, 2003a). These are useful classifications from which to derive the roots of the concept of OL and these are considered below. Also considered are the authors of the late 70’s and 80’s who further developed the concept, the authors of the 90’s who progressed and popularised the concept, as well as the contemporary authors.

3-4.1. The Roots of the Term Organisational Learning

To understand the development of “Organisational Learning” as a concept, it is useful to first examine the roots of the term. The term is attributed by some (for example, Crossan et al., 1999) to a 1965 article – “*Organisational Learning: Observations Towards a Theory*”, Cangelosi and Dill (1965). This is the first article to have the term included in the title. However that paper was itself based up a review of the existing organisational studies literature of Cyert & March (1963, 1992), Simon (1953), Chapman et al (1959) and March and Simon (1958) amongst others.

“We recognise that environmental forces mould organisations through the mediation of human minds. The process is a learning process in which growing insights and successive restructuring as it appears to the humans dealing with it reflect themselves in the structural elements of the organisation itself.”

Herbert A. Simon (1953, cited in Cangelosi and Dill, 1965, p176)

This 1953 quote proposes a process by which the organisation is successively “restructured” (or renewed, or re-organised) through the intervention of its members learning. Although clearly referring to “structure”, rather than processes, procedures or routines, Simon demonstrates the view that a learning processes is occurring at the organisational level. This process is described as being mediated through individual learning, that is, the source of any adaptation can be traced back to human intervention. These comments reflect the fundamental nature at the organisational level of the organisation as the creation of its members. It’s being and existence is the result of the self-organisation of its members.

Chapman et al (1959) considered the use and control of adaptation processes in organisations. They identified the need to design and manage complex systems for operational flexibility and to achieve this through harnessing the learning ability of organisational members. In the circumstances of a simulated environment, they identified

that two “stresses”, failure and discomfort, were drivers for learning. They concluded there was a need for a framework for comprehending organisations. In their paper, they specifically refer to the term “organisational learning” and equate it to operational flexibility. Conditions that promote OL were proposed as: clarify the goal; give the organisation as a whole experience with tasks of increasing difficulty; provide immediate knowledge of results.

The work of Chapman et al (1959), while based on a simulated environment and therefore limited in applicability, was conceptually insightful and identified theoretical and methodological implications. Its main relevance was to recognise that individual learning drove OL but that organisational pressures would affect the operation of that individual learning process and also the transfer of individual knowledge into the procedures of the organisation. Their interpretation of the organisation as an organism gives organisations anthropomorphic qualities but this raises the issue of a concept being used as an object (see Kim, 1993).

In another early reference to OL, comment:

“Organisations learn: to assume that organisations go through the same processes of learning as do individual human beings seems to be unnecessarily naïve, but organisations exhibit (as do other social institutions) adaptive behaviour overtime”

Cyert & March (1963, 1992, p171)

Cyert & March elaborate on the outcome of the learning process as adaptation of goals, adaptation in attention rules, adaptation in search rules, rather than the “structure” oriented learning described by Simon. The importance of Cyert & March’s perspective is that it provides the foundation for the concept which researchers have since refined and developed.

3-4.2. Definitions of Organisational Learning

As discussed in the first section on the foundations of the OL concept, the term “organisational learning” was formed to describe the process by which organisations adapt to their environment. Here, some of the definitions used by the primary authors are examined and conclusions drawn about the range of concepts being discussed under the OL heading.

Table 3-2, shows the various perspectives taken by OL authors and how these have developed chronologically. This table lists the author, a definition or perspective, explanatory comment, how OL is enacted, drivers proposed, and the proposed impact of OL.

As can be seen from the table, there is a wide range of definitions and perspective. This suggests a lack of clarity about the core theme of OL. The positions adopted by these various definitions are discussed below and conclusions drawn regarding the nature of OL and this field of enquiry.

Author	OL Definition or Perspective	Comment	OL Enacted by	OL Driver	Outcome of OL
Hayek (1945, p527)	To assume all the knowledge to be given to a single mind in the same manner in which we assume it to be given to us as the explaining economist is to assume the problem away and to disregard everything that is important and significant in the real world.	Questions the nature of the group mind	Not discussed	Not discussed	Not discussed
Cyert and March (1963, 1992)	An adaptive process through which firms respond to environmental changes by readjusting their goals, attention rules, and search rules	Group adaptation,	Group	Environment	Readjusting goals, attention rules, and search rules
Cangelosi and Dill (1965)	A sporadic, stepwise, adaptive process that is the product of interactions among three kinds of stress, generating both individual and organisational level outcomes	Describes drivers for group adaptation		Interactions among three kinds of stress	Individual and organisational change
Simon (1969)	The growing insights and successful restructurings of organisational problems by individuals reflected in the structural elements and outcomes of the organisation itself	Individually driven group adaptation, enacted by group	Group	Organisational members	Group adaptation
March and Olsen (1975)	Organisations adapt their behaviour in terms of their experience, but that experience requires interpretation	Adaptation results from experience	Group adaptation	Driven by individual interpretation	Group adaptation
Argyris and Schön (1978)	A process in which organisational members detect error or anomaly and correct it by restructuring organisational theory of action and by encoding and embedding the results of their inquiry in organisational maps and images	The norms, assumptions, and strategies inherent in collective practices	Individual adaptation to group	individually driven by detection of error	Individual adaptation
Argyris and Schön	Generically an organisation may be said to learn when it acquires information (knowledge, understanding, know-how, techniques	Comprehensive approach	Not discussed	Not discussed	Not discussed

Author	OL Definition or Perspective	Comment	OL Enacted by	OL Driver	Outcome of OL
(1996, p1)	or practices) of any kind and by whatever means.				
Duncan and Weiss (1979)	The process within the organisation by which knowledge about action outcome relationships and the effects of the environment on them is developed	Knowledge creation	Not discussed	Not discussed	Knowledge about action
Hedberg (1981, p3)	Learning takes place when organisations interact with their environments: organisations increase their understanding of reality by observing the results of their acts. Often the acts are experimental ones. In other instances, organisations learn by imitating other organisations' behaviour, or by accepting others' experiences and maps of the environment.	Flow between organisation and environment	Group	Driven by feedback from environment	Increased their understanding, change in organisations' behaviour, or by accepting others' experiences
Fiol and Lyles (1985)	The process of improving actions through better knowledge and understanding		Group	Driven by knowledge	Improving actions
Levitt and March (1988)	Organisations learn by encoding inferences from history into routines that guide behaviour, despite the turnover of personnel and the passage of time.	Retained in routines	Group	Driven by feedback	New routines
Senge (1990)	...organisations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together	Individual development, driven by group	Individual	Driven by group	People continually expand capacity to create results they desire
Huber (1991)	An organisation learns if any of its units acquires knowledge that it recognises as potentially useful to the organisation.	Individual level, aggregated result	Individual	Not discussed	Aggregated result
Dodgson (1993)	"the way firms build, supplement, and organize knowledge and routines around their activities and within their cultures and adapt and develop organisational efficiency by improving the use of the broad skills of their workforces"	Enacted through routines	Enacted by individuals	Not discussed	Delivering efficiencies

Author	OL Definition or Perspective	Comment	OL Enacted by	OL Driver	Outcome of OL
(Nonaka and Takeuchi, 1995, p3)	"By organisational knowledge creation we mean the capability of a company as a whole to create new knowledge, disseminate it throughout the organisation, and embody it in products, services, and systems"	Knowledge development equals learning	Embodied in products, services, systems	Not discussed	Innovation
Heracleous (1995)	"The process by which organisations change their cultures and systems in relation to market conditions; and that they must do this in order to improve their competitiveness and achieve a sustainable competitive advantage"	Group level, market driven, delivering competitiveness	Enacted by Group	market driven	Delivering competitiveness
Crossan et al.(1999)	The principal means of achieving the strategic renewal of an enterprise.	Group level, group renewal	Not discussed	Not discussed	Strategic renewal
Lipshitz et al (2002)	For learning to become organisational, there must be roles, functions, and procedures that enable organisational members to systematically collect, analyse, store, disseminate, and use information relevant to their own and other members' performance. In order to learn, organisations must have non-metaphorical analogues to the central nervous system.	Depends on individual knowledge creation.	Roles, functions, and procedures	Process driven by group	Members' performance
Nicolini and Meznar (1995)	OL can be interpreted as a social construction which transforms acquired cognition into accountable, abstract knowledge.	Created as abstract knowledge	Group	Not discussed	Transforms cognition into accountable abstract knowledge
Elkjaer (2004)	Organisations can learn from direct experience or from the experience of others, and then develop conceptual frameworks for interpreting that experience.	Created as conceptual frameworks	Group	Direct experience or experience of others	Interpreted experience based on conceptual frameworks

Table 3-2 – Definitions and Perspectives of OL. Source: As cited author

Table 3-2 shows these authors are relatively consistent on describing OL as enacted through individuals or groups.

Drivers for OL vary, for example, the environment, experiences, group need, stress or error. Although expressed in different ways, these drivers described are seen here as all related in some way to goals or purpose. That is the driver for OL is the goal or purpose of the organisation.

The outcomes of OL are variously described in terms of new knowledge, new routines, or new behaviour. When viewed from a high level, these can be seen as outcomes that are involved in adaptation.

The range of definitions and perspectives highlights the diversity of approaches to OL that have been adopted over time. These approaches can be seen as varying according to:

- The subject of study (individual learning to institutionalisation)
- The area of study (decision making, management, etc.)
- The nature of learning (behaviourist, cognitive, social)
- The level of study (individual to organisational)
- The method of study (theoretical, empirical)
- The outcome or use of the study (descriptive, explanatory, prescriptive)
- The nature of the researcher (academic, management consultant)

This variation indicates that there is no single way to approach OL at a generic level. It is therefore difficult for a single, all-encompassing theory of OL to develop. The lack of empirical research and attributes this to the ambiguities that have developed in the field of OL (Weerd-Nederhof et al., 2002).

The underlying and apparently simple concept of organisational adaptation has been applied to many aspects of the organisation (Crossan et al., 1999). While the exploratory literature describes the stages involved and highlights dysfunctional aspects (e.g. Huber, 1991), the normative literature identifies the features of the transfer process most likely to promote

effectiveness (Elkjaer, 2004). There is frequent failure to generate useful implications for practitioners (Tsang, 1997).

A particular point of divergence in the literature can be traced to the publication of a special issue of *Organisation Science*, dedicated to the work of March (see Bontis et al., 2002 for full detail). From the variation of approaches included in this publication alone it can be seen that from the simple concept originally proposed, the field had broadened to become a diverse and more mature, critical field.

It has been seen that even amongst literature of the foundational authors, OL is portrayed in diverse ways. The current knowledge about OL is weak, partial, and often generalized from individual learning (Hedberg, 1981). The range of factors proposed for this diversity include: the causes, effects, and domains (Miller, 1996). The range of perspectives adopted by scholars has led to more divergence (Shipton, 2006, Tsang, 1997, Sun and Scott, 2003).

Pfeffer and Fong identify a similar situation within the field of organisational theory, and propose that this is the result of author's efforts to differentiate their research and invent new terms for the same phenomena has sometimes occurred at the expense of integration and an emphasis on the interrelated nature of organisational science (Pfeffer and Fong, 2005, p372). This process may be occurring within the field of OL where only a few authors attempt to integrate the field, while others appear to wish to distinguish their own work.

3-4.3. Conclusion re the Foundations of OL

A considerable effort is expended by authors in justifying the use of the term "organisational learning". What is noteworthy is that March and Simon refer to the use of a biological analogy in their description of the nature of organisation but add the caveat that the analogy should not be taken to literally or too seriously (1958, p172). A similar caveat is added by Cyert and March who suggest that to assume that organisations go through the same process of learning as do individual human beings seems unnecessarily naïve (1963, 1992, p171).

These caveats indicate that these early writers were well aware of the discussion on the nature of OL that would follow (discussed later in this chapter).

In Chapman's (1959) foundational work, his research project is aimed at finding a framework for comprehending organisational behaviour. This simple view of the overall concept is useful at summarising why we need to understand what is since been termed "organisational learning". The resulting discussion regarding the nature of learning has been useful in establishing whether or to what extent learning theory can be transferred to the organisational level. The downside has been a strong focus on learning at the expense of the focus on understanding the precursors for organisational behaviour. In attempts to avoid this diversion, terms such as organisational adaptation, change or adjustment have been proposed (Fiol and Lyles, 1985).

As discussed earlier, the intention of March, and other foundational writers, was to discuss the adaptation of organisational behaviour through the use of information acquired by its members. While there may have been an element of anthromorphism in their thinking that led to the use of the term "learning", in the context in which they applied the term and the manner in which it was applied, there can be seen a close connection to the human process of learning but they are clearly not the same. Few authors since have questioned the term organisational behaviour, to which similar arguments against its use could be directed. Understanding how organisations adapt to their environment through the use of the knowledge and experience of members is the subject of interest and the term OL is a useful metaphor for this process. As a metaphor for behavioural adaptation through the acquisition and interpretation of the meaning of information, "learning" is considered a pragmatic term to use in this context.

From the foundational works, it is concluded that the adaptation by the organisation occurs through the modification or addition of systems and procedures and that it is reasonable to describe this is learning by the organisational. Cyert and March (1963, 1992) assert that

without constant renewal, these systems and procedures would become out of step with the organisations environment and that it would cease to function effectively. In other words, OL is not just essential for the continual renewal of an organisation's programs for achieving its goals; it is the actual process of renewal. This process of organisational renewal is facilitated through the collation, interpretation and integration of new information into more appropriate behaviour, behaviour that maintains the organisation's ability to operate within its environment. This process of organisational adaptation and renewal through the use of information, or OL, is therefore, by definition part of an organisation. For an organisation to exist and OL must have occurred. For an organisation to continue to exist, over time OL must be equivalent to the rate of change in the organisations environment.

This research should therefore be attending to what contributes to the constant renewal of these systems and procedures, how do these processes operate and what would be the impact of their efficiency.

The diversity in the field of OL research poses a problem for this research in that there is not one dominant theme or single perspective that can be selected from the literature to apply to the research problem. Organisational adaptation is subject to considerable variation across sectors and even organisations, and could be seen to be influenced by almost every factor of

Neither is there a clear definition that can directly be applied to the circumstances and context of the research problem. A more suitable working definition must be derived in order to support the development of the research strategy. This is discussed at the end of this chapter.

To assist in defining a research strategy, the following section identifies and considers OL in the wider field of learning and knowing in organisations.

3-5 LEARNING THEORIES AND ORGANISATIONS

This section considers how learning theory underpins the different approaches to OL. These are based on different theories of learning, cognitive, behaviourist and social learning.

Cognitive and behavioural approaches come direct from individual learning theory (Fiol and Lyles, 1985). Cognitive approaches focus on the impact of learning on the cognition or understanding of the individual, whilst behavioural approaches focus on the impact of learning on behavioural outcomes.



Figure 3-1 – Learning Outcomes. Source: Fiol and Lyles, 1985

The OL literature can broadly be seen as taking two perspectives, cognitive or behaviourist (Cook and Yanow, 1993, Easterby-Smith, 1997, Easterby-Smith and Araújo, 1999, Gherardi, 1999). Fiol and Lyles (1985) relate these two perspectives to organisational change (see Figure 3-1). Rather than being competing perspectives on a single dimension, their diagram shows that it is useful to view them as different dimensions.

Those in the behaviourist camp, see learning as best evidenced through changes in organisational behaviour. The mind is treated as a black box. That is, one does not need to understand how the mind works to demonstrate learning has occurred.

Argyris and Schön (1978) identify that general assumptions of behaviourist theories include:

- Principles of learning apply equally to different behaviours and to different species of animals.
- Learning processes can be studied most objectively when the focus of study is on stimuli and responses.
- Internal cognitive processes are largely excluded from scientific study.
- Learning involves a behaviour change.
- Learning is largely the result of environmental events.

An example of a behaviourist approach from an organisational perspective is Crossan et al, (1999). They describe institutionalisation, the embedding of new behaviour, as the outcome of OL.

Huber argues that changes resulting from learning may not be visibly behavioural (1991) and cites examples of learning resulting in new and significant insights and awareness that dictate no behavioural change. In this sense the crucial element in learning is that the organism be consciously aware of differences and alternatives and have consciously chosen one of these alternatives (Huber, 1991). His criticism is of a purely behavioural approach to learning. Similarly, it is important to see learning as not merely as adaptation to contingencies but also as development through insight, understanding, and interpretation (Pawlowski, 2001).

The cognitive approach to OL is based on the position that learning leads to changes in knowledge within the organisation. The development of cognitivism is often associated with the work of Jean Piaget, who developed the major aspects of his theory as early as the 1920's (see Piaget, 2001). Cognitive theorists view learning as involving the acquisition or reorganisation of the cognitive structures through which information is processed and stored (Good and Brophy, 1990). This would result in changes to understanding or skill within the organisation which are not necessarily manifest in organisational action but which have the potential to be so (e.g. Akgün et al., 2003, Cavaleri, 2004, Cohen and Levinthal, 1990, Simon and Kaplan, 1989).

The application of the cognitive perspective to OL is based on the early works about decision-making processes in organisations, but it has developed far beyond the concepts of bounded rationality in terms of its ability to integrate the value and belief perspective (Pawlowski, 2001). The reason why changed cognitive states are explicitly excluded from most definitions has to do with problems in finding 'evidence of a change' in organisational cognitive memory (Argyris and Schön, 1996, p17).

The cognitive view of OL understandably has much closer ties to the knowledge related perspective. It is this overlap or similarity to other fields that has introduced confusion between these fields and it is seen as an advantage that this be largely avoided by maintaining a behaviourist perspective in this research.

3-5.1. Social Learning

OL based on individual learning theory sees the enhancement of organisation information processing and decision-making as something that is enhanced by individual learning which becomes crystallised in organisational routines and values. The problem with this perspective is how the outcomes of individual learning are transferred to the organisational level (Elkjaer, 2003).

OL is a process that crosses organisational boundaries and affects and interacts with the human resources of the organisation (Lyles and Easterby-Smith, 2003, p644). As a result, one aspect of OL that has developed is based on sociology and social learning where more consideration is given to the nature of human networks and relations (Weick and Westley, 1996, Gherardi, 1999).

There has been a tendency towards the strengthening of the social perspective in the OL literature (Easterby-Smith and Araújo, 1999). Social learning theory provides an insight into how individual learning could be transferred, at the group level, to the organisational level (Elkjaer, 2003). The introduction of social aspects to the field of OL emphasises the

importance of areas such as aesthetics and paves the way for OL to be seen as an art rather than a science. If the social aspect of OL is as relevant as other aspects previously discussed, then the nature and quality of social interaction will have significant impact on the outcome of that interaction.

Participation, power, politics, conflict, collaboration, dialogue or cultural artefacts, are also proposed as areas that have been avoided or neglected by the empirical works within the cognitive approach. All of these play an essential role in the social construction of beliefs and shared meanings, which imply learning and knowing (Chiva and Alegre, 2005). However, few researchers have addressed the 'psychosocial' view of learning (Antonacopoulou, 2001).

The value of learning and of knowledge "*depends largely upon the human capital and its ability to recognize, assimilate, and utilize new knowledge*" (Lyles and Easterby-Smith, 2003, p644). In other words, while the process of OL is completed when new knowledge is finally converted into new practice. The precursors to that completion involve the individual and group processes of recognition, assimilation, and utilisation of knowledge.

In contrast to other major theories of learning (behavioural, cognitive), which conceptualise learning as the response of humans to an external environment, as a question of responding to external stimuli, progression through a series of predetermined conceptual stages or as the processing of information, Vygotsky (1978) conceptualised learning as a social and cultural process.

OL may be presented as a social process affected by the contextual factors such as the organisation structure, information, communication and control processes, all of which may impact on the way individuals learn (Pawlowski, 2001, Hedberg, 1981, Simon, 1991).

The application of social learning theory to OL, arose out of a critique of the use of individual learning theory (Elkjaer, 2003). It addresses the development of new skills, without the acquisition of new information, through participation. This challenges the

concept of the development of cognitive structures through participative action instead of through verbally represented “information”. This can be considered in terms of classroom learning versus experience. The basis of social learning is therefore, whether experience can be distilled into the acquisition of large amounts of pieces of information or whether there is more to be broken down into constituent “information” elements. It also introduces the situation factor to behaviour, in that a person will behave differently in different situations. An individual can therefore be considered to behave differently in an organisational situation.

From the perspective of this research, the importance of social learning is the consideration of the non-human artefacts that mediate between the social interactions through which OL is manifested, or between the stages of process views of OL. Artefacts play a role of being the medium through which information is communicated. This is an undeveloped field and that the potential to enrich the explanation and understanding of a large element of OL.

However, whilst having the potential to explain certain aspects of OL, this perspective does not take into account the whole process.

3-5.2. Comparing Behaviourist, Cognitive and Social Perspectives

Different theories of organisational learning appear to address different levels and dimensions of learning (Antonacopoulou, 2006). The two types of learning - cognitive and behavioural, correlate to two outcomes of learning - knowledge and action. The current duality in OL is seen as coming from the application of these two learning theories (Elkjaer, 2003).

OL is comprised of new insights on one hand and a change in structural elements on the other (Fiol and Lyles, 1985). One is a change in the states of knowledge and not clearly visible, the other is an organisational outcome and usually more clearly visible. However it

would not be unusual for the two to occur together and therefore identifying cause and effect is problematic (Fiol and Lyles, 1985).

The question of the most appropriate perspective is largely an epistemological one, in that identifying changes in organisational cognition is likely to be challenging. Changes in organisational behaviour are more easily identified and linked to organisational outcomes.

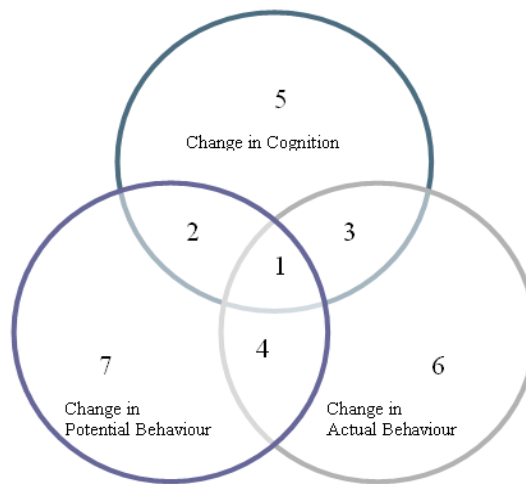


Figure 3-2 - Areas of Learning. Source: After Tsang, 1997

Tsang identifies the difficulties that exist in establishing link between behavioural change and what is learned (Tsang, 1997) i.e. linking cause and effect. He describes three areas in which learning may be identified, cognition, potential behaviour, and actual behaviour. Learning may occur in any one of these areas or a combination as shown in Table 3-2.

These three theories of learning are not seen as competing but rather addressing different aspects of learning. These three theories have developed over time to address learning from increasingly complex perspectives. Learning is seen as a highly complex interaction between the individual, their social groups and their environment.

These three theories clearly relate to individual learning and cannot be directly applied to the organisation. They do apply directly to individual learning within organisations and are

therefore relevant to that aspect of the OL concept. They also have relevance as they have provided the basis upon which OL theory has been developed.

Several writers help to clarify what evidence could be sought for the existence of OL:

“The structural facet focuses on organisational learning mechanisms, which are institutionalized structural and procedural arrangements allowing organisations to systematically collect, analyze, store, disseminate, and use information that is relevant to the performance of the organisation” (Popper and Lipshitz, 2000)

“It is the production of new institutional procedures that evidences OL. Therefore a place to start looking is within the knowledge embedded in non-human repositories such as routines, systems, structures, culture and strategy” (Vera and Crossan, 2003).

The nature of behaviourist theory is less dependent on human values than cognition theory; it is therefore more easily transferred to organisations. The benefits of adopting a behaviourist approach are therefore:

- This distinguishes the field from knowledge management
- It is a more useful approach to considering practice
- The link between knowledge and action is not well researched.
- Cognitive approaches have greater difficulty in linking cause to effect.

This research adopts a behaviourist approach to the examination of OL for two reasons. The first is that a behaviourist approach allows the more definitive identification of learning outcomes. The second is the closeness of cognitive OL discussions and the knowledge management fields. It is viewed that this would confuse the nature and outputs of the research, thus reducing its overall value in addressing the research problem.

But the contributions of cognitive and social perspectives are acknowledged. These perspectives can only add to the richness of the concept and are seen as complimentary, not exclusive.

3-6 THE WIDER FIELD OF LEARNING AND KNOWING IN ORGANISATIONS

Learning can be simply stated as the acquisition of knowledge. It is surprising then that the fields of Knowledge Management and Organisational Knowledge have developed quite separately from OL with separate and distinct bodies of literature. The Learning Organisation, similarly, has developed its own body of literature, although confusion is still found amongst authors who fail to distinguish between the two, treating them as the same (see Ortenblad, 2002). This section examines the relationships, commonalities and distinctiveness of these other areas of learning and knowledge within organisations and concludes that OL should not be considered in isolation.

Having their roots in related fields and suffering from overlapping boundaries, definitions and application, Easterby-Smith and Lyles (2003b) provide a framework in which to consider these distinct areas; Organisational Learning; The learning Organisation; Organisational Knowledge; and Knowledge Management.

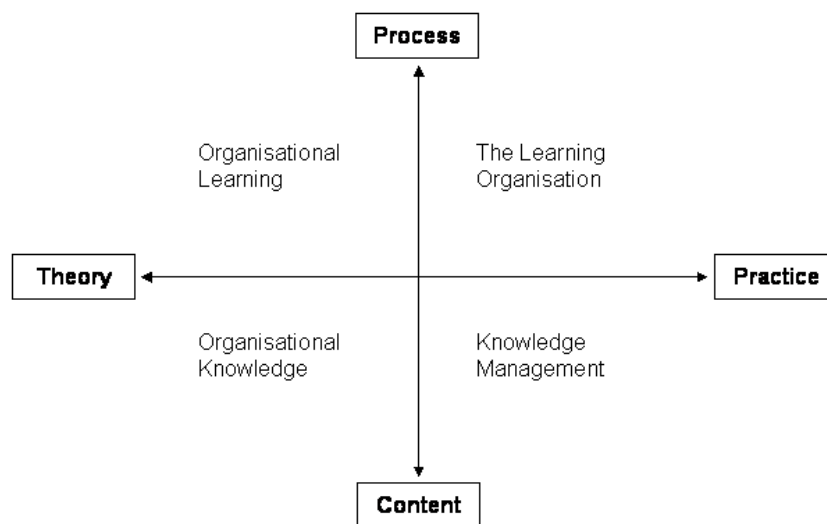


Figure 3-3 – Mapping the key fields. Source: Easterby-Smith & Lyles (2003a)

Their framework considered the theory and practice approaches to the subjects and the process and content continuum as shown in Figure 3-3. It relies heavily on the work of

Tsang (1997) to discriminate the fields of OL and the LO, and the work of Vera and Crossan (2003) to provide a distinction between OL and KM.

It is important to note that the mapping of the four areas is not derived from the use of the terms within the literature but rather an inductive approach to the meaning of the terms and how they should be applied. The situation is further complicated by the interchangeable nature of many of the terms used within the literature and the resulting need to consider each in terms of the new framework rather than the classification provided by its author.

Each of these areas is now briefly discussed and their relevance to the research identified.

3-6.1. Organisational Knowledge

The first area of the quadrant, Organisational Knowledge was placed in the theory and content area (see Figure 3-3).

Hayek introduced the concept of the combined knowledge of individuals within an organisation. The problem he addresses is whether organisational knowledge can be seen as *dispersed bits of incomplete and frequently contradictory knowledge, which all the separate individuals possess* (Hayek, 1945, p527) and that the utilization of that knowledge not given to anyone in its totality, is difficult for organisations.

To assume all the knowledge to be given to a single mind in the same manner in which we assume it to be given to us as the explaining economist is to assume the problem away and to disregard everything that is important and significant in the real world. (Hayek, 1945, p527)

The implications of Hayek's work was the recognition of the potential for something beyond the knowledge of individuals, that the process of sharing information between individuals created something separate from those dispersed "bits" of knowledge. This has fundamental implications for understanding the nature of the organisation as something through which

individual knowledge can be used and added too, or conversely, suppressed or ineffectively utilised.

Knowledge in organisations is generally viewed from either a cognitive or social aspect (Chiva and Alegre, 2005). However, the knowledge based literature contains a range of perspectives, and sometimes contradictory views, of knowledge in organisations. For example, knowledge can be seen as either "sticky" and "leaky" (Brown and Duguid, 2001). Sticky discussions focus primarily on the challenge of moving knowledge inside organisations. Whilst leaky discussions generally focus on the external and undesirable flow of knowledge, in particular the loss of knowledge across the boundaries of the firm.

Organisational knowledge is closely related to the concept of organisational memory in that they both refer to the latent knowledge held within the organisation. They can be distinguished from OL by its 'operationalised' or enacted nature. Organisational Knowledge has the potential to be retrieved and used by the organisation and may be seen as a precursor to behaviour. The different languages used within Organisational Knowledge and OL research are acknowledged as a reason for their independent development (Easterby-Smith et al., 2000).

Although having common theoretical assumptions Chiva and Alegre (2005) identify different theoretical sources (psychology and economy), and different academic areas involved (human resources and strategic management), as other reasons why the literatures have remained separate.

The conversion of knowledge, from tacit to explicit is an essential element of creating behaviour (Nonaka, 1994, Nonaka et al., 2006). Knowledge conversion explains, theoretically and empirically, the interaction between tacit and explicit knowledge (Nonaka and von Krogh, 2009). The conversion of knowledge is driven by organisational intention, autonomy, fluctuation and creative chaos, redundancy, and requisite variety (Nonaka and Takeuchi, 1995). Routine-based conceptions of learning presume that the lessons of

experience are maintained and accumulated within routines despite the turnover of personnel and the passage of time (Levitt and March, 1988).

The notion of the existence of knowledge as a commodity at an organisational level, underpins the concept of OL. If knowledge can be created, cognitive or social learning has occurred. If new behaviour results from that knowledge then behavioural learning has occurred. These cognitive, behaviourist and social types of learning were more fully discussed earlier in this Chapter.

3-6.2. The Learning Organisation

The second area of the quadrant, the Learning Organisation, was placed in the process and practice area (see Figure 3-3).

The concept of a learning organisation was popularised by Senge with the publication of the book “The Fifth Discipline” (1990). The concept relates the learning capacity within organisations and how it can be increased in order to improve its performance.

The concept of has been further developed during the 1990’s by writers such as Pedlar et al. (1991, 1997), Garvin (1993), Coopey (1996), Goh (1997), and Burgoyne (1995). Its prescriptive/descriptive relationship with OL was not generally resolved until Tsang (1997) clarified the normative aspect of the Learning Organisation. Its popularity and the resulting increase in related research caused further confusion in the field and many writers failed to distinguish between the two perspectives (Ortenblad, 2002).

Unlike the OL literature produced by academics which is predominantly scholarly and sceptical, the literature of “the learning organisation” is practice-orientated, prescriptive and disseminated mainly by consultants and practitioners (Argyris and Schön, 1996, Tsang, 1997). Argyris and Schön describe the Learning Organisation as probably “more of a visionary rhetorical device than a realizable empirical entity” (1996). The over generalised and groundless prescriptions of the Learning Organisation were seen to do more harm than

good by Tsang (1997) but its suitability for use by management practitioners further drove its popularity.

A major theme in the LO literature is the use of a systems thinking to understanding the nature of organisations. Systems thinking has evolved from the work of Bertalanffy (1950) who saw biological organisms as exchanges of material and between processes. This led to the development of organisations being seen as learning systems (Nevis et al., 1995) where learning is seen as being a systems level phenomena.

The Learning Organisation can be distinguished from OL by the nature of change. The Learning Organisation literature emphasises learning that alters the theory of action (Watkins and Marsick, 1993, p166).

The normative elements to the Learning Organisation concept, that organisations only enhance their effectiveness of performance when they learn, described how an organisation should learn, rather than how an organisation does learn. Fundamentally, the assertion of the Learning Organisation field is that all learning is good and will lead to better performance. The Learning Organisation objective of improving organisational performance, while founded in theory, lacked the theoretical foundations to be able to deliver. Tsang (1997) identified a tendency in the Learning Organisation literature to over generalise a theory and apply it to all types of organisation. No organisation can truly be classified as a learning organisation (Lipshitz et al., 2002). However, until the relationship between performance and OL is established and the means by which this is facilitated, the Learning Organisation concept cannot be expected to deliver effectively.

Tsang (1997) identified that different “end users” of literature tended to use different descriptions of the subject even though, fundamentally, they were considering the same topic. The development of knowledge management and OL were at times considered to be both the same topic but with different titles and completely separate areas of research. Whereas, the use of knowledge management as a means to achieve a Learning Organisation

is promoted by Scarborough and Swan (Scarborough and Swan, 2003) who also acknowledge the aspirational and prescriptive elements of the Learning Organisation concept.

The Learning Organisation and OL belong to different streams of theorising in the field (Vera and Crossan, 2003). However, while perhaps different streams, they must exist together. OL has no practical application if it is not the understanding and improvement of organisational performance. The theoretical underpinning of the Learning Organisation must be strengthened if it is to provide a credible way forward. Through its nature in seeking “a practical solution to current policing problems”, this research may contribute towards a prescriptive approach akin to the Learning Organisation; however this will be firmly located in the thorough research undertaken.

As the OL literature is dominated by theoretical perspectives, potential influences on learning capability of organisations are rarely detailed. It therefore falls to the prescriptive literature of the Learning Organisation to contribute to the identification of these.

Argyris and Schön (1996) see the Learning Organisation literature as being:

- inattentive to gaps emphasised by learning-sceptics;
- ignores analytic difficulties posed by the very idea of OL;
- treats beneficence of OL as an axiom;
- does not give serious consideration to processes that threaten validity or utility of OL;
- and gives short shrift to difficulties of implementation, phenomenon that undermine attempts to achieve the ideal or cause it to be short lived.

Here, the value of the prescriptive literature is questioned. It appears there is insufficient basis upon which to build a prescriptive literature, especially as it is unclear what it is being prescriptive about. However, it would be unwise to ignore these elements completely simply because of the nature of the concept. Each is a potential factor that is likely to impact OL to some extent. They are therefore acknowledged as such and to be considered within the examination of the case studies.

3-6.3. Knowledge Management

The third area of the quadrant, Knowledge Management (KM), was placed in the practice and content area (see Figure 3-3).

The associated fields of organisational knowledge and KM have developed from the work of Polanyi (1966) on tacit knowledge.

The Knowledge Management literature owes a lot to Nonaka and Takeuchi, who popularised the concept with their book, *The Knowledge-Creating Company* (1995) and developed the concepts of tacit and explicit knowledge.

The aims of KM and OL are similar; facilitating effective action through the use of information. Due to the large number of similarities and the fact that these two subject areas are addressing the organisational capacity for effective action, some argue that there is value in combining the two areas into a single larger framework that is potentially a more potent way to leverage human intellectual capital for performance (Cavaleri, 2004, Vera and Crossan, 2003).

Although both these areas have similar roots, those who write about KM generally adopt a technical approach aimed at ways of disseminating and leveraging knowledge in order to enhance organisational performance (Easterby-Smith and Lyles, 2003b). The role and design of information technology is often central to such discussions (Scarborough and Swan, 2003). One of the difficulties is that many terms have been created within each discipline resulting in a language that does not transfer easily from one field to another. Another difficulty is the research in KM tends not to use the term learning and researchers in OL tend not to use the term knowledge (Vera and Crossan, 2003).

The influence of IT commercial interests as proponents of IT solutions to the processing of information, as well as differing readership of the literature (Scarborough and Swan, 2003) will continue to have a diverging influence on the direction of the two areas. However,

recent developments within KM suggest it is beginning to realise the need for underlying theoretical basis and it is looking to OL to provide this – newer KM approaches view OL as being a critical component of knowledge processing activities (Cavaleri, 2004). Recent moves within the field of KM involve the inclusion of cognitive processes of people at work, business functions, or management philosophies and practices (Malhotra, 2004).

Cavaleri (2004) views KM as focusing on the control of knowledge in the assumption that this will lead to greater organisational potential. He distinguishes this from OL as focusing on the process that leads to changed behaviour in the assumption that knowledge results from the assimilation of information. While he proposes the unification of OL and KM, Cavaleri's writing has a tendency to focus on individual learning within organisations, possibly as he is coming from the view that KM also focuses on leveraging individual knowledge, but he ignores how this is converted into new procedures i.e. action. He addresses this by suggesting adaptation of definition of knowledge from "capacity for effective action" to "knowledge is a cache of scripts that may potentially be used in any situation". This highlights the lack of useable definitions of terms and how these introduce more confusion rather than clarity. This confusion will have to be handled within my own research.

One purpose of KM can be seen as to aid OL. The outcome of a good strategy for information is the improvement of OL through a variety of pathways (Orna, 2004). There is no doubt that these two areas have more in common than differences.

The theoretical basis of OL will contribute to the understanding of the process of knowing and the practical application of KM will help to provide useable results that can be used to improve organisational performance. As these two areas continue to use work from each other's areas to inform their own development, it is likely they will continue to expand the areas of overlap until a single enquiry area results. Defining a common set of terms would go a long way to facilitating this.

More recent approaches to KM are considering the embedding of knowledge (e.g. Hsiao et al., 2006, Nonaka et al., 2006). This increases the overlap between the fields and takes KM towards the realm of OL.

OL links cognition with action differentiating it from KM (Crossan et al., 1999). Although Nonaka and Takeuchi (1995) argue to the contrary, their position is slightly different from the main body of literature, which sees KM as largely focussed on cognition. The cycle of action taking and knowledge acquisition is what defines OL.

The discussion can be seen to equate to the related arguments between cognitive and behavioural approaches to learning, with KM falling into the cognitive camp and OL into the behavioural camp.

Easterby-Smith and Lyles (2003a) suggest that the main difference between the two fields of KM and OL is theory and practice. This is considered a fair distinction, however the historical legacy of ill-defined literature makes this difficult to establish. Within an OL context, KM plays a role of developing understanding and maintaining knowledge within the organisation. This is anticipated to have an impact on the organisational perception and affect decision making.

3-6.3.1. Organisational Learning

The fourth area of the quadrant, OL, was firmly placed in the theoretical and process area (see Figure 3-3), which reflects the need for process to consider both content and outcome. As it is discussed throughout the chapter, it is not elaborated on in this section.

3-6.4. Discussion regarding the wider field of Organisational Knowing

It is questionable whether the reduction of each of the four areas of research into the tight boundaries proposed is appropriate. Despite this, the mapping of the four areas, OK, OL, LO and KM by Easterby-Smith and Lyles (2003a) is likely to require some refinement in

definition and terms, its value is in providing a context for future research which will clearly identify where it sits within the limits and boundaries proposed. This new mapping also necessitates the translation of earlier work from the terms used by the author, into the terms as defined in the new mapping. For example, the term “knowledge management” has often been used in a theoretical area and the term “organisational learning” has often been used from a prescriptive and purely practical viewpoint.

OL is more than knowledge creation; it involves the acquisition, retention and application of knowledge that contributes to organisational purpose.

Researchers tend to focus either on “learning” or “knowledge” and subsequently tend to ignore the related literature within the other field (Vera and Crossan, 2003). The field also suffers from conceptions that are excessively broad, encompassing merely all organisational change (Cohen and Sproull, 1996). It is therefore considered important within this research to consider related research within the fields of Organisational Knowledge and KM, and to incorporate them appropriately.

Vera and Crossan (2003) in considering an integrative framework of the two fields of OL and KM warn against adoption of only one paradigm and losing the benefit of research in the other. Developing their model further, the concept of Organisational Knowledge can be incorporated and Knowledge Management can be seen as a mediator between “raw” knowledge and its conversion into behaviour, or learning (see Figure 3-4). As we move from left to right across this framework, a need for information may be converted into potential, which in turn may result in behaviour. At one end of the dimension is the creation of knowledge and at the other the creation of action. The nature of the management of knowledge will influence the extent to which one is converted into the other.

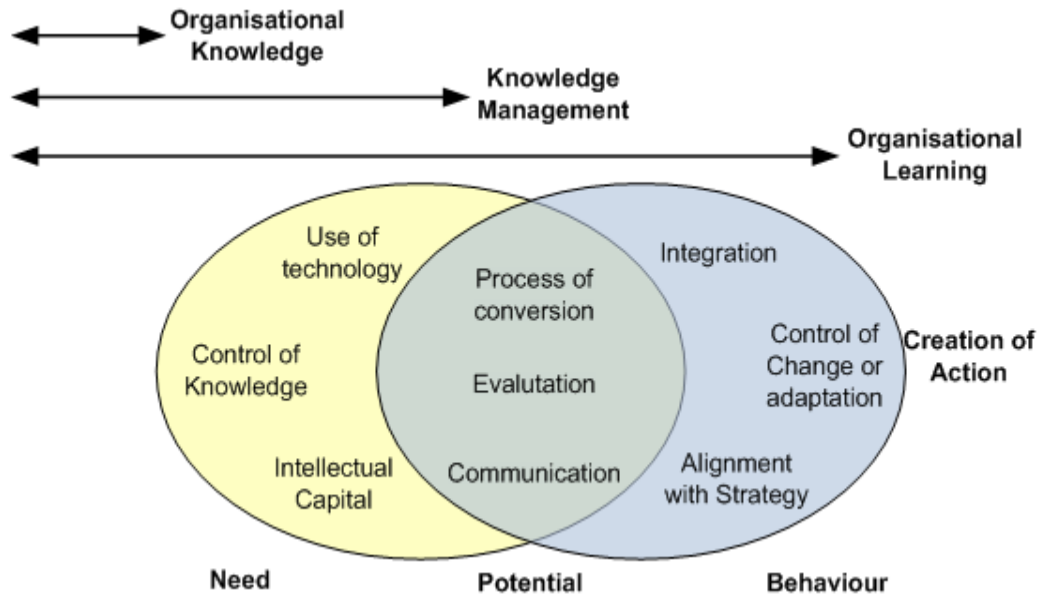


Figure 3-4 – Knowing and Learning in Organisations. Source: Derived from Vera and Crossan (2003).

The key difference from the dimensions proposed by (Easterby-Smith and Lyles, 2003b), is that OL as proposed here incorporates organisational knowledge and knowledge management. This fundamental conversion process provides a framework in which OL can be used to underpin the research process.

3-7 DEBATES IN THE OL FIELD

While the early work by Cyert & March (1963, 1992) clearly identified OL as the process of adaptation by organisations to their environment through the acquisition of information, it was presented as an un-problematic concept.

“Organisational learn: to assume that organisation as go through the same process of leaning as do individual human beings seems unnecessarily naive, but organisations exhibit (as do other social institutions) adaptive behaviour over time.” (Cyert and March, 1963, 1992, p172)

Their intention was to deal with the aggregate behaviour of the organisation.

However, the nature of that adaptive process is far more complex than its definition would suggest. A number of key points of discussion have exercised scholars in this field over the past forty years to the extent that much of the literature has concentrated on examining the theoretical nature of OL rather than providing empirical evidence.

The following considers and addresses some of the key debates of the OL literature and identifies the implications for the research.

3-7.1. The Locus of Learning

From the relatively simple basis for the concept put forward by Cyert and March (1963, 1992) and other early writers, that organisational adaptation is a “learning” process, it is apparent that much debate lies around the use of the term learning and whether it can be applied to an entity other than an organic one. Within this debate, it has been suggested that the concept of OL is either contradictory, paradoxical, or devoid of meaning (Argyris and Schön, 1996).

The importance of the interactions between individual and OL was recognised by Cangelosi and Dill (1965). Since then, this subject has been examined by a number of scholars (e.g. Kim, 1993, Crossan et al., 1999, Antonacopoulou, 2006, Elkjaer, 2004).

A basic assumption is that insight and innovative ideas occur to individuals, not organisations (Nonaka and Takeuchi, 1995). Some conclude that OL is the product of individuals’ learning (Argyris and Schön, 1978, Fiol and Lyles, 1985). However, it would be a mistake to conclude that OL is nothing but the cumulative result of their members’ learning (Hedberg, 1981).

This dilemma is reduced if learning is considered as on “behalf of the organisation” rather than by the organisation (Argyris and Schön, 1996, p191). However, this reduces the

concept of OL to being centred on the individual level and not the group or organisation level.

Organisations can be seen as learning because they possess capacities that are identical or equivalent to those possessed by individuals (Levitt and March, 1988). However, Hedberg argues that organisations are merely constructs and cannot do anything for themselves (Hedberg, 1981). This is not necessarily the case and Hedberg's views may reflect more on his concept of the nature of an organisation than the nature of learning.

While the Cyert and March view of OL largely ignores the interactions between individual or subgroup learning (Cangelosi and Dill, 1965), subsequent authors have been aware of the differing roles the ontological levels of the individual, group and organisational play in OL. For example;

- Cangelosi and Dill (1965) saw a need for more attention to the interaction between individual and organisational learning. In considering change in the communities in which work takes place (i.e. communities of practice)
- Brown and Duguid consider the group level as the means by which organisations adapt (1991).
- Argyris and Schön (1978) consider that learning is seen to occur at the organisation level when the organisation captures learning which has taken place at the individual (or group) level and is encoded or institutionalised in the organisation as a whole.
- March and Olsen (1975) recognised individuals as those who act and who learn from acting, whereas organisations are the stages where acting takes place.
- Nonaka and Takeuchi (1995) saw the organisation as being unable to create knowledge on its own without the initiative of the individual and the interaction that takes place within the group.
- Crossan et al (1999) saw OL as being multilevel: individual, group, and organisation.

Their positions clearly attribute certain aspects or stages of the learning process to specific ontological levels, the individual, the group or the organisation. However, it is questioned whether the concept of a single ontological level is appropriate? For example, whilst only an individual can interpret information, they do not do so in isolation, or outside of the influence of the group or the organisation. Indeed, without the context provided by the organisation, meaning cannot be attributed. It is therefore considered too simplistic to say that interpretation occurs at the individual level.

The essence is that these levels are not mutually exclusive, but co-exist. They are products of our approach rather than separate realities (see Chapter 5 for discussion on Critical Realism). For example, Nonaka and Takeuchi saw the individual is the "creator" of knowledge and the organisation is the "amplifier" of knowledge (1995). This view indicates that it is not a simple question of level but that each level plays a role that will depend on the stage of the process.

Group and organisation level learning depends on entities defined at relatively high levels of social aggregation. It would be unreasonable to expect a psychologist, when explaining individual learning, to describe it in terms of the individual brain cells of the learner, whilst a neurologist may. It is not that one level is less accurate than the other, but they are two valid perspectives.

In this research it seems reasonable to adopt a position that considers the organisation from a multi-level perspective. To try to break the concept into low different levels of aggregation removes the meaning from the concept. It is concluded that organisations, while comprised of individuals, are subject to social rules that govern how those individuals interact. That is, OL can be considered from a sociological perspective as well as a psychological one.

3-7.2. Can OL be Dysfunctional?

Two approaches are evident in the approaches of theorists, either, OL is that which provides positive change (i.e. a normative quality where learning is defined by improvement) or, OL (like individual learning) is on-going, sporadic, random, and results in outcomes that may or may not be beneficial (Cangelosi and Dill, 1965).

Those attributing positive outcomes are largely from the management consultant and practitioner literature (e.g. de Geus, 1988). However, what happens if a new adaptation is less effective? Change has occurred and this new behaviour has been learned by the organisation. Is this then OL or not?

Argyris and Schön (1996) quote the example of Eichman's bureaucracy during the Nazi period (see Jackson, 1984) as an organisation that could have been argued to have learned but produced no "good". Their argument however misses the point that in terms of the organisation the "good" is relative to its purpose, not an ethical or societal "good". It is deeply unfortunate in this case that the organisational good was contrary to the societal good. This highlights the need to avoid application of normative values without the context.

OL can be dysfunctional and something that can lead to dysfunctional organisations (Crossan et al., 1999). Organisations, like people, can learn the right things incorrectly, or they can learn the wrong things correctly (Huber, 1991). While the exploratory literature describes the stages involved and highlights dysfunctional aspects (e.g. Huber, 1991) the normative literature identifies the features of the transfer process most likely to promote effectiveness (Elkjaer, 2004)

These dysfunctional aspects bring into question the approach of the "learning organisation" literature which assumes its beneficence (Argyris and Schön, 1996). However, accepting the dysfunctional nature of OL assumes that OL can have a quality, i.e. it can work well or not. In other words, while all organisations may continually be adapting to their environment, the

effectiveness with which they do so is dependent on the nature of OL, the nature of the organisation, the nature of the procedures through which it achieves its purpose, the nature of its member, and their interaction and relationship to the organisation.

The organisational purpose, while perhaps difficult to define in some cases, can be considered a more relevant comparator. Using this, learning can be said to have a positive or negative affect if the end result favours or works against the purpose of the organisation. This however introduces an ethical question regarding the impact on members. While members can be considered to support the organisation in return for a personal benefit, the organisation can be seen to apply control to gain compliance but which may be detrimental to the members.

Another aspect of this argument is the use of “learning” to maintain organisational stability rather than organisational change. Again, it can be argued that stability, such as in the form of bureaucracy, is the enemy of organisation change and reform (Fiol and Lyles, 1985, Levitt and March, 1988).

The fundamental argument is that OL is often ascribed a value of good or right and that this is inappropriate. It is argued here that OL can be ascribed a positive or negative value in relation to the context of the organisational purpose but not in absolute terms.

Rather than that which produces any new behaviour, Lipshitz et al address this problem by defining OL as that which produces productive behaviour (2002, 2007).

Three types of productive learning identified by Argyris and Schön (1996, p20), all of which reflect improved performance.

1. Organisational enquiry: Instrumental learning that leads to improvement in the performance of organisational tasks
2. Inquiry through which an organisation explores and restructures the values and criteria through which it defines what it means by improved performance;

3. Inquiry through which an organisation enhances its capacity for learning types 1 and 2.

These types provide the basis for and single loop, double loop and deuterio learning. However they don't elaborate on the meaning of "productive". These types of learning are also called generative or adaptive learning (Senge 1999), lower level and higher level learning (Fiol & Lyles 1985), or "learning how" and "learning why" (Edmonson and Moingeon 1996).

However, Argyris and Schön question the ability of organisations to learn productively. Their ability to act coherently, make valid inference, are seen as threats to effective action (1996). They see this as a challenge to the concept of OL as any organisation that is unable to act coherently, cannot make decisions on a solid basis, and cannot effectively enact the correct behaviour.

However, such difficulties are in the real nature of organisations and any theory of OL must address the real world. Organisations exist in an ever changing world of competing demands on resources, changing financial environment and where the aims and objectives of members are influenced by a wide variety of interrelated organisations. In effect, organisations can be seen as a complicated set of systems with a loosely defined boundary that exists in a much larger and much more complicated system. That does not mean that organisations cannot be viewed as an entity but that they cannot be considered to exist in isolation.

3-7.3. Conclusion Regarding Debates

As was shown earlier, different perspectives and approaches lead researchers to focus on different levels of aggregation and on different features of the phenomena discovered at each level. This variety in positions does not invalidate the concept or any of the perspectives proposed. However, it is a considerable task to explain how fundamentally different

processes interact to create the phenomena recognised as OL. Also, any theory of OL has to resolve somehow the dilemma of imparting intelligence and learning capability to a non-human entity without anthropomorphising it (Kim, 1993).

Simple transference from individual learning theory to OL theory must be treated with caution. However, our vocabulary has not expanded to create a more useful, commonly understood term.

In this research, it is viewed that OL is a metaphor for a process that involves an interaction between the individual, the group and the organisational levels, in which a learning process is simulated. The use of metaphors is widely established in organisational science. Their meaning can be taken literally or as an analogy. Their use can aid comprehension and understanding through insights (Tsoukas, 1991).

As with individual learning, OL can be viewed as either a process or an outcome (Levitt and March, 1988). The following section goes on to discuss the implications of this for the research.

3-8 ORGANISATIONAL LEARNING AS A PROCESS

Just as learning can be considered both as an outcome or a process, that is a noun or a verb, OL can be viewed in the same way. Whilst models of OL from the literature are explored in detail in Chapter 6, this section briefly introduces the literature that views OL as a process.

With its focus on practical application of OL theory to performance management approaches in policing, this research is focussed the contributing processes that create the outcome rather than the outcome itself. A relatively small number of authors have considered the process that leads to the outcome of OL.

Cangelosi and Dill (1965) proposed that OL occurred in a sporadic and stepwise manner rather than being continuous and gradual. They also considered that the driver for OL

was a product of different kinds of tensions within the organisation. Those stresses can be seen as driving a number of sub-processes that combine to produce organisational adaptation.

Amongst others, other process approaches include Hedberg (1981), Huber (1991) and Crossan et al (1999). The adoption of a process approach tends to result in a model of OL which describes the process (see Chapter 6 for full discussion).

3-8.1. OL Impact factors

A number of factors may impact on the effectiveness of the OL process, or inhibit the flow through the process. Identifying these factors is key to understanding how the impact of OL may vary. Providing evidence of the impact of these factors also provides some clues as to the nature of the process.

Various factors have previously been identified in the literature. These include:

- Incomplete organisational learning process resulting in the absence or reduction in OL as an outcome (March and Olsen, 1975).
- Effective interaction between the “stages” of the OL process (Crossan et al., 1999). The role of mediating artefacts in this transfer process was proposed as an area worth further examination.
- Information overload (Huber, 1991). Interpretation within or across organisational units is less effective if the information to be interpreted exceeds the units' capacity to process the information adequately.
- The ability to unlearn previous behaviours (Hedberg, 1981).
- Bureaucracy hobbles individual initiative because of its strong propensity for control and can be dysfunctional in periods of uncertainty and rapid change (Nonaka and Takeuchi, 1995).
- Institutionalization can easily drive out intuition (Crossan et al., 1999).

- Actions, emotions and social cognition (Akgün et al., 2003).
- The task force, on the other hand, is indispensable in generating new knowledge through socialization and externalization (Nonaka and Takeuchi, 1995).
- The alignment of knowledge with a firm's corporate vision as an enabler for further knowledge creation (Nonaka and Takeuchi, 1995).

There is little consistency in the factors identified in the literature. This is seen as reflecting the diversity of perspectives and approaches across the field.

The direction of the behaviour of organisational members is the role of management and leadership. Surprisingly this type of influence is not identified within the main literature.

Factors play an important role in this research as they are seen as having the potential influence the outcome, or completion of OL, that is, the extent to which OL is productive. Further examination of the impact of these factors on the effectiveness of the outcome of OL is needed.

3-9 CONCLUSIONS REGARDING THE NATURE OF ORGANISATIONAL LEARNING

The aims of this review of the OL literature were to:

- Identify the nature of the OL concept and the context in which it may occur.
- Understand the wider context of knowing and learning in organisations.
- Establish the support for concept of OL and the debates within the academic literature.
- Build a clear definition of the OL concept upon which this research will be based.

3-9.1. Support for the concept

The roots of OL within the literature have been identified as stemming from a loosely defined concept expressed by Cyert & March (1963, 1992). From that concept the field of study has developed into a broad spectrum of research relating to the adaptation of organisations and their members.

The discussion has considered the nature of organisations and their apparent ability to act as a whole towards adaptation in their structure, composition and method towards changing environment and changing goals.

It is a commonly held view that the literature has yet to add up to a coherent body of knowledge (Lipshitz et al., 2007, Crossan et al., 1999, Gherardi, 1999). Neither can we say that we know much more about organisational processes of knowledge handling today than we did 30 years ago (Easterby-Smith, 1997). The theoretical field of OL appears to have become abstracted from its roots in the nature of the organisation.

However, based on the literature reviewed above it is proposed that:

- a) OL can be a process or a product of a process. Given the nature of this research, it is appropriate to focus on the former;
- b) OL involves the conversion of knowledge into behaviour, or potential behaviour. This conversion process involves decision making about appropriate responses to the new information or stimulus;
- c) Action becomes institutionalised when new behaviours become routinized or incorporated into standard operating procedures (even if not enacted);
- d) This institutionalisation itself occurs over time;
- e) OL has been shown to occur through many roots and to occur in different ways depending on the context (Huber, 1991).

- f) A specific example is required in order to focus the data collection in this research.

It is proposed in Chapter 4 that we can view the development of performance indicators and their use to guide strategic decision making as OL.

These principles provide a sound basis up which the research can be conducted.

3-9.2. A Working Definition of OL

From the literature, it has been established that OL is a generic term that covers a range of separate fields of study from information processing, psychological aspects of information sharing, sociological practice of decision making and leadership, psycho-social aspects of individual and group behaviour. It can be both an outcome and a process that leads to an outcome and is oriented to organisational intention. OL is more than knowledge creation as it provides both cognitive and behavioural outcomes; it also involves different types and sources of information acquisition, as well as different types of learning at different phases of the process.

At this stage then, a working definition of OL is proposed as:

OL is an umbrella term for the fundamental relationship an organisation has with its members and environment through which the organisational behaviour is continually modified and adapted to meet the changing needs of its leaders, members, internal and external environments in order to achieve the intentions of the organisation.

OL is seen as fundamental to the nature of organisations which exist over time in a changing environment and with changing membership. Organisations can do nothing without learning it first.

3-9.3. Potential fields of enquiry

The diverse nature of OL field identified means that a single research project could not satisfactorily address the subject in its entirety. Taking an organisation as a whole presents the difficulty of the wide range of decision making practice on-going. Early investigations into OL look at management practice in simulated situations such as role playing. To examine practice in sufficient detail to provide insight into its nature there is a need to isolate a more specific kind of OL practice so the subject can be more closely examined in situ.

Such an example of OL must be relevant to the research context and validated as appropriate by the literature. As explained in Chapter 2, the management of performance in policing is current and relevant issue. Also, performance monitoring practice is explicitly mentioned by Huber (1991) as one type of OL mechanism.

It is therefore proposed that this uses using Performance Management (PM) as an area of practice that can be investigated to address the Research Problem. The next chapter (Chapter 4) considers the PM literature to establish the nature of this concept and how it can be examined.

3-9.4. The justification for looking at OL

Despite the uncertainty about its meaning and practice, the subsequent mystification attributed by some authors (see Friedman et al., 2005), and its perception within the Learning Organisation literature as the “holy grail” to which all organisations must aspire, it is argued here that the concept of OL is fundamental to the concept of the organisation. That is, organisational existence implies OL. OL is seen as “in the nature of” organising human activity.

If we compare the nature of organisations of say 100 years ago with organisations today we would probably see the impact of management practice, such as Taylorism (see Taylor, 1911), has resulted in a transfer of skill from the individual artisan or professional, into the processes, routines, and structures of the organisation. Organisations have become more skilled, enabling more the complex organising of greater numbers of members (Jelinek, 1979). This is an aspect of OL that is rarely discussed in the literature, and yet this macro level view perhaps provides a more meaningful view of OL than the micro level detail of how knowledge is converted into action. This macro view provides an understanding of the relevance of OL to the police service. Over the long term, OL enables more complex functioning of the organisation by absorbing the skills of individuals into developing more appropriate practices, routines and structures.

However, to continue to benefit from OL, there is a need to become more in control of it. To do this requires a greater understanding of how the process of OL operates. Due to the diversity of the literature and the absence of empirical work, the OL literature is unable to fully address this. Whilst indicating the relevance to organisations in general, the OL literature does little to identify how this would apply to public sector organisations, and specifically to police management practice.

“...we are missing ways of capturing the holistic and complex nature of learning in organisations in ways that we can engage in at the same time, both the relationships across levels of analysis and the multiple dimensions of learning” (Antonacopoulou, 2006, p456).

Although behaviourist approaches are present, a clear relationship has not been established between knowledge and action. This is seen as key to underpinning the whole field of organisational knowing and learning.

The need for a suitable model to structure the research is identified in Chapter 5. The process of OL has been theorised in a small number of diverse models (see Chapter 6).

Whilst some are more favoured than others, few have been thoroughly tested by empirical work. Chapter 6 goes on to investigate models of OL and how these may be applied to an investigation of PM practice. This research into OL is justified both by the need to answer the Research Problem and to contribute to the body of knowledge in this field.

3-10 REFLECTION

This research was initiated by the more prescriptive literature on learning in organisations (e.g. Sun and Scott, 2003, Garvin, 1993, Goh, 1997, Senge, 1990). The exploration of the more academic literature on OL provided some initial disappointment as the imprecise nature of OL and the degree of controversy around the subject was uncovered. The diversity in approaches and lack of definitive detail meant changes to planned research. However, it was felt that this was largely based on the related issues of absence of practical research, lack of agreement on the application of OL, confusion with the Learning Organisation and the prescriptive texts.

Whilst the majority of this literature review was undertaken to advise the development of the research in its early stages, this has regularly been revisited. On each occasion, as more of the literature is absorbed, and this is balanced by experience in the field, as well as time to reflect, the relevance and meaning of many different aspects of the literature have been revealed.

“...a report of a scientific search, experimental development, modifications in method, and successive insights is presented to convey the essence of an ambitious investigation at the frontier of knowledge where the terrain is not well-mapped and the research tools are being developed as needed” (Chapman et al., 1959)

In 1959 Chapman described his research as shown above. Fifty years later, this research could easily make the same statement and I wonder whether this relates more to the nature of research or the nature of the subject.

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4-1 ORGANISATION OF THE CHAPTER

The following table (Table 4-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Problem.

Content	Relevance to Research Questions	Comment
The Development of PM Literature	Identify foundational works, key authors and their perspectives.	Accounting, Operations and Personnel.
Performance and its Management	Establish from the literature the meaning of “performance” and what it means to manage it.	Performance is relative.
PM Frameworks	Identifies and compares PM frameworks and how these are reflected in the academic literature and published practitioner material.	Involved in conversion of information to action.
PM and OL	Develops an understanding of the fit of PM practice with OL theory and to propose how an OL approach would impact on a PM research study.	There is sufficient material to validate the approach adopted.
PM and the Public Sector	Identify the current state of understanding of PM and its relevance to the public sector and the police service in particular.	Also discussed in Chapter 2
Influences on PM	Examine the literature to identify factors that may influence the process and outcomes of PM practice.	Factors that influence PM outcomes may also affect OL outcomes.
Conclusion re Research Agenda	Concludes that PM provides a suitable area in which to research OL and identifies the knowledge gap that this research must address.	PM research would benefit from grounding in theory. There is a need for police oriented research

Table 4-1 - Organisation of the Chapter

As an example of Organisational Learning (OL) in practice, this review considers the literature in the light of a rapid growth in Performance Management (PM) practice during the last decade. Differences between the practitioner literature and the academic literature

are highlights. The small body of literature combining PM and OL is identified and reviewed and the implications for the research identified.

4-2 INTRODUCTION

The review of the OL literature identified that PM may provide a practical example of an OL mechanism. To better understand the nature of PM practice, and to provide a basis upon which the research can be conducted, a review of the PM literature is necessary.

This review considers the literature in the light of a rapid growth in PM practice during the last decade or so and examines the similarities differences between the practitioner literature and the academic literature. Theoretical approaches to PM are critically reviewed and the implications of the small body of literature combining performance management and organisational learning are considered. The small body of PM material relating to UK police service is highlighted.

Within the literature, the term “performance management” encompasses both organisational level operations management (e.g. Barnes and Radnor, 2008), organisational improvement (de Nahlik, 2008), and individual performance (see Houldsworth and Burkinshaw, 2008). The last of these, which focuses on the performance of the individual within an organisational setting, is not considered here. While the basic principles of objectives, behaviour and feedback are similar in both fields, the adjustment of organisation behaviour is seen as a sociological issue whereas the adjustment of individual behaviour is seen as a psychological issue. The scope of this review is limited to an organisational behaviour perspective and establishing the position and relevance of strategic level PM.

4-3 THE DEVELOPMENT OF THE PM LITERATURE

This section identifies the key literature in the field, how the field has developed and the commonalities, differences and directions taken within the literature. Through this the nature of PM is identified and its suitability as a research subject is considered.

A study by Neely (2005) identified the authors in the field of PM most frequently cited. The results are shown in Figure 4-1. The relatively small number of authors in this range reflects the relatively recent development of PM as an academic the subject, and the dominance by Robert Kaplan reflects the significant impact of his work on the Balanced Scorecard in moving the focus from monitoring organisational value to managing a wider range of organisation factors.

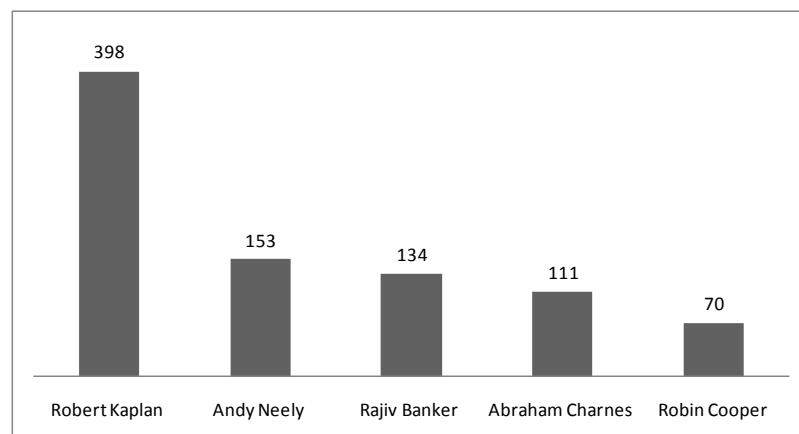


Figure 4-1 - Frequently Cited Authors. Source: Data from Neely (2005)

The background of PM, from a practitioner perspective, is variously attributed to:

- Early accounting systems (Bourne and Neely, 2003, Gordon et al., 1978, Johnson, 1981).
- Marketing productivity in the 1970's (Clark, 2002, Hudson et al., 2001).
- Operations management (Neely and Austin, 2002, Radnor, 2007a, Otley et al., 1995).

These different backgrounds broadly reflect different approaches to PM. The following traces the general development of the field.

Kaplan (1984) notes that the demand for information for internal planning and control became prevalent during the first half 19th century when firms such as textile mills and railroad had to devise internal administrative procedures to coordinate the multiple process involved in the undertaking the basic activities of those organisations. As a result of changes in the organisation of economic activity, cost accounting became the norm during the mid to late 1800's (Johnson, 1981). There is a strong correlation between accounting metrics and performance metrics, each being quantitative in nature and intended to determine value.

This use of metrics developed in the early 20th century as Taylor's management principles (see Taylor, 1911) became prevalent. Adapting practice to maximise efficiency required the measurement, monitoring and adjustment of workers' effort, tasks, work arrangements, and output. Assuming the benchmark level of performance reflected the relationship between worker effort and output, workers could be paid according to a simple formula that included a base wage per hour plus a bonus rate for performance above the standard (Heinrich and Marschke, 2010). The development of an operations management approach is therefore attributed to Frederick Taylor (Radnor, 2007a).

Drucker picks up the baton in the mid-20th century by developing descriptions of how to set objectives, how to decide what should be measured, and what the metrics should be (Drucker, 1954).

“For the measurement used determines what one pays attention to. It makes things visible or tangible. The things included in the measurement become relevant; the things omitted are out of sight and out of mind. (Drucker, 1954, p61)

The emphasis of post war manufacturing on cost based competition led to the dominance of an operations management application of performance measurement (Neely and Austin, 2002). The revival of the Japanese economy caused the west to re-evaluate the nature of performance and the focus moved, from cost alone, to include perspectives on quality ,

flexibility (Neely, 2002). This underpinned a realisation that operations management had a significant role to play in the effectiveness of organisations.

Traditional PM systems were financially driven and historically focused (Kaplan and Norton, 2001). This focus on financial performance measures were identified as causing an imbalance for companies (Bititci et al., 2000, Brignall, 2008, Tangen, 2004). The 1980's and early 1990's saw an explosion in the number of authors criticising the performance measurement systems used by organisations (Neely et al., 2003). For example, in 1984 Robert Kaplan wrote:

Despite considerable changes in the nature of organisations and the dimensions of competition during the past 60 years, there has been little innovation in the design and implementation of cost accounting and management control systems. Virtually all the practices employed by firms today had been developed by 1925. (Kaplan, 1984, p390)

Neely et al. (1995) characterises the shortcomings of an accounting based focus as follows:

- Encourages short-termism.
- Lacks strategic focus.
- Encourages local optimisation
- Encourages managers to minimise variance from standard rather than seek continuous improvement.
- Fails to provide information on what customers want and what their competitors are doing.

During the 1980's the link between strategic objectives and organisational performance was explored by, amongst others by Kaplan (1983). Keegan et al. (1989) proposed a performance measurement matrix reflecting the need for balanced measurement. This led to the development of a number of PM systems that enabled this link to be made. Throughout the '80s and '90s, many new frameworks were developed to try to provide the right information and the right emphasis to decision makers. Key frameworks are discussed later in this chapter.

During the 1990's the development of lean manufacturing in the USA led to the need for performance measurement techniques and increased concern to improve effectiveness and responsiveness (Radnor, 2007a). Subsequently, PM has moved from measurement based on efficiency and productivity related to cost to management on a broader more strategic level considering operations from a number of objectives.

This diverse body of literature has resulted from the development of PM from a range of disciplinary backgrounds (Neely et al., 1995). Stringer (2004) identifies that a number of key themes are discussed in the PM literature and there is diversity in areas such as:

- Research method.
- Research question.
- Variables used.
- Measures.
- Definitions.
- Theory.
- Research sites.
- Levels in the organisation.

Some of these areas are more developed and have more thorough grounding than others. For example, organisational behaviourists, have explored the rationale underlying the use of performance measures more fully than the production and operations management community (Stringer, 2004).

Early work on OL focused on “exploratory” learning (Crossan et al., 1999, Huber, 1991). More recent research has shown that PM processes are also forms of OL (Moynihan, 2005, Stringer, 2004, Sun and Scott, 2003, Otley, 1999) and, as a result, are more “exploitative” (see Chenhall, 2005). The range of PM behaviours indicate the need for OL to be considered, not as a single behaviour type, but as extending from “exploratory” to “exploitative”.

This review has found that the field of PM has evolved from a body of literature that primarily focused on performance measurement. The area of performance measurement

developed from accounting systems. Neely (1995) noted that the field of performance measurement was not yet fully accepted as an academic subject. However, as shown above, the development of the literature since then, especially during the past decade has changed this situation. Performance and its management are now more firmly established in the academic literature. However, as Radnor (2007a) points out, the dominance of practitioner based approaches means that it is often difficult to discern whether PM theory leads or lags practice.

There is increasing recognition of the need for research to be based on more coherent theoretical foundations (Chenhall, 2003). This research will establish a link between OL and PM (see also Section 4-6 below) which, although discussed in the literature, has rarely been the subject of empirical study.

The next section goes on to define what PM means in the context of this research.

4-4 PERFORMANCE AND ITS MANAGEMENT

To establish the basis of PM, the nature of performance must be defined and what it means to manage it must be identified.

This section explores the nature of performance as discussed in the literature, examines how it can be measured, and identifies from the literature whether it can be managed. The theoretical foundations of PM are considered and some boundaries are established as to the meaning of PM in this research. The issues around PM are brought to light and their implications for the research are discussed.

4-4.1 Performance – What is it?

Performance is often mentioned by the foundational authors of OL in their discussion on the organisation (e.g. Drucker, 1954, March and Simon, 1958, Simon, 1959, Stinchcombe, 1965). It is often used in an innocent context, that is, as if everyone understands the concept

and it needs no further explanation. However, before considering the management of performance in more detail, it is essential to establish what is meant here by the term 'performance'.

Otley (1999) views the term performance as ambiguous and capable of no simple definition. Lebas (1995) takes a wider view and sees performance as the potential for future successful implementation of actions in order to reach the objectives and targets. Neely et al, (1995) propose that performance should be defined as the efficiency and effectiveness of action. Performance is normative in that it tends to create or prescribe a standard against which something is judged. As the effectiveness of an action implies an intended goal or outcome, performance therefore must have a context.

To be understood, performance is therefore generally stated in terms of relative performance against similar organisations or as performance against objectives or aspirations. It can be assumed that an organisation that is performing well is one that is successfully attaining its objectives; that is, one that is effectively implementing an appropriate strategy (Otley, 1999, p364). An important insight is that performance may be viewed as institutionally defined, as institutional factors determine the interests being pursued by organisations (Brignall and Modell, 2000). This type of performance assessment focuses activity toward the achievement of objectives and is particularly relevant to the management of strategic performance.

There is some similarity here with the discussion in OL around productive learning proposed by Lipshitz et al (2007). Productive learning is determined by two criteria, 1) learning results in intended organisational outcomes, 2) learning results in organisational *action* based on *valid* knowledge (Lipshitz et al., 2007, p16 with original emphasis). It is reasonable to ask the relationship between performance and goals, and how performance is validated.

Performance is a relative term (Lebas and Euske, 2002). Performance management begins with purposes and objectives (Ferreira and Otley, 2009). Goals therefore define

performance. But organisations have to meet multiple and sometimes competing objectives (Chenhall, 2003). Organisational success is therefore multifaceted (Brignall, 2008).

Variation in PM practice is often related to the nature of the goals selected. Hudson et al (2001) identified that the SMEs had different needs for PM systems from other organisations. Their research indicates that goals need to be defined in a way that was appropriate for the nature of the organisation and that contextualising factors, such as resource availability, quality, and time were relevant. Such factors are defined as key success factors, that is, activities, attributes, competencies, and capabilities that are seen as critical pre-requisites for the success of an organisation in its industry at a certain point of time (Ferreira and Otley, 2009).

Performance measurement was conceived primarily in terms of the volume and cost, and hence productivity (Radnor, 2007a). During the 1980s, it began to be argued that an organisation's strategic policies could be used to inform and justify the choice of non-financial measures (Lawrie and Cobbold, 2004). Many performance frameworks are now based on the identification of various types of goals (this is discussed in more detail later in Section 4-5).

Within the organisation the identification and communication of goals to members is designed to create alignment in activity. Aligning performance measurement systems with strategic goals is also important (Kaplan, 1983).

An organisations strategy can be seen as its course, its onward movement in space and time where it goes and where it does not go. (Cummings and Wilson, 2003, p1)

From the above it is viewed that organisational performance is associated with organisational purpose. As a means of organising the achievement of its purpose, organisations deploy strategies. Strategy refers to the means through which goals will be delivered. As strategies are the main contributors to the achievement of the organisations goals it is essential that these are well informed, monitored and controlled. In effect, the

planning and performance of the strategy will determine the how well the organisation achieves its objectives.

Strategy formation and implementation are distinct and separable (Mintzberg, 1979). These can be seen as planning and acting.

Communication to members is an important element of strategy and it offers a language which can be simply understood enabling a group to understand about themselves and what they want to achieve in their environment (Cummings and Wilson, 2003).

Performance can therefore be seen as achievement of strategy which, in turn, is a way of delivering on organisational goals.

4-4.2 Performance – Can it be measured?

Having identified performance as the delivery of organisational goals, it is now asked whether this performance can be measured.

Performance “monitoring” is used to mean both focused and wide-ranging sensing of the organisation's effectiveness in fulfilling its own pre-established goals or the requirements of stake-holders (Huber, 1991). Performance information is essential for managerial control, informed decision making and public accountability in any organisation (Wisniewski and Stewart, 2004). PM practice implies an assumption that performance can be measured. Performance indicators are fundamental to PM as they can provide the raw information upon which management direction is determined.

The term ‘performance indicator’ is used here in preference to ‘performance measure’ as it is questionable whether they accurately measure performance. Instead they provide information that provides an indication about performance. That indication normally needs analysis to become meaningful.

Three types of indicators within the healthcare service were identified by Eddy (1998), namely outcome indicators, process indicators and structure indicators. Difficulties in the

accuracy and meaningfulness of outcome and structure indicators, led to proposals to use more process measures. However, process indicators also have some drawbacks. For example, a) they require an assumption that a difference in the process represents an important difference in health outcomes, and b) a change in a process measure is less meaningful and more easily misunderstood than is a health outcome (Eddy, 1998).

A performance indicator is a “metric used to quantify the efficiency and/or effectiveness of an action” (Neely et al., 1995, p80). This definition assumes that a causal effect can be established to a particular action when in practice this is unlikely to be the case.

To be useful, performance indicators will normally be associated, through a causal map to a particular organisational goal. In order to clearly determine if objectives have been achieved, goals should be measurable. Accurate and timely performance information is seen as essential for management control and decision making at both the strategic (Jackson, 1995, Neely et al., 1997). Within the public sector, the relevance of measures taken from the private sector has been questioned (Micheli and Kennerley, 2005). Indicators may be quantitative or qualitative, but measurement should be against a standard of performance and a standard of expectation (Shahin and Ali Mahbod, 2006).

This somewhat mechanistic view is complemented by the widespread recognition that the measurement of performance also has a behavioural impact. Systems, especially systems involving humans, respond to performance measures (Neely et al., 1997).

The measurability of performance therefore, is perhaps with less accuracy than implied by the usage of the term. The extent to which an indicator is accurate is often underplayed and as such they provide an approximation of apparent performance rather than actual performance (Hibberd, 2004). However, it is seen as essential to good management to have such information. The greater the extent to which the level of approximation is known, the more useful the indicator. However, this is of limited use if the relationship between the indicator and the organisational goals is not understood.

4-4.3 Performance – Can it be Managed?

Having identified that some aspects of performance may to an extent be measureable, it is now considered whether, with this information, the achievement of organisational goals can be managed.

Typically performance measurement is often described as an end in itself. The assumption being that the measurement of performance will enable the delivery of better performance. Both practical experience and literature (Collier, 2008, Brooks, 2007, Campbell, 2006, Lebas, 1995, Loveday, 2006) suggest this is not the case and that the management of performance is a much more complex phenomenon than some authors would suggest.

Drucker (1954) provides an early reference to performance measurement and the use of measures to support management activity, in particular in support of decision making and management activity. This supports the idea that information is sought through measurement and that this is used to support adjustment of activity.

Otley (1999) asserts that the availability of performance information has enabled the progression from merely performance measurement data collection to true performance management, where significant use is made of this data.

Lebas (1995) explores and identifies the different natures of performance measurement and performance management. The attributes associated with each are shown in Figure 4-2. In the diagram, added to these are the domains of knowledge and behaviour (as discussed in Chapter 3). This begins to develop the relationship between OL and PM but this is more fully discussed later in this Chapter.

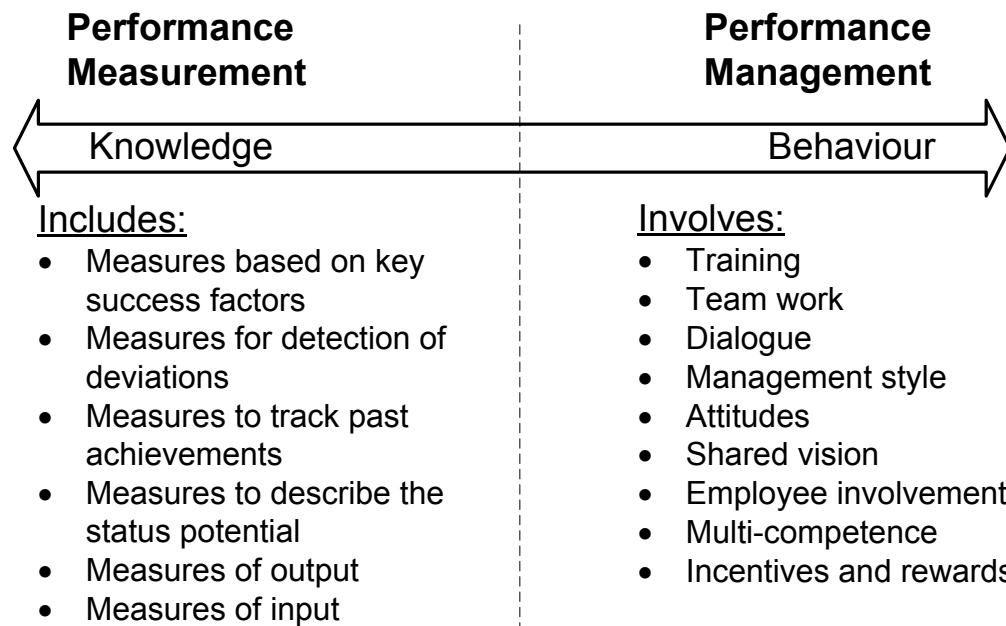


Figure 4-2 - Measurement and Management. Source: Adapted from Lebas (1995)

Lebas (1995) identifies that the measurement and management of performance are dependent on each other but this is not reflected in the attributes derived. For management to become performance management it is proposed that it must be based on the data from performance measurement and that the management practice must actively contribute to the achievement of organisational goals.

Neely (1995) identifies that the field of PM has not achieved academic professionalism but dismisses attributing this to the diversity of contributing disciplines (which include accounting, information systems, and operations management). He later asserts that there appears to be a reasonably integrated set of themes that individual researchers are exploring, most particularly those associated with the relationship between organisational strategy and measurement (2005).

Hudson et al. (2001) reviewed the dimensions of performance within strategically aligned PM systems. They found that time, quality and flexibility are commonly cited as the main operational dimensions, whilst finance was also considered to be a critical dimension of performance, and customer satisfaction and human resources were also commonly used. Table 4-2 shows the types of measures that were frequently attributed to these dimensions.

It is worth noting that the same measure can relate to different dimensions, for example, delivery reliability.

Quality	Time	Flexibility	Finance	Customer satisfaction	Human resources
Product performance	Lead time	Manufacturing effectiveness	Cash flow	Market share	Employee relationships
Delivery reliability	Delivery reliability	Resource utilisation	Market share	Service	Employee involvement
Waste	Process throughput time	Volume flexibility	Overhead cost reduction	Image	Workforce
Dependability	Process time	New product introduction	Inventory performance	Integration with customers	Employee skills
Innovation	Productivity	Computer systems	Cost control		Learning
	Cycle time	Future growth	Sales	Competitiveness	Labour efficiency
	Delivery speed	Product innovation	Profitability	Innovation	Quality of work life
	Labour efficiency		Efficiency	Delivery reliability	Resource utilisation
	Resource utilisation		Product cost reduction		Productivity

Table 4-2 - Dimensions of Performance. Source: Hudson et al. (2001)

Performance measurement has since become more sophisticated and indicators can relate not only to the external environment but also the internal aspects of the organisation.

Practice oriented research is present and even relatively common in the field of PM (Thorpe and Holloway, 2008). PM as an academic subject may be seen as driven by practitioner demand. The conspicuous absence of theoretical basis within PM is a challenge for academia. The literature in the area of PM increasingly recognises the need for research to be based on more coherent theoretical foundations (Chenhall, 2003).

As increasing numbers of organisations have adopted the measurement frameworks it has become easier to gather empirical data on their impact and this in turn has resulted a greater emphasis on theoretical verification (Neely, 2005). The works on theory related to PM have been approached from multidisciplinary perspectives (Thorpe and Holloway, 2008). These include agency theory, control theory, motivation theory, contingency theory (Neely, 2002).

The concept of control is fundamental to management and this is now considered in more detail before conclusions are drawn about whether performance can be managed based on performance indicators.

4-4.3.1 Management and Control

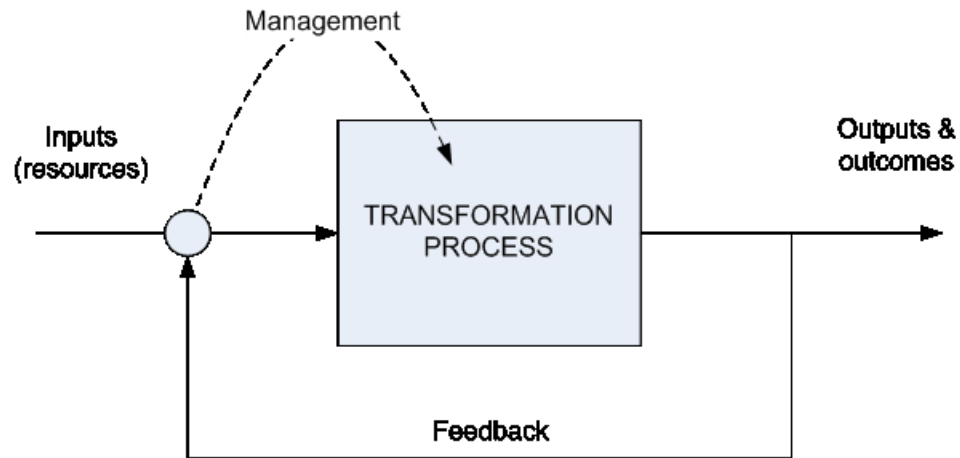


Figure 4-3 - Feedback Control - Source: Pidd (2008)

Organisation interact with the environment through the performance feedback process (Greve, 2003). Cybernetic ideas of control are widely used when considering organisations, but sometimes just as metaphors (Morgan, 1997). Cybernetic control (see Figure 4-3) is based on the assumption that control, or management, is exercised through information feedback (Pidd, 2008).

Cybernetics is the basis of any control system and the foundation on which any definition of organisational control must exist (Green and Welsh, 1988).

By cybernetic, we mean a process in which, a feedback loop is represented by using standards of performance measuring system performance, comparing that performance to standards, feeding back information about unwanted variances in the system and modifying the system's component.

(Green and Welsh, 1988, p289)

PM plays a feedback role. This feedback contributes to ensuring the organisation delivers on its strategy for achieving its goals. The question is whether a simple feedback system is appropriate as a means of managing performance.

Hofsted (1981) identifies types of control as Routine; Expert; Trial and Error; Intuitive; Judgemental; and Political. Four dimensions are used to create a matrix of the suitability of types of control to various activities; Objectives, Measurability, Knowledge and Repetition. From the resulting matrix it is identified that “routine control” works well when objectives are unambiguous and agreed, the outputs and outcomes of the process can be meaningfully quantified, when there is complete knowledge of how to intervene, and what the effects of intervention will be, and when the activity is repetitive.

Pidd (2008) identifies Hofsted’s “routine control” as the equivalent of simple cybernetic control. This is contrasted with “political control” in which the job of the manager is to create and manage coalitions between different interest groups.

Hofsted’s (1981) work therefore indicates that cybernetic control is suitable in certain circumstances, such as when cause and effect are clearly understood and there is little ambiguity in objectives. Cybernetic control is seen as less suitable in other circumstances. However, experience in the field shows that this is rarely appreciated and it may be more broadly applied than is appropriate.

It is generally accepted that the balanced scorecard and other structural performance frameworks are based on the basic cybernetic model of strategy implementation control (Muralidharan, 2004). These frameworks are discussed in more detail later in this chapter.

PM can be seen as a control system to implement strategy, control and Ouchi (1977) describes this as a three step process; 1) standards of performance necessary to implement strategy are articulated; 2) actual performance is measured, and 3) deviations of actual performance from standards are used to inform corrective action.

It is concluded therefore, that the cybernetic model is appropriate for application to PM practice. However, it is only suitable to apply such a method where when objectives are unambiguous and agreed, the outputs and outcomes of the process can be meaningfully quantified, when there is complete knowledge of how to intervene, and what the effects of intervention will be (i.e. cause and effect) and when the activity is repetitive (Pidd, 2008). Other control methods would be more appropriate outwith these boundaries.

It should be noted here that there is a close relationship between the descriptions of cybernetic control and the basic feed-forward / feedback flow of OL identified in Chapter 3. This is discussed further later in this chapter.

4-4.4 What then is Performance Management?

It has been shown above that performance is related to organisational goals and strategies. It has also been shown that performance can be measured to an extent and that such information can be used to establish a feedback system.

Organisations are continually changing, routinely, easily, and responsively, but change within them cannot ordinarily be arbitrarily controlled (March, 1981). Feldman and Kanter (1965) identify the trigger for decision making as dissatisfaction with achievement of current goals. This is seen as causing a search for alternatives. This dissatisfaction would be dependent on feedback on goals. It is this fundamental principle that underpins PM.

Managers measure organisational performance in order to improve it; thus PM is part of the process by which management teams manage the improvement of performance over time (Brignall, 2008, p160). Managers and leaders propose changes to cope with the environment and to control it; they respond to other members of the organisation; they issue orders and manipulate incentives (March, 1981). Organisations therefore can be seen as changing in response to management activity which aims to more organisational behaviour in the direction of achieving goals and objectives.

The nature of decision making in organisations has been considered amongst others by Drucker (1954), March (1987), Simon (1959), Cangelosi and Dill (1965), and Daft and Weick (1984). While various aspects of decision making are considered, all approach decision making as a core role of organisational leaders.

Little crossover between PM theory and organisational theory is evident in the literature. Given the close relationship between organisational change (e.g. March, 1981) and organisational adaptation it is surprising that this areas has largely been ignored.

Rather than asking what is PM and what should it do, Neely (2002) changes the PM debate by asking; what is performance and how can it be delivered by PM? Performance has been shown to be the achievement of purpose, goals or objectives (appropriate to the level being considered). As all management practice can be seen as contributing (at least ultimately) to the delivery of organisational purpose, all management practice would be management of performance. Neely's approach therefore considerably opens the field from earlier discussion on current practice of PM. It is viewed that this leads to confusion regarding the use of the term.

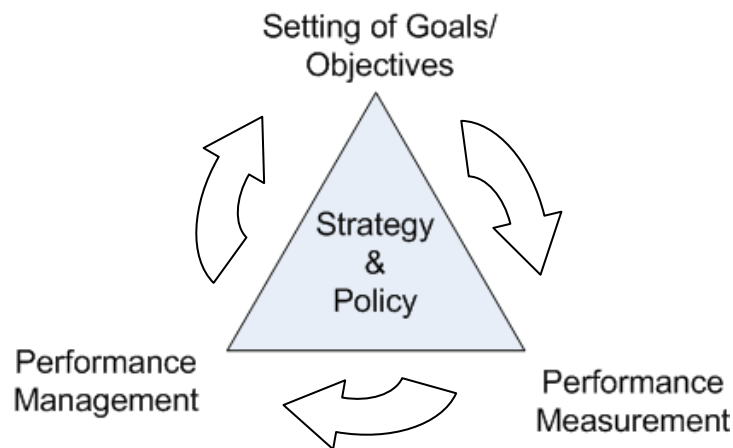


Figure 4-4 - Performance and its Management. Source: Author derived from literature.

Instead of this all-encompassing approach, and taking into account the literature discussed above, the key elements of PM practice are viewed here as goals, management, and essentially, the use of performance information. This performance information is used to

guide choices about what action is needed. These three aspects are conceptually linked to strategy and policy, which are then developed to structure organisational change around these aspects of performance. This relationship is represented in Figure 4-4.

Following the position adopted by (Lebas and Euske, 2002) a set of boundaries can be established, not so much to explain the field, but to define the subject as it is to be applied within this research. These boundaries are designed to fit closely with the experience of the author on how PM practice is currently conceived within the practical context of police PM. Based on the work of Lebas and Euske, the following table (Table 4-3) shows an adapted set of proposition which establish boundaries for this research.

Boundary	Sources	Comment
1. Performance is a relative term. Actual performance is dependent on the nature of goals.	(Lebas and Euske, 2002). (Ferreira and Otley, 2009). (Chenhall, 2003).	The complexity and temporal nature of organisational goals implies there will always be something to be achieved.
2. Performance indicators provide an estimate of value and rely on an assumption as to their meaning.	(Lebas and Euske, 2002) (Hibberd, 2004)	The link between an indicators and actual performance is only apparent if a causal relationship is established.
3. Apparent performance is normally expressed as a set of indicators that represent the different organisational perspectives.	(Lebas and Euske, 2002) (Kaplan and Norton, 1992) (Hibberd, 2004)	Actual performance can never be fully assessed only estimated.
4. Indicators can be related to any aspect of a causal model but need to be constantly validated modified to reflect more detailed understanding.	(Lebas and Euske, 2002) (Kaplan and Norton, 2001) (Micheli and Kennerley, 2005)	Strategic mapping enables links to be made between cause and effect. This has implications for framework design and use.
5. Indicators are normally quantitative but their meaning is not obvious and requires interpretation	(Neely et al., 1995)	An indicator is a metric used to quantify the efficiency and/or effectiveness of an action
6. Performance is a social	(Lebas and Euske,	Organisational goals may be

construct defined by the users of the information and is related to their context. There is no objective definition.	2002)	generally agreed but are open to interpretation by members. Each member will have a different perception about what those goals mean and the extent to which they are being achieved.
7. Managing performance relies on assumptions and often unspecified theory about how an performance measure can be influenced	(Lebas and Euske, 2002) (Neely, 2002)	The application of management techniques to organisational behaviour cannot be driven purely by performance information but must include assumptions about how behaviour can and should be influenced.

Table 4-3 - Boundaries of Research. Source: Derived from literature by author

Within these boundaries, a working definition of PM for this research is proposed as:

Performance Management is the process of adjusting systems, processes, and influencing the behaviour of members, towards the achievement of specific objectives through the use of feedback from metrics, the assessment of their meaning, to inform decision making.

This section has explored the nature of performance as discussed in the literature and examines how it can be measured. How management is applied in order to adjust organisational behaviour towards the achievement of aims and objectives has also been identified and boundaries established for this research.

The next section goes on to examine the role of performance frameworks in the process of managing performance.

4-5 THE ROLE OF PERFORMANCE FRAMEWORKS

Partly driven by their enormous practical application, performance frameworks are perhaps the best known aspect of PM. As a result these frameworks are a key theme within the PM

literature. This section considers the role of performance frameworks and how these fit within a process of PM.

One of the best known frameworks is the Balanced Scorecard (Kaplan and Norton, 1992). The popularity of this model in the practitioner field resulted in the academic field developing a range of new frameworks to meet the practitioner appetite for practical solutions.

The relevance of performance frameworks to a study of OL is unclear and needs to be examined. Rather than creating a new performance framework, this research is intended to consider the process of PM into which frameworks fit. This section introduces some of the more prominent frameworks in the academic literature and published practitioner material and discusses their role in the PM process, the mechanisms through which they operate, and the assumptions upon which they are based. Frameworks adopted within the public sector and more specifically in policing are identified.

A systematic review of the literature relating to public and non-profit organisations framework, including those targeting academic and practitioner audiences, was conducted by Micheli and Kennerley (2005). A PM system, or structure in which a framework is used, is a set of metrics used to quantify both the efficiency and effectiveness of actions (Neely et al., 1995). However, this description is limited and fails to appreciate how the information is used and structure to aid the management of performance.

There are four distinct performance dimensions identified by Toni and Tonchia (2001):

- (1) Costs/productivity.
- (2) Time.
- (3) Flexibility.
- (4) Quality.

This also implies performance indicators can be categorised similarly.

Hudson (2001) identifies two types of performance frameworks, procedural and structural. Procedural frameworks are those that offer a process for developing measures from a

strategy, for example, Sink & Tuttle model (1989), or the performance pyramid (Lynch and Cross, 1991). Structural frameworks on the other hand give a structure for the management of performance measures.

These structural frameworks are the most commonly applied and a selection of these, chosen for their relevance, is now briefly outlined. This is not intended to provide a critical review of the use or development of performance frameworks, but to establish the role they play within the process of managing performance.

4-5.1 The Balanced Scorecard

The balanced scorecard supplemented traditional financial measures with criteria that measured performance from three additional perspectives, that is, customers, internal processes, and learning and growth (Kaplan and Norton, 1996).

The balanced scorecard has become the most popular PM system in the private sector (Micheli and Kennerley, 2005).

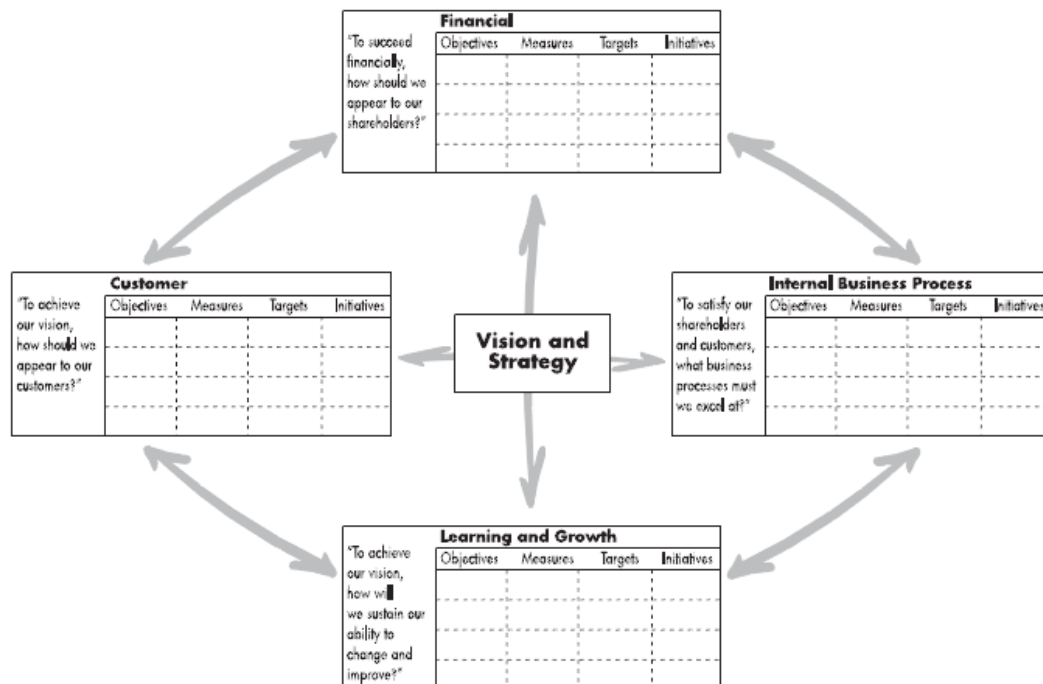


Figure 4-5 - The Balanced Scorecard. Source: (Kaplan and Norton, 1996)

The balanced scorecard remains frequently cited in the academic and practitioner literature and has energised a generation of both practitioners and academics (Neely, 2005). This may be contributed to by the fact that the move to inclusion of non-financial measures was a significant step in the evolution of performance measurement systems. .

The balanced scorecard is based on the basic cybernetic model of strategy implementation control (Muralidharan, 2004).

However, concerns are raised about this dominance of the research field and the fact that this may lead to becoming trapped in the solution for historical situations. (Neely, 2005) proposes the need is to build on the influence and significance of the balanced scorecard to take the measurement research agenda forward.

4-5.2 Sink & Tuttle Model

The Sink and Tuttle model (see Figure 4-6) claims that the performance of an organisation is a complex inter-relationship between a range of performance criteria (Sink and Tuttle, 1989):

1. Effectiveness
2. Efficiency
3. Quality
4. Productivity
5. Quality of work life
6. Innovation
7. Profitability and Budgetability

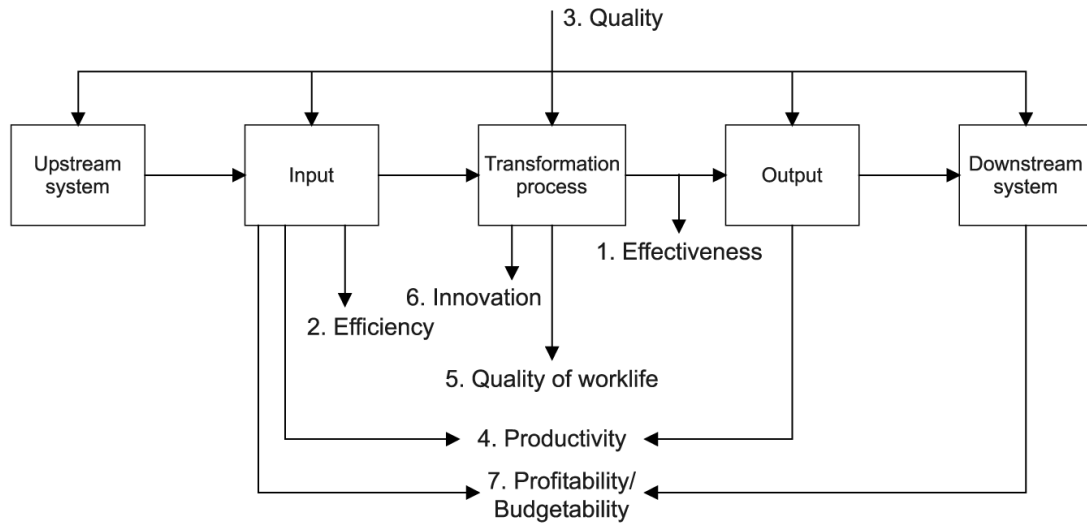


Figure 4-6 - Sink and Tuttle Model. Source: Sink and Tuttle (1989)

The Sink and Tuttle model proposes a relationship between these seven criteria and the process of production within the organisation, namely: Upstream system: Input: Transformation process: Output: and, Downstream system.

The model suggests that the correct measures of these seven aspects will enable the manager to fully understand the whole system, from end to end, thus enabling fully informed management. However, some of these concepts are less easy to capture than others. For example, an indicator of the quality of work life is likely to be difficult to develop and ambiguous in its interpretation.

4-5.3 EFQM Excellence Model

The European Foundation for Quality Management (EFQM) Excellence Model was the European answer to the Deming Prize and the Malcolm Baldrige Model in the United States. Its aim was to support and stimulate management practice within Europe and was founded by major European companies.

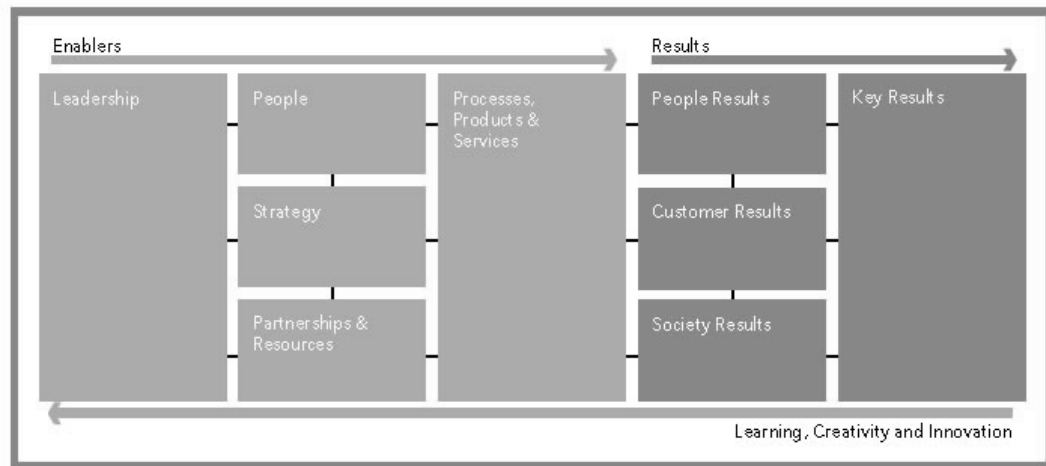


Figure 4-7 - EFQM Excellence Model 2010. Source: EFQM (2010)

The model describes five enabler areas and four result areas within which an organisation can be assessed. The enablers are described as Leadership, People, Policy & Strategy, Partnerships & Resources and Processes. The results include customer results, people results, society results, and key performance indicators.

High performing organisations have management frameworks which define what they do and explain why they do it (EFQM, 2010).

4-5.4 Performance Prism

One of the more recently developed conceptual frameworks is the Performance Prism (see Figure 4-8) of Neely et al. (2001). Their framework is organised around five distinct but linked perspectives of performance: Stakeholder satisfaction; Strategies; Processes; Capabilities; and Stakeholder contribution.

The Performance Prism has a much more comprehensive view of different stakeholders (e.g. investors, customers, employees, regulators and suppliers) than other frameworks. As such, it attempts to identify and conceptualise related facets of performance. By making explicit these factors, and describing the relationship between, this framework attempts to provide an overall picture of performance in which the cause and effect are more evident.

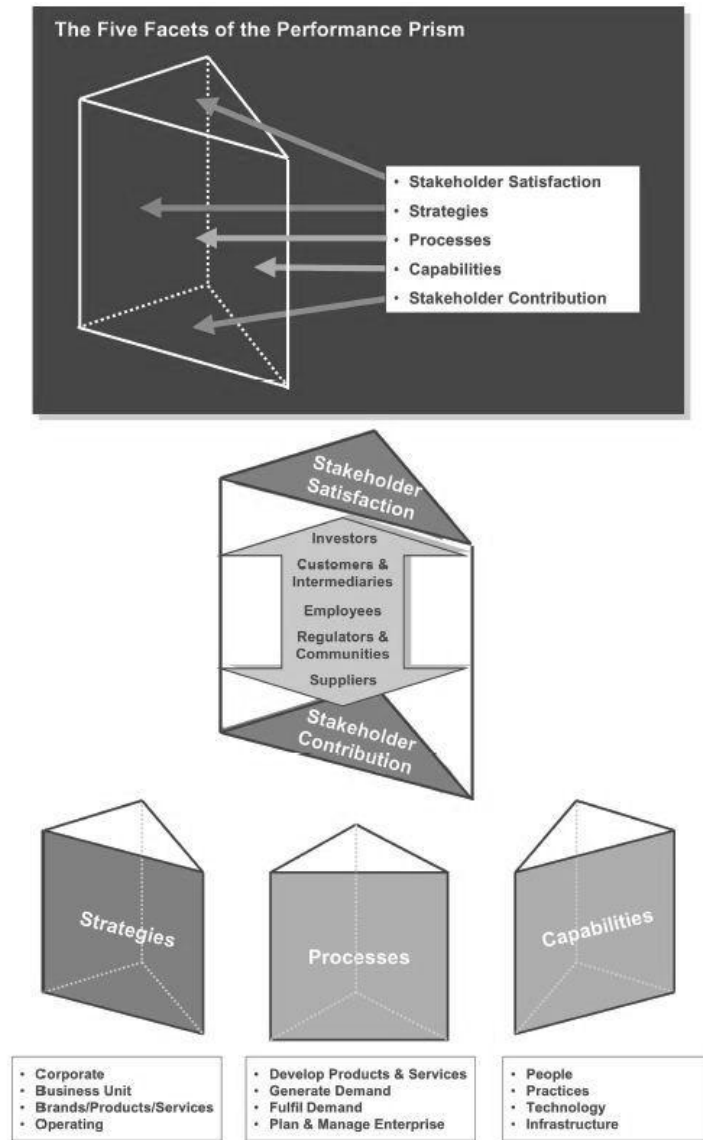


Figure 4-8 - Performance Prism. Source: Neely et al (2001)

4-5.5 The Results-Determinants Framework

The results-determinants framework, was developed by Fitzgerald et al. (1991). The development was based on their study of performance measurement in the service sector. They propose that the two basic types of performance measure are results based (i.e. competitiveness, financial performance), and determinants of the results (i.e. quality, flexibility, resource utilisation and innovation). The key aspect of this model is its fundamental focus on conceptually linking cause and effect, that is, determinants and results.

The results and determinants were simply defined, as shown in Figure 4-9, as sets of dimensions which were used to guide the choice of indicators. Each of these is expanded into areas of measurement.

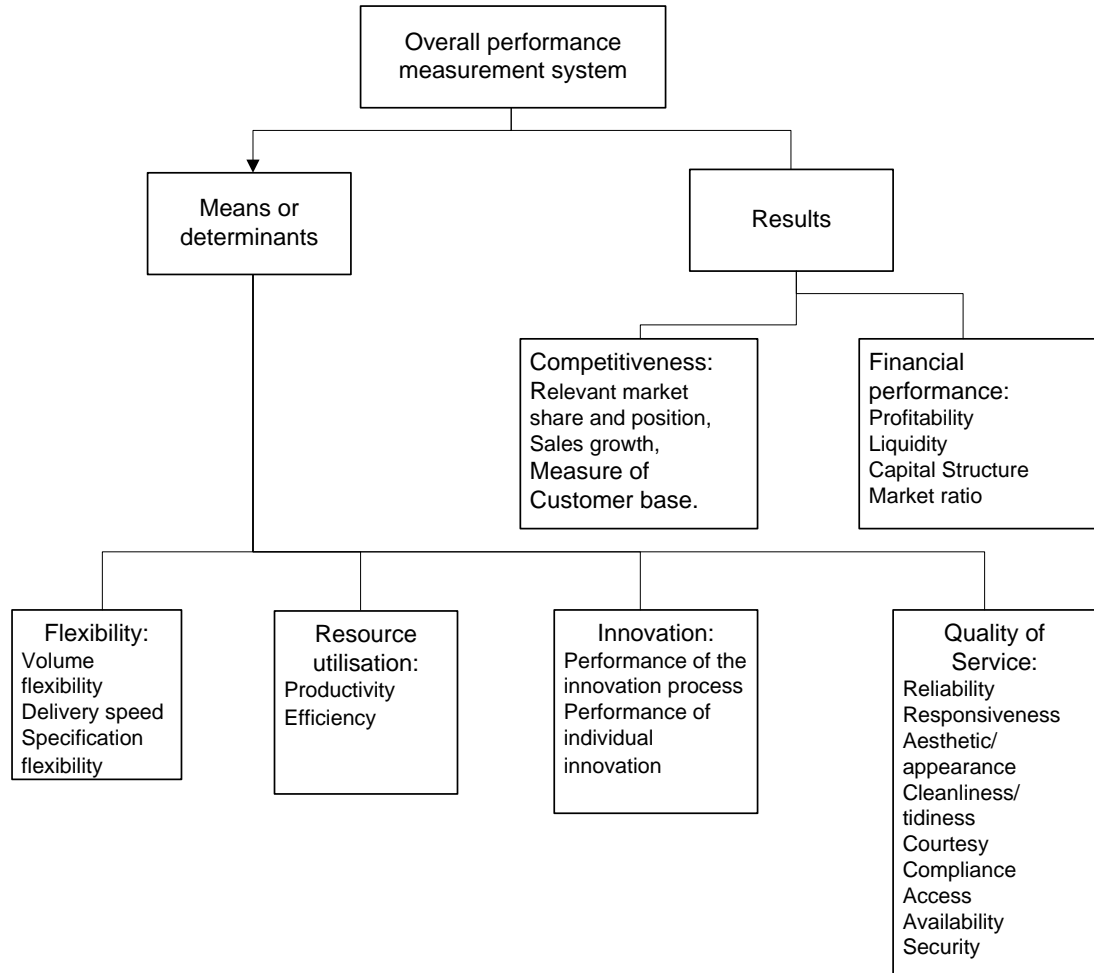


Figure 4-9 - Results and Determinants Framework. Source: Fitzgerald et al. (1991)

The results and determinants framework is developed around a feed-forward/feedback control model in which PM is part of feedback control, being a stimulus to appropriate action and organisational learning at the right level of the organisation and stage of the decision-making process (Brignall and Ballantine, 1995).

4-5.6 The Performance Pyramid

The performance pyramid (Lynch and Cross, 1991, Cross and Lynch, 1988) was designed based on a 'just in time' review at Wang Laboratories. It aimed to link the organisation's

strategy with its operations. This is achieved within the framework by translating customer based prioritised objectives from the top down and measures are developed from the bottom up (see Figure 4-10). It is also sometimes called the Strategic Measurement Analysis and Reporting Technique (SMART).

This framework includes four levels of objectives that address the organisation's external effectiveness (left side of the pyramid) and its internal efficiency (right side of the pyramid). As such, it strongly reflects 'just-in-time' practice (Bateman et al., 2009).



Figure 4-10 - SMART Performance Pyramid. Source: Lynch and Cross (1991)

The objective was to devise a management control system with performance indicators designed to define and sustain success (Cross and Lynch, 1988). However, this approach does not provide any mechanism to identify key performance indicators, nor does it explicitly integrate the concept of continuous improvement (Tangen, 2004).

4-5.7 APACS

The Home Office has developed two frameworks for use by Police Forces in England and Wales. The first of these, the Policing Performance Assessment Framework (PPAF), was superseded by the Assessments of Policing and Community Safety (APACS) in 2008.

PPAF contained over one hundred indicators, whereas its replacement APCS has a more streamlined set of indicators (forty-three in 2010).

An important aim of APACS is to reflect performance in respect of locally selected priorities set alongside assessments based on Home Office statutory performance indicators (Association of Police Authorities, 2008).

The strategic vision for APACS is that it will give the Home Office and policing and community safety partners the capability to monitor and assess performance in policing and community safety broken down by:

- geographic area (e.g. local, regional, national);
- organisation (e.g. police forces);
- partnership (e.g. Crime and Drug Reduction Partnerships);
- and policy area (e.g. Neighbourhood policing).



Figure 4-11 - APACS Structure. Source: Ashford (2007)

The links between outcomes are implied in APACS rather than clearly expressed. The structure of the framework (see Figure 4-11) is intended to represent that organisational management underpins the delivery of three key aims of promoting safety, tackling crime and serious crime and protection, each of which are seen as determinants of public confidence and satisfaction (Ashford, 2007). It is perhaps more appropriate to consider it as a performance reporting framework, than a performance management framework.

4-5.8 SPPF

In Scotland, in the absence of any previous framework, there was a need to provide a common assessment method across all the Forces in Scotland. The Scottish Policing Performance Framework (SPPF) was published in 2007.



Figure 4-12 - Scottish Policing Performance Framework. Source: (Justice Department, 2010)

As can be seen from Figure 4-12, the SPPF provides indicators across four different aspects of policing;

- Service Response;
- Public Reassurance & Community Safety;
- Criminal Justice & Tackling Crime;
- Sound Governance & Efficiency.

As such it has similarities to a balanced scorecard approach. Within each aspect, different types of indicators are identified namely, outcomes, inputs and activities. This approach helps to identify the nature of different indicators and how they relate to each other. This is aimed at supporting the conceptual understanding of cause and effect. Each of the areas is associated with a set of high level objectives for that aspect of policing.

During the period of the research project, the author was closely involved with the Scottish Government and HMIC in Scotland in the development of this framework for the police service in Scotland.

4-5.9 Performance Dashboards

It was shown earlier that PM is dependent on the information from performance indicators. The communication of performance information in a way that supports decision making is central to this. Performance dashboards are one means of supporting this and to some extent are extensions of performance frameworks in that they provide structure to information. However, as they are generally computer based systems, they aim to provide performance information at the point of need. As these are largely dependent on advances in the capability of information technology systems the literature on performance dashboards is all relatively recent.

A wide range of material relating to the communication of information, the human factors and aesthetics of such is available, but only a very small proportion of this is directly associated with PM. It is therefore only briefly discussed here.

Two examples of the performance dashboard literature are Few (2006) and Eckerson (2006).

Few (2006) sees dashboard as a unique solution to information needs of business and are becoming more popular. He asserts there has been little discussion about need for visual design to support decision making and sees dashboards as medium of communication. The role of dashboards is to support decision makers in viewing and analysing information about the performance of their business and the activities they manage.

Eckerson (2006) sees dashboards as enabling decision makers to view the performance of key business metrics at a glance and then move swiftly through successive layers of actionable information. If provided in the right format, the information in dashboards should provide the insight they need to solve problems quickly, efficiently, and effectively. Like frameworks dashboards are again linked to goals. He believes they should chart progress towards meeting strategic and tactical objectives, performance dashboards and are becoming powerful agents of organisational change.

The role of dashboards then is seen as ensuring right information is communicated to decision makers whilst diminishing background noise, enabling key issues and options to be identified quickly. This view of dashboards as being a medium of communication is relevant to this research.

4-5.10 Frameworks – Discussion

At the beginning of this section the role of PM frameworks and their relevance to this research was questioned. A range of performance frameworks have been reviewed and performance dashboards have been introduced. Several comparative reviews of PM systems have been published (Brignall and Modell, 2000, Tangen, 2004, Hudson et al., 2001, Otley, 1999).

Frameworks do not manage performance, but support managers by presenting the information in a structured way. Frameworks and dashboards a) provide a wide range of information, b) enable indicators to be considered in a wider context, and c) normally identify a relationship to high level goals. It can be seen that each of these frameworks plays

a role of collating sets of performance information in a way that aims to support comprehension of the meaning and relevance of the performance information. Based on this, it is agreed with Otley (1999) that frameworks play a role in supporting management control systems through providing information that is intended to be useful to managers in performing their jobs and to assisting organisations in developing and maintaining viable patterns of behaviour.

With regard to the process of managing performance then, frameworks and dashboards fit between the collection of performance information and subsequent adaptation of organisational behaviour to increase performance. They assist in communicating the meaning of data to decision makers, largely through providing context in the form of other performance information, comparison over time, or as relative to goals.

The design of a performance measurement system is principally a cognitive exercise, translating views of customer and other stakeholder needs into business objectives and appropriate performance measures (Bourne et al., 2000). The formal performance measurement system is seen as '*a major mechanism that can be used to make explicit the sets of causal relationships that the organisation has developed and the methods it will use to implement its strategic intent*' (Otley, 1999, p367).

An essential element of models has been seen to be the identification of cause-and-effect relationships between indicators and outcomes. A number of existing frameworks are weak in this sense and further research would be beneficial (Micheli and Kennerley, 2005).

4-6 PERFORMANCE MANAGEMENT AND ORGANISATIONAL LEARNING

This section identifies and reviews the overlap in the literature relating both the OL and PM fields and provides some degree of validation of the approach. The close relationship between the descriptions of cybernetic control and types of OL is considered.

Descriptions of OL and descriptions of the management of performance clearly overlap. For example:

- Performance monitoring is one of the “*clearest and most pervasive forms of organisational search*” (Huber, 1991, p99).
- There is a need for organisations to understand and know their environment (Daft and Weick, 1984).
- There is a positive relationship between the stocks of learning at all levels and business performance (Bontis et al., 2002).
- The results and determinants feed-forward/feedback control model in which PM is part of feedback control, being a stimulus to appropriate action and OL at the right level of the organisation and stage of the decision-making process (Brignall and Ballantine, 1995).
- *For the measurement used determines what one pays attention to. It makes things visible or tangible. The things included in the measurement become relevant; the things omitted are out of sight and out of mind.* (Drucker, 1954, p61).
- Performance is defined as the potential for future successful implementation of actions in order to reach the objectives and targets (Lebas, 1995).
- *Learning, analysis, imitation, regeneration, and technological change are major components of any effort to improve organisational performance and strengthen competitive advantage.* (March, 1991, p11).

The extent of this overlap means that, taken away from their context, it can be difficult to determine which set of literature some of these statements are derived from.

Developed in Chapter 3, the working definition of OL applied to this research is as follows:

OL is an umbrella term for the fundamental relationship an organisation has with its members and environment through which the organisational behaviour is continually modified and adapted to meet the changing needs of

its leaders, members, internal and external environments in order to achieve the intentions of the organisation. (See Chapter 3, p94)

The nature of decision making in organisations is complex. Organisational participants, to varying degrees, expect and allow decisions to be taken on behalf of the organisation by a limited number of people. Greve (2003) describes this decision making group as the “dominant coalition”. Decision-making regarding appropriate behaviour provides the link between performance metrics and new behaviour.

Organisational adaptation can be seen as being dependent on the work of individuals who change procedures or processes on the authority of the organisation, and also on the decisions of the dominant coalition whose role is to make strategic decisions on behalf of the organisation. This decision making by a small group on behalf of the organisational members is a fundamental stage of achieving adaptation and therefore to organisational learning. While the stages are discussed further later in this review, it is worth considering the key role of decision making in more detail.

In terms of Daft & Weick’s (1984) model of organisations as interpretation systems, organisations can either be *active* or *passive* in terms of intrusiveness in the environment and either assumes that the environment is analysable or un-analysable. Organisations involved in PM, being both active and assuming the environment is analysable, clearly fall into their “discovering” category, having formal search routines, involved in questioning, data gathering and active detection. Organisations involved in PM are therefore a subset of all organisational types.

Early work on OL focused on *exploratory* learning (Crossan et al., 1999, Huber, 1991). More recent research has shown that PM processes are also forms of OL (Moynihan, 2005, Stringer, 2004, Sun and Scott, 2003, Otley, 1999). The range of PM behaviours indicate the need for OL to be considered, not as a single behaviour type, but as extending from *exploratory* to *exploitative* (March, 1991).

Within this research then, PM is largely discussed from a practitioner perspective and is seen to sit within the family of activities aimed at results-based reform where there is a deliberate and structural effort to induce learning (Moynihan, 2005) through the use of feedback. This is comparable to Crossan's view of OL as a process of strategic renewal (Crossan et al., 1999). Both approaches share the assumption that information forms the basis for improved decision making, and both rely on systems theory for a logical account of how information is converted into decisions. Both theorists suggest that routines of information collection followed by routines of information use are prevalent. While culture plays a major role in both OL and PM, the link between them relies strongly on a structural approach (Moynihan, 2005).

Pawlowski (2001) approaches the subject of OL from the perspective of management science and as such adopts a position that is more clearly associated with a PM approach. Recognising that management has to consider transformation of knowledge into work systems, the role of OL is seen as related to business success. The use of wide ranging indicators of operations is therefore argued as essential to promoting effective corporate strategies.

These different perspectives identified by Pawlowski (2001) may reflect different approaches to the study of OL or reflect different aspects of OL. The fact that all these aspects may operate together, but at different ontological levels is worthy of investigation.

The academic work on PM traces its roots to accounting based processes (Otley, 1999). A significant amount of literature on the subject continues to be published in accounting based journals even though they have a significant OL content (Kloot, 1997, Langfield-Smith, 1997, Chenhall and Langfield-Smith, 1998, Kaplan and Norton, 2001). This strong relationship between accounting and learning would not normally be anticipated but indicates the nature of the relationship between the "routinized procedures" that evidence OL and the structure needed to facilitate the flow of actionable information to managers.

There is sufficient evidence to conclude that PM and OL are both seen as aspects of organisational adaptation, and that both involve the creation and conversion of knowledge into action. Based on the existing literature it is considered safe to conclude that PM is a form of OL. The literature supports the proposal to use PM as an exemplar of OL in practice. As a specialised type of OL, it can be seen as a subset of all OL behaviour. The question may be whether this specialised type of OL is subject to different rules than other types of OL and the research will have to address this.

There is no model of PM in the literature that can be directly applied to OL. This research will need to establish such a model in order to structure the research questions and data collection. This is discussed further in Chapter 4 and an OL Model of PM is developed in Chapter 6.

Having established the nature of the relationship between OL and PM, this literature review goes on to consider the nature of PM in the public sector and to identify whether this varies from wider practice.

4-7 PERFORMANCE AND THE PUBLIC SECTOR

This section considers the literature regarding PM in the public sector and the implications for the research. The drivers for its use as found to differ and this is seen as influencing practice. The use of PM within the police service, introduced in Chapter 2, is considered further.

A critical difference between public sector performance and private sector performance is the nature of stakeholders and how they can influence the organisational goals. This can influence choices regarding performance indicators (Micheli and Kennerley, 2005).

The public sector has traditionally relied on centralised controls on behaviour, human and financial resources, and decision making. This has led to a decline in creativity and effectiveness (Moynihan, 2005). The basis of new public management lay in lessening or

removing differences between the public and the private sector and shifting the emphasis from process accountability towards a greater element of accountability in terms of results (Hood, 1995).

As identified in Chapter 2, the background to PM practice has been to enable centralised control. The Labour government of the last decade has placed public service improvement at the centre of its domestic agenda and PM has played a critical role in this (Boyne et al., 2006).

Performance targets and league tables have been used in order to push through the modernisation programme and demonstrate that value for taxpayers' money is being delivered (Brignall and Modell, 2000). This provides a means of exerting governance through increasing accountability. However, questions have arisen regarding the use of PM for governance, rather than improvement (Collier, 2008). Collier identifies that as a consequence of the performance culture some aspects of performance are highlighted while other elements are downplayed (2008).

As discussed in Chapter 2, the application of PM to the police service has been the result of government strategy. The academic PM literature relating to the police service is limited and tends to focus on issues surrounding measurement and interpretation and in particular, target setting (Wisniewski and Dickson, 2001, Collier, 1997, Hood, 1995, Spottiswoode, 2001). This reflects the nature of PM in the public sector over the past decade (see Chapter 2). The result is a dearth of literature underpinning the theoretical basis for applying PM to the public sector (Brignall and Modell, 2000, Micheli and Kennerley, 2005, Collier et al., 2004), or more specifically to the Police Service

The application of PM within the police service in the UK has been seen to stem from the practice of Compstat in NYPD being adopted by the new labour government at the start of the 21st century. This enabled control to be applied to Forces through the use of ever increasingly intrusive PM practice.

Compstat is a goal-oriented strategic management process that uses technology, operational strategy and managerial accountability to structure the delivery of police services and provide safety to communities (Walsh, 2001). Originally established by Commissioner William Bratton in the New York City Police Department, Compstat has emerged as a new organisational paradigm in policing (Vito et al., 2005). *Compstat's many advocates assume the existence of several conditions that will allow Compstat to transform conservative police departments into efficient crime-fighting machines by motivating employees through the stimulation of a rigorous system of accountability* (Hubert Williams in Willis et al., 2003, page v). In particular, the Compstat management tool developed, gives senior officers week by week real time crime statistics broken down by precinct, which is used to move resources to where the priorities are (Flanagan, 2008). The development of PM practice in UK policing can be traced to the success and increased control attributed to Compstat.

Collier (2008, 2001, 1997) has examined police PM practice in England and Wales and identified a conflict between two control systems represented by the National Intelligence Model (see John and Maguire, 2004) and PM. Both systems provide control but based on different information sources and through competing management systems. Collier identified that Forces end up being dominated by one practice or the other. This is seen as likely to be relevant to this research.

This section has considered the literature regarding PM in the public sector and the police service in particular. Practice in the public sector is seen as being influenced by the different nature of the stakeholder sand how they define organisational purpose, as well as the dominant use of PM to deliver accountability rather than improvement. Whilst public sector based literature is becoming more prevalent, there is only a small body of literature relating to practice in policing. This means there is little to directly guide this current study and that any work in this area is likely to be ground breaking.

4-8 INFLUENCES ON PERFORMANCE MANAGEMENT

From an examination of the literature, this section identifies that PM does not necessarily have a positive influence on organisational outcomes. From this it can be deduced that some factors must influence how well PM operates. These factors would have relevance to the impact of PM and therefore, it is proposed, on OL.

Whilst increasing the ability to control, the uses of performance measures as the basis for management is often associated with unintended consequences. Though many reasons are cited for public service performance measurement regimes, it is clear that control aspects dominate the others. This, when allied to an unthinking use of cybernetic metaphors, can lead to dysfunctionality (Pidd, 2005).

Neely et al (1997) points out systems, especially systems involving humans, respond to performance measures. There are behavioural implications for measurement and reward (Neely, 2002). Gaming behaviour is often present within organisations using PM (Radnor, 2007b, Hood, 2006, Bevan and Hood, 2006). That is, members involve in practice, often contrary to established goals and practice, to make performance results appear better. This confirms experience in the field where people are seen to modify their behaviours in an attempt to ensure a positive performance outcome, even if this means pursuing inappropriate courses of action.

Management by numbers is a common theme in organisations using PM and comes in at least three major forms (Hood, 2007, p95):

- *Target systems*, which measure actual performance against one or more specified aspirational standards expressed as threshold numbers (often, but not always, based on some increment or decrement on what happened in an earlier time-period).
- *Ranking systems*, which measure current or past performance of comparable service units against one another (as information to inform user choice, as information for action by government, or simply as a means for encouraging ‘saints’ and shaming ‘sinners’).

- *'Intelligence' systems*, which measure performance for background information (for example as a by-product of administrative processing or complaint handling), but involve no fixed interpretation of the data in forms such as league tables or comparisons with some stipulated standard.

Each of these, whilst intended to reduce the complexity of management decision making, perhaps reduce it to the point where decisions are determined by pre-set criteria. This results in rules taking over from managers.

Instead of seeing the running down, proliferation and strategic use of performance information as dysfunctional, these effects are probably the unavoidable outcomes of functional and effective performance measurement systems in open societies and competitive democracies. (Johnsen, 2005, p9)

Bevan and Hood (2006) compare target regimes with practice in the Soviet Union where practice became undermined by gaming and advise that corrective action is necessary to avoid this. Whilst perhaps an unavoidable influence, awareness of that influence is seen as militating against its likelihood.

Problems in PM practice are also associated with determining the correct indicators.

"Today's measures tend to be blunt, expensive, incomplete, and distorting. And they can easily be inaccurate and misleading." (Eddy, 1998, p15)

This area of indicator choice and its influence on practice is rarely mentioned in the literature and needs further development.

In this short section it has been seen that the conduct of PM can result in unintended consequences and that practice can result in perverse outcomes. Several drivers and influences have been identified but these cannot be considered as a comprehensive list of factors, merely the more obvious. This absence of detail will be another challenge to this research in that there is a need to identify the impact of OL, and therefore the success of PM practice which can be anticipated to be influenced by a range of unidentified factors.

4-9 CONCLUSION

The aim of this review of the PM literature was, a) to explore the concept proposed by Huber, that Performance monitoring was a form of searching and noticing, a specific type of OL, and b) to establish the grounds for considering police PM practice as a valid realm of OL practice with which to investigate its prevalence and impact.

The review finds that the field of PM has evolved from a body of literature that primarily focused on performance measurement. The area of performance measurement developed from accounting systems. The use of performance measurement has only rarely been considered from a holistic perspective of management and strategic goal setting.

The review of the literature has shown there is a strong practitioner element in the development of PM. More recently the theoretical assumptions underpinning PM practice have begun to be questioned and analysed.

This Chapter has established the nature of PM and provided a working definition.

The relationship of PM to OL has been clearly established in that PM is one example of a mechanism of OL. Learning contributes to intended organisational outcomes, and understanding the role of OL in PM has a significant contribution to make.

The development of new frameworks for use in managing performance, demonstrates the development of understanding around the nature of the flow of information within the organisation, and how the correct information is needed to support decision making.

The PM field is more strongly supported by practitioner approaches and interventions, than by theory (Thorpe and Holloway, 2008). Considering PM as an OL process allows a perspective that is more suited to practice, to be applied.

There is a need for a theoretical OL model of PM to provide the basis for questions, data collection and analysis. Chapter 6 explores this in more detail.

PM has been seen to have the potential result of creating an unintended, or perverse, impact on human behaviour. As an example of an OL process, the factors that influence PM are important in making an assessment of the impact of OL. Relatively few factors are identified directly from the literature and this is seen as a gap that can be addressed by this research.

Taking into account the literature above, the problems with the PM field identified by Thorpe and Holloway (2008) can be summarised as follows:

- Does management practice influence performance (as an outcome)?
- From a practical perspective, this question can be expanded to ask to what extent management affects behaviour.
- How can this be explained by organisational theory?
- Is management practice based on performance information, or management assumptions, or to some extent both?
- How clear is the understanding of cause and effect, that is, can performance be attributed to PM practice?
- At which level is organisational behaviour influenced, for example, through the individual, the group level, or the organisational level?
- Over what timescale does the impact take effect?
- What influences the dysfunctional aspects of PM and is this in the nature of PM practice or is it something that can be addressed?

These are relatively fundamental questions and PM is based upon assumptions regarding their answers. This research cannot hope to address all of these, but to some extent will attend to these basic issues.

There is only a small body of literature relating to PM practice in policing. Given the importance attached by the UK government, its apparent widespread application, and the

developments in practice during the past ten years, this is seen as a significant gap that this research can aim to fill.

Thorpe and Holloway (2008) see that PM has been subject to a relatively narrow set of research methods. As will be seen in Chapter 5, this research proposes to undertake cases studies and to use thematic analysis of interviews to identify the nature of OL. This is seen as a unique approach to the subject.

4-10 REFLECTION

The recent publication of a number of PM related edited books, including Thorpe and Holloway (2008), have provided a more comprehensive coverage of PM thinking in the UK than previously existed. As such these have had a significant influence on this literature review, albeit this was not available at the outset.

Many of the issues identified by these authors sit very closely with issues identified in this research, and it is viewed that this research will make a significant contribution to answering some of these. However, as the research was defined and underway before its publication, these are not addressed directly.

The similarity in issues identified by this newer body of literature regarding the nature of PM provides some validation of the approach taken.

It would be interesting to derive a similar construct to Hofsted's matrix of suitability for control methods (1981) to OL. This may provide a useful means of categorising OL learning types. However, this is beyond the scope of this research.

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5-1 ORGANISATION OF THE CHAPTER

The following table (Table 5-1) orients the reader to the content and structure of the Chapter and indicates its relationship to the Research Problem.

Content	Relevance to Research Problem	Comment
The Nature of the Phenomena of Interest	Establishes the Ontological and Epistemological basis from which the Research Problem can be approached.	A Critical Realist position is adopted
A Retroductive Approach	Considers the implications of the position adopted on the conduct of the research and the analysis of the data	
Data Collection and Analytical Methods	Considers the relevance of qualitative methods and describes adoption of a Case Study method to address Research Questions.	
Developing the Research Method	Considers how outcome validity can be maintained during conduct of research.	

Table 5-1 - Organisation of the Chapter

In light of the research questions, this chapter considers the ontological and epistemological foundations for management research and situates this research in a Critical Realist position. Methodologies are examined and a Case Study approach is determined as an appropriate research strategy. Strategies to enhance the validity of the research findings are explored.

5-2 INTRODUCTION

Chapter 2 discussed and elaborated on the Research Problem and established a Research Aim and a set of Research Objectives (see Table 5-2). This Chapter considers the nature of

the phenomena of interest and places that within an Ontological and Epistemological position of Critical Realism.

The implications for the Research in terms of a methodological approach are considered and a retroductive approach is developed using data collated through a Case Study method.

Area	Comment
Research Problem	OL is seen as beneficial to Organisational effectiveness. Identifying the impact and prevalence of OL will assist in understanding its relevance to Police Forces.
Research Aims	<ul style="list-style-type: none">• To identify OL practice that can be researched.• To identify a suitable research approach and to undertake this.• To determine in what circumstances it is present and what influences its effect on organisational outcomes.
Research Objectives	<ul style="list-style-type: none">• Understand the characteristics of the phenomena• Approach OL through the mechanism of PM• Identify when PM delivers OL outcomes• What influences PM practice

Table 5-2 - Research Outline Source: Derived by author

Alternative views of reality (Ontology) lead to different ways of establishing what can be accepted as real (Epistemology), as well as different strategies for validating our claims about reality (Hart, 1998: 51). Therefore, techniques for collecting data depend on the reality implicit within the Research Aims and the strategies available to address these. This chapter explores the options available for fit against the Research Questions and describes the choice of Research Design and Strategy.

It will be shown that the nature of the research problem apparently exists across two distinct Ontological levels. As a result, a Critical Realist position (see Johnson and Duberley, 2000) is adopted to address this. The implications of this choice, in particular the development of a retroductive technique, are discussed.

The research aims require both the development of theory and rich contextual information to support practical application. As a research strategy, Case Study is particularly appropriate for this kind of dual research outcome. Issues of validity are identified and addressed.

Consideration is given to the method of case selection as well as the conduct of the data collection. The need for a model on which to structure the research is identified.

5-3 THE NATURE OF THE PHENOMENA OF INTEREST

Whilst the primary aim of the research is to understand Organisational Learning (OL) within police organisations, as described in Chapters 1 and 4, it has been proposed to use Performance Management (PM) practice as a specific example of OL. The earlier review of the literature (see Chapters 3 and 4) relating to OL and PM identified the imprecise nature of both of the fields and as a result, the proposed method will have to be able to address this.

Also in Chapter 3, it was shown that OL involves both knowledge assimilation and organisational adaptation, both of which occur through social interaction of members within the organisation. PM however, although a practical application of OL, explicitly adopts an empirical view of the world, with clear assumptions about cause and effect, and about how these can be measured.

In this context, various ontological and epistemological positions and their fit to the research questions are now considered.

5-3.1 Positivism

The positivist paradigm asserts that there is an objective truth existing in the world which can be revealed through the scientific method where the focus is on measuring the relationship between variables systematically and statistically (Cassell and Symon, 1994b). That is, Positivism takes an objectivist view of reality and an objectivist view on how it can be known (Johnson and Duberley, 2000: p180).

Positivism therefore favours naturalistic, science based research questions where the subject can be rigorously and scientifically tested in controlled circumstances. The evidence can be tested to ensure its validity through repetition. From a positivist perspective, the aim of research in the field of management is to generate laws which govern the way in which organisations operate (Johnson and Duberley, 2000). The assumption here is that being better able to predict, leads to better control and therefore better management.

Characteristics of Positivism include Independence theory (the observer is independent of what is being observed), neutral observation language (the observer can stand back and observe the world neutrally), the choice of what to study can be determined by objective criteria rather than human beliefs or interests, theory can be tested against the facts of the situation and it is concerned with producing accounts that correspond to independent reality (Johnson and Duberley, 2000).

Does Positivism provide a useful approach to understanding addressing the research questions? As shown in Chapter 3, PM practice explicitly adopts an empirical view of the world, with clear assumptions about cause and effect, and about how these can be measured. However, the practice of managing performance cannot be independently observed in controlled circumstances. Nor can the subtleties of management practice be reduced to statistical variables without making assumptions about cause and effect, which is not clearly established in the literature. Therefore, as a position from which to address the research questions, Positivism is rejected.

5-3.2 Social Constructivism

Social Constructionist ontology stems from an alternative view that reality (or the reality in question) is neither external nor objective. Instead it views reality as socially constructed, for example, when examining the ways people make sense of the world, or share experiences through language (Berger and Luckman, 1966). In this approach, knowledge is contextually bound and therefore truth arises out of a process of human construction,

interpretation, understanding and negotiation. Social Constructivism (also known as Conventionalism) adopts a subjectivist epistemology but adopts a relativist view of reality, that is, there are no neutral or independent criteria for judging truth claims (Johnson and Duberley, 2000). It therefore offers an alternative to the Positivist approach, especially when considering human behaviour and understanding.

Criteria	Positivism	Social Constructivism
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Explanations	Must demonstrate causality	Aim to increase general understanding of the situation
Research progresses through	Hypothesis and deductions	Gathering rich data from which ideas are induced
Concepts	Need to be operationalised so they can be measures	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to the simplest terms	May include the complexity of 'whole' situations
Generalisation through	Statistical probability	Theoretical abstraction
Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Table 5-3 - Comparing Management Research Approaches. Source: after Easterby-Smith et al, 2002

The key differences between Social Constructivism and Positivism, in terms of conducting research, are identified by Easterby-Smith et al (2002). These are summarised in Table 5-3.

As OL occurs at the organisational level and can be considered as existing within the realm of socially created phenomena, Social Constructivism would appear to provide a route to understanding the nature of the phenomena contained within the research questions. However, the position that social reality has no independent existence and remains unformed until the act of cognition (Johnson and Duberley, 2000) would limit the practicality of such

an approach. Identifying relational aspects such as cause and effect would be problematic with this approach. Therefore, as a position from which to address the research questions Social Constructivism is rejected.

5-3.3 Critical Realism

Critical social paradigms critique both Positivism and Social Constructivism as ways of understanding the social world (Blaxter et al., 2001). Critical Realists argue that science is concerned with ontological questions of what kinds of things there are and how these things behave (Blaikie, 2007). Not only do they seek to understand, but also to challenge, and bring about change. Critical methodology is concerned with an analysis of the current situation which enables us to see how this has developed and liberates us from seeing this as the natural order of things (Johnson and Duberley, 2000).

*As a philosophy of science, Critical Realism is based on the assumption that reality, including social reality, has **an inherent nature or structure** that we may hope and try to identify through various kinds of epistemological devices, conceptual models and methodological procedures that cluster together as science and the knowledge that practising scientists produce (Reed, 2005b: p1665, original emphasis retained).*

Critical Realism emanated from the work of Roy Bhaskar (Bhaskar, 2008, Archer et al., 1998). It emerged out of a growing dissatisfaction with the inherent explanatory limitations of postmodernist and post-structuralist epistemologies and their grounding in a Social Constructionist ontology (Reed, 2005b). Bhaskar has sought a middle way between Positivism and Hermeneutics, sharing Positivism's desire to produce causal explanations, and Interpretivism's view on the nature of social reality (Blaikie, 2007).

Two key premise underlie Critical Realism, a) social phenomena are intrinsically meaningful (Sayer, 2000), and b), that there exists a reality independent of our representation of it (Bhaskar, 2008). Reed sees Critical Realism as based on the assumption

that reality, ‘has an inherent nature or structure that we may hope and try to identify through various kinds of epistemological devices, conceptual models and methodological procedures that cluster together as science and the knowledge that practising scientists produce’. (2005a, p1665).

Bhaskar (2008) proposes experiences, events and mechanism occur within a stratified ontology containing three overlapping domains of reality; real objects and mechanisms, actual events and empirical experiences. These are explained in Table 5-4.

	Domain of empirical <i>Events that can be observed</i>	Domain of actual <i>Events, whether or not they can be observed</i>	Domain of real <i>Structures or mechanisms that produce these events</i>
Experiences	◆	◆	◆
Events		◆	◆
Mechanisms			◆

Table 5-4 - Domains of Reality. Source: Adapted from Bhaskar (2008) and Blaikie (2007).

By making explicit these levels of reality, Critical Realism can provide a coherent ontological rationale and a causal-explanatory method for identifying underlying structures or mechanisms (Reed, 2005b). Critical Realism can be seen as a search for generative structures or mechanisms (Blaikie, 2007). It’s goal is to ‘posit a mechanism which, if it existed and acted in the postulated manner, could account for the phenomenon singled out for explanation’ (Bhaskar, 1989). This is based upon the *retroduction* of underlying structures and mechanisms from the observation of ‘surface’ events and regularities (Contu and Willmott, 2005).

Tsoukas (1994) provides a practical example of the application of a Critical Realist approach to management, describing ever more subtle levels of the management reality as Management Roles, Management Task Characteristics, Management Functions, and

Management Causal Powers. However, causal powers cannot be observed directly but can only be theoretically inferred through examination of the relational effects on human agency (Johnson and Duberley, 2000).

Modell (2009) describes and defends the application of Critical Realism to accounting research. He identifies the combined workings of causal powers that shape employee experiences of control in particular organizational contexts, and describes accounting systems as having certain ‘real’ properties independent of individual actors with the causal power to regularly generate diverse events. From this it is concluded that PM practice is a suitable subject for adopting a Critical Realist approach.

5-3.4 Conclusion re Ontological and Epistemological Position

There is a danger of becoming too introspective in choosing an appropriate paradigm, becoming bogged down in solving philosophical problems rather than the research problem. The outcome of the debate *could drive us either into cynical passivity or into disabling philosophical introspection* (Johnson and Duberley, 2000: p113).

What is apparent is that no single method is without criticism and that those who propose one criticise the others. Even the self-confessed extremists do not hold consistently to one position or another and a pragmatic view is often adopted, where researchers combine methods drawn from both traditions (Easterby-Smith et al., 2002).

The researchers task is to choose the research strategy that best fits the investigation of the research problem at hand, and the research questions that express it (Blaikie, 2007). Table 5-5 summarises the fit of the various positions outlined above to the broad research questions derived from the review of the literature. This demonstrates that only the Critical Realist position allows them to be addressed satisfactorily. A more detailed set of Research Questions is derived in Chapter 6 based on the development of a model.

Broad Research Questions	Positivism	Social Constructivism	Critical Realism
Within the bounds of PM practice within Police Forces, how do knowledge and action interact to create OL	No	Yes	Yes
In UK Police Forces, is organisational behaviour affected by the creation of organisational knowledge (regarding performance) and, if so, to what degree does this occur.	Yes	No	Yes
What is the nature of factors influencing PM practice and to what degree do these affect the OL outcome.	Yes	No	Yes

Table 5-5 - Fit to Research Questions. Source: Derived by Author

PM takes a largely normative approach, and is based on positivist assumptions that both the organisation and the environment are measurable. On the other hand Organisational Learning clearly fits within a socially constructed reality. Given this dual nature, a Critical Realist position allows us to consider both aspects as stratified levels of reality (Bhaskar, 1998a) and is therefore adopted here. The Critical Realist position would thrive on multi-methodological approaches where there is room to utilise the full range of methodological techniques that are available to management researchers (Johnson and Duberley, 2000).

Having established the research problem within an appropriate ontological and epistemological framework, it is now necessary to establish the methodology that will be adopted to answer the research questions.

5-4 A RETRODUCTIVE APPROACH

As explained above, a Critical Realist position, reflecting an objectivist Ontology and a subjectivist Epistemology, is adopted (Johnson and Duberley, 2000). This section considers the implications of this position on the conduct of the research and the analysis of the data.

The use of Retroductive process using data collected from case studies analysed using open, sampling and thematic coding in NVivo is proposed.

5-4.1 Retroduction

A critical realist approach is to identify the structures and mechanisms which, although not directly observable, underlie and govern the events of experience and hence explain why regularities occur (Johnson and Duberley, 2000). Although unobservable, Critical Realists claim these can be shown to be real through the deployment of what Bhaskar calls ‘retroductive’ argument (Bhaskar, 2008).

Retroduction is positing mechanisms which, if they were to exist and act in the postulated manner would account for the phenomena singled out for investigation (Lawson, 1998, Bhaskar, 1989) or, the process of building hypothetical models of structures and mechanisms that are assumed to produced empirical phenomena (Bhaskar, 1998b).

Whilst some authors argue a distinction between retroduction and abduction, Modell (2009) sees no real difference between the contemporary *retroduction* of Bhaskar and the *abduction* of the late 19th Century as described by Pierce:

“A hypothesis then has to be adopted, which is likely in itself, and renders the facts likely.” (Peirce, 1998, p95)

Abduction was originally introduced by Charles S Peirce (Peirce, 1998) and has assumed a central position as a means of advancing causal explanations in critical realist analyses (Modell, 2009). However, as the terms are posed as equivalent, to maintain consistency with the literature, retroduction will continue to be used in this thesis.

Deduction depends on empirical testing of hypotheses derived from extant theories, whereas retroduction is about developing theoretical explanations based on emerging empirical observations.

Induction moves directly from empirical observations to theoretical inferences, whereas retroduction relies heavily on theories as mediators for deriving explanations (Wiener, 1966, Peirce, 1998).

Retroduction entails the idea of going back from, below, or behind observed patterns or regularities to discover what produces them (Blaikie, 2003). It is a mode of inference that aims at discovering the *“underlying structures or mechanisms that produce tendencies or regularities under certain conditions through a process of model building, testing and evaluation in which complex and time-consuming procedures are required to unearth them”* (Reed, 2005b, p1631).

Blaikie (2003) however, points out that, because it is a relatively new notion in the social sciences, retroduction has yet to attract serious criticism.

5-4.2 The Process of Retroduction

Stages	Description
Exploring	<ul style="list-style-type: none"> Identifies causation Explores the mechanisms of cause and effect which underlie regular events, or mechanisms
Modelling	<ul style="list-style-type: none"> Posits a mechanism which could account for the phenomenon Typically at a different level to the phenomenon being explained Utilises such cognitive materials and operating under the control of something like a logic of analogy and metaphor, of a mechanism Explains why regularities occur
Testing	<ul style="list-style-type: none"> Collects data Tests predictions based on the assumption that it does exist, Evolving new instruments to observe it.

Table 5-6 - Stages of Retroduction. Source: Author derived from literature

Retroductive strategies are discussed, amongst others, by Blaikie (2003) and (Miles and Huberman, 1994). Based on their work, the process of Retroduction can be seen as

involving three stages, Exploring, Modelling and Testing. These stages are developed in Table 5-6.

How each these three stages of Retroduction are to be addressed within this research is now expanded on.

5-4.2.1 Exploring

Causal powers exist necessarily by virtue of the nature of the objects which possess them, and whether they are exercised depends on conditions in which they work and are therefore contingent not fixed (Sayer, 1992). If the inherent causal powers or capacities of underlying structures or mechanisms are activated in particular circumstances, then they may generate corresponding empirical events and outcomes (Reed, 2005b). Causality must be regarded as referring to the inherent powers or capacities of mechanisms or structures to generate certain tendencies or regularities which may or may not be contingently observed in empirical events or outcomes (Sayer, 2000). Our knowledge of real causal mechanisms is inevitably socially constructed through our prior cultural preconceptions (Johnson and Duberley, 2000).

Sayer (1992) provides a description of the structure of causal explanations (see Figure 5-1). This demonstrates that causal explanations will therefore take the form of a) identifying underlying mechanisms or structures that generate relationships, regularities or patterns in the real world and the extent to which their inherent tendencies become empirically operational within the complex conjuncture of contingencies defining any socio-historical situation (Reed, 2005a); and b) postulating and identifying mechanisms which are capable of producing them (Sayer, 1992).

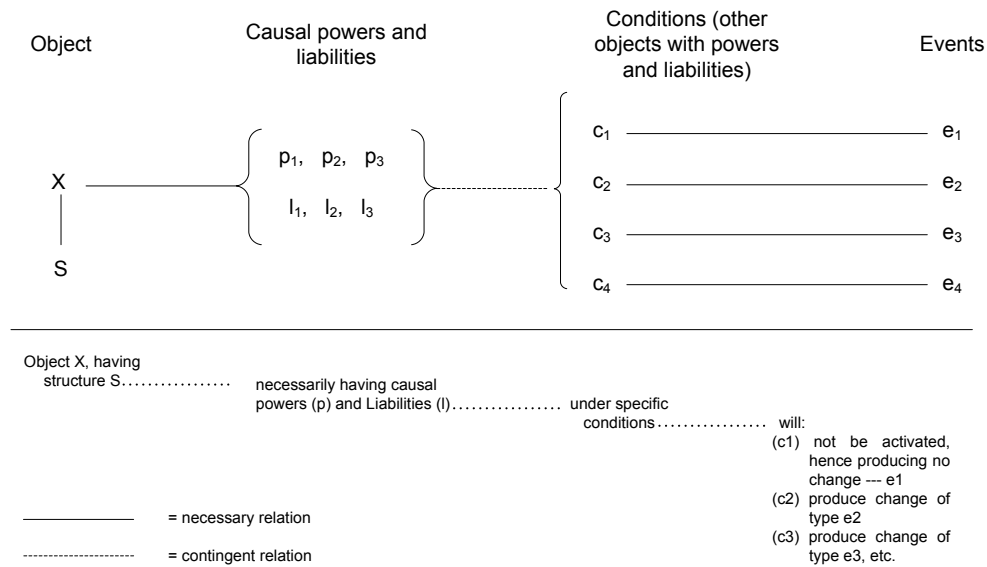


Figure 5-1 - Structures of causal explanation (after Sayer, 1992, p116)

Causality is not synonymous with a *relationship between discrete events and cannot be reduced to the statistical generalisations of empirically observed invariance of constant conjunctions of events that characterize quantitative research methods* (Sayer, 2000, p104).

Rather than entering the field with little or no preconceptions (as in an inductive or grounded approach), it is proposed to review of the literature and reveal previously identified attributes of PM and OL. This will underpin the validity of the approach, contribute to the identification of causal powers, influences, mechanisms etc., and support the development of a more sophisticated model.

5-4.2.2 Building a Model

The second stage of retrodution is to develop a theoretical model. Here, it is considered both appropriate and relevant to consider the literature and to build a model based on the views and evidence already contained in the field.

The major value of a hypothetical model is that it gives direction to research. Unlike the inductive researcher, this provides the retroductive researcher with something to look for (Blaikie, 2003).

The Critical Realist literature does not expand greatly on the methods for developing models. Referring to Sayer's (1992) structure of causal explanation shown in Figure 5-1, it can be seen that based on events, retroductive reasoning should lead us to conditions under which causal powers manifest themselves, thus indicating the nature of the underlying objects and structures. Modelling should therefore propose a summary of these conditions, causal powers, objects and structures.

Chapter 6, 'An OL Model of PM', goes on to develop a hypothetical model based on the OL and PM literature. From this, to structure the collection of data, a set of questions are derived and against which, the assumptions of the model can be tested.

5-4.2.3 Testing

The third stage of retroduction, testing, compares the model developed in the stage above, to data derived from Case Studies. This involves checking whether the explanation accounts for the data gathered about the phenomena in question and comparing it to other possible explanations. The aim of analysis is to realise the structures, causal powers, and mechanisms (Sayer, 1992).

Testing involves both data collection and an analytical approach.

A Case Study method is proposed to elicit the nature of the structures, mechanisms, and causal powers. Three Case Studies are proposed to elicit a wider variation of conditions and to strengthen the validity of findings. This is discussed more fully below.

An approach to analysis of data is not defined within the Critical Realist literature. Following the retroductive reasoning outlined earlier, the aim of analysis is to:

- Provide explanations of the underlying structures and mechanisms that must exist for phenomena to be the way that they are and for the innate powers that they possess to generate certain kinds of patterns and regularities rather than others (Reed, 2005b).

- Consider variation in practice in terms of different influences and conditions operating on the same underlying objects within the different cases.

The analytical approach is fully outlined in Chapter 6 and the use of Qualitative Data Analysis (QDA) software to support the process is explained.

5-4.2.4 An Iterative Process

One cycle of retrodution is unlikely to produce a refined model and, in reality, the process may be applied iteratively to continually refine a model as more data becomes available. This iterative process is described in Figure 5-2 where it is proposed that the result of iteration is increasingly refined knowledge.

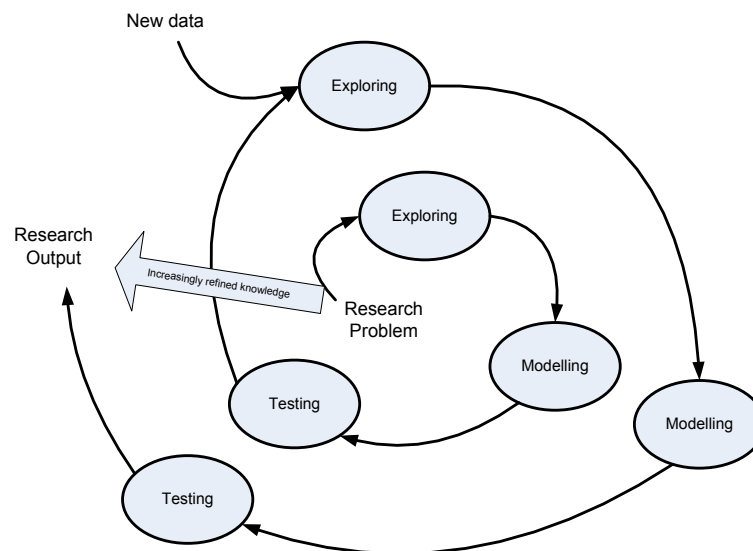


Figure 5-2 - Retrodution as an iterative process (Author derived)

5-4.3 Conclusion re Approach

Within this research, it is proposed to address these three stages as shown in Table 5-7. The relevant section of this Thesis is also shown.

Stages of Retroduction	How Addressed	Thesis Content
Identifying causal powers	<ul style="list-style-type: none"> Reviewing extant literature to establish previously identified patterns of behaviour 	Chapter 3, 4 & 6
Developing a scheme	<ul style="list-style-type: none"> Creating an OL Model of PM consisting of elements, influences and causal powers 	Chapter 6
Checking explanation	<ul style="list-style-type: none"> Deriving an analytical approach to compare the Model against the data Undertaking Case Studies to collect data Refining the OL Model of PM through reference to the data 	Chapter 7 Chapters 8,9,10 & 11

Table 5-7 - Applying Retroduction in Thesis. Source: Derived by Author

5-5 DATA COLLECTION AND ANALYTICAL METHODS

Methodology encompasses the choices made about what to study, methods of data gathering, forms of data analysis etc., in planning and executing a research study (see Silverman, 2006). As shown above, the dual nature of the research problem (theoretical and practical contribution) and the dual nature of the subject (socially constructed OL and positivist PM), has implications for how data is collected, analysed and interpreted. The following sub-sections discuss the relevance of qualitative methods and describe the reasons for the adoption of a Case Study method to address Research Questions within the context of the Critical Realist position.

5-5.1 Qualitative Approaches

Qualitative management research comprises an array of non-statistical research practices. This diversity is an outcome of competing ontological assumptions (as discussed earlier) which produce distinctive research perspectives and justify the use of different sets of evaluation criteria (Johnson et al., 2006). It has evolved to consider events or occurrences that cannot be “controlled” within an experiment. Qualitative approaches examine occurrences in terms of the perceptions of those involved or affected by the occurrence and

represent that reality through narrative of their interpretation. This often involves human behaviour, which, for ethical reasons, cannot be subjected to strict experimental controls.

The primary advantage of quantitative approaches is the ability to provide a statistically valid result; the outcome demonstrates the degree to which the result can be relied upon in statistical terms. However Mintzberg criticised the emphasis on quantitative approaches as follows:

“The field of organization theory has, I believe, paid dearly for the obsession with rigor in the choice of methodology. Too many of the results have been significant only in the statistical sense of the word. In our work, we have always found that simpler, more direct methodologies have yielded more useful results. Like sitting down in a manager's office and watching what he does. Or tracing the flow of decisions in an organization.” (Mintzberg, 1979: p583)

Qualitative researching, on the other hand engages the researcher with things that matter, in ways that matter (Mason, 1996). Qualitative data are attractive because *they are rich, full, earthy, holistic, "real"; their face validity seems unimpeachable; they preserve chronological flow where that is important, and suffer minimally from retrospective distortion* (Miles, 1979: p590). They also provide unrivalled capacity to constitute compelling arguments about how things work in particular contexts (Mason, 1996).

There are of course criticisms of qualitative approaches. For example, Miles (1979) lists the following:

- Collecting and analysing the data is a highly labour intensive operation.
- Much energy is required to make data systematically ‘comparable’.
- Qualitative data tend to overload the researcher badly at almost every point.
- The sheer range of phenomena to be observed.
- Methods of analysis are not well formulated.

The appropriateness of a qualitative approach to the research problem and its ability to provide insight into the nature of practice are obvious. There is the opportunity to undertake

an exploratory study and to examine something that is broadly unexplored. A flexible approach is required to address the *emic* issues identified by people involved in practice. There is also a need to incorporate the context of policing in the UK in which the study is undertaken.

With arguments on both sides, the choice is determined by the ability of any approach to maximise the stated advantages whilst minimising the disadvantages. The next step is to explain why Case Study is adopted as an appropriate qualitative approach.

5-5.2 A Case Study Approach

Case Studies “*can included and even be limited to quantitative evidence*” (Yin, 2003b, p14). As such, it does not fall under the heading of a qualitative approach, but instead sits above this with either a qualitative or quantitative approach. In this study, Case Study is considered as the strategy for investigation (data collection and analysis), albeit this will focus on qualitative data.

A Case Study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1994). Unlike empirical approaches, which divorce the context and phenomenon in order to control variables, Case Study method covers contextual conditions that may be highly pertinent to the phenomenon of study.

The rationale for adopting a Case Study is that rather than trying to provide a statistical generalisation, the study of a single case can tell us something about the nature of the phenomena (Yin, 2003b). The use of multiple cases will allow differences across regional boundaries to be considered.

Gillham (2000, p1) identifies appropriate subjects for Case Study as:

- A unit of human activity embedded in the real world;
- Which can only be studied or understood in context;

- Which exists in the here and now;
- That merges in with its context so that precise boundaries are difficult to draw;
- Individual, group, institution, community, multiple cases.

Case Study is sometimes seen as taking a specific item of data from a larger set of data and looking at in detail. For example Richards (2005, p172) proposes a case study as a way of exploring an identified theme by examining a subset of data, such as an individual experience.

Hartley (1994) argues that Case Study should not be seen as a method, or data collection tactic, but rather a strategy or all-encompassing model with the logic of design incorporating specific approaches to data collection and to data analysis (Yin, 1994). Case Study, as a strategy for data collection, is consistent with the Critical Realist position outlined and adopted earlier in this Chapter. The process derived by Yin (2003b, p50) and reproduced in the diagram shown in Figure 5-3 is consistent with the iterative retroductive approach described earlier of exploring, modelling and testing.

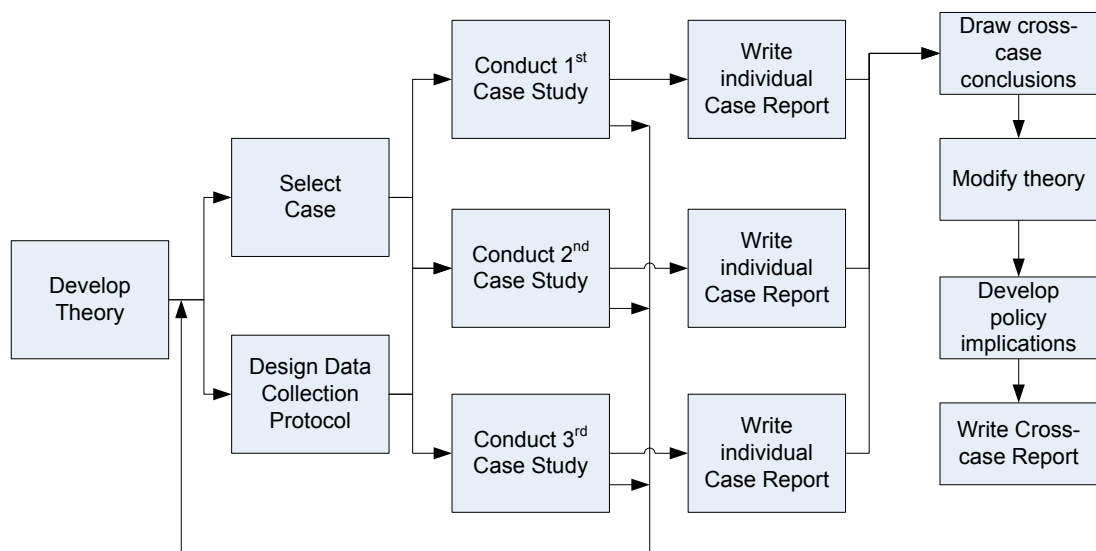


Figure 5-3 - Case Study Method. Source: Yin (2003)

The strategy focuses on understanding the dynamics present within single settings (Eisenhardt, 1989). It consists of a detailed investigation, often with data collected over a

period of time, of one or more organisations, or groups within organisations, with a view to providing an analysis of the context of the process involved in the phenomena under study (Hartley, 1994). Potential sources of evidence within case studies include documents, archived records, interviews, direct observation, participant observation, and physical artefacts. Each needs different research skills and procedures (Yin, 1994).

An explanatory case study consists of: a) an accurate rendition of the facts of the case, b) some consideration of alternative explanations of these facts, and c) a conclusion based on the single explanation that appears most congruent with the facts (Yin, 1981).

5-5.2.1 Criticism and Response

Yin is consistent in his own description of Case Study but does not resolve the issue of the “case” and is therefore contrary to other descriptions of case study (Stake, 1995, Gillham, 2000, Eisenhardt, 1989). Tensions exist between the key authors as these are not resolved in the literature.

Miles criticised case study and considered:

- within-case analysis was "essentially intuitive, primitive, and unmanageable" (1979, p597)
- cross-case analysis was "even less well formulated than within-site analysis" (1979, p599)
- respondents objected to case study results much more frequently than to survey results (1979, p597).

He concluded that, without renewed efforts, *qualitative research on organizations cannot be expected to transcend story-telling* (1979, p600).

The inability of Case Study method to provide replicable results that can be reliably applied across the field has led to criticism of the approach, particularly from the Positivist school. Early criticism of Case Study led Yin to claim that it could not be regarded as rational, much

less scientific venture (Yin, 1981). Key criticisms of the case study method were summarised by Yin (1994) and are shown in Table 5-8.

<i>Criticism</i>	<i>Comment</i>
Bias	Every case study investigator must work hard to report all evidence fairly. Bias can also enter the conduct of experiments and the use of other research strategies – problems are not different but may be encountered more frequently.
Generalisation	Difficult to generalise from single case study
Time to complete study	Resources required as case study method takes so long. Not necessarily so. Chapter 6 demonstrates how alternative ways of writing the case study – traditional lengthy narrative can be avoided completely
Difficulty	Good case studies are difficult to do.
Ethnography	Requires good ethnographic skills
Time consuming	Explanation of use of typist, non-productive, not value for money to type, all transcripts reviewed, this allowed time for focus on content.
Analysis	Highly complicated data sets
Is it trustworthy	Lower end of scale but is relevant and meaningful. An essential element of practice oriented research. Triangulation allows comparison of interviews with artefacts, documents and observation.

Table 5-8 - Key Criticisms of Case Study. Source: After Yin, 1994

In response to such criticism the development of work by Yin (1981, 2003b, 2003a), Eisenhardt (1989), Miles and Huberman (1984, 1994), and Pettigrew (1979), aimed at addressing the perceived shortcomings and establishing more validity and reliability in Case Study practice. Yin (1994) points out that although problems may be encountered more frequently in the Case Study method, bias can also present itself in other research strategies. Also, although case studies are difficult to do, they have a number of inherent benefits over other techniques.

Hartley (1994) argues that criticisms are outmoded and that there is nothing in the method *per se* that makes it unreliable, only its application. Here therefore, approaches that have developed to address weaknesses in the application of the method are considered.

Case Study is particularly appropriate where there is a lack of empirical studies on the issues considered in the research, and the study is primarily descriptive and partly explanatory and of a theory-building nature, both of which are particularly relevant to this research. The case study method of research provides a sound basis upon which to examine a phenomenon involving human behaviour in an organisational context. Furthermore, Case Study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points; relies on multiple sources of evidence, with data needing to converge in a triangulating fashion; benefits from the prior development of theoretical propositions to guide data collection and analysis (Yin, 1994).

Case study is particularly relevant for the area of performance management research, where there are material challenges involved in creating credible formally controlled experimental tests (Silverman, 2004). It also enables us to "understand" the shared meanings of practitioners and draw insight that could not be gained with "hard" data only (Numagami, 1998).

It is argued therefore that a Case Study approach, whilst difficult and complex to undertake, is both appropriate for the research problem and can produce valid results if appropriate steps are taken. In this research, Critical Realism reinforces the approach, underpinning practical aspects with retroductive reasoning.

5-5.3 Ensuring Quality and Improving Validity

The primary criticisms of Case Study relating to internal validity, construct validity, reliability and replicability, and external validity are addressed by a variety of techniques aimed at improving the quality of case studies (Yin, 1994, Eisenhardt, 1989).

5-5.3.1 Yin's Quality Test

Yin (1994) recommends four tests to ensure quality within Case Study practice, Construct Validity, Internal Validity, External Validity, and Reliability. Table 5-9 outlines how these have been applied to this research.

Test	Purpose	Method	Application
Construct validity	Establishing correct operational measures for the concepts being studied	<ul style="list-style-type: none"> • Multiple sources of Evidence • Chain of evidence • Interview and documentary evidence 	QSR NVivo trees of nodes established from Model
Internal validity	Establishing causal relationships or explanations	<ul style="list-style-type: none"> • Pattern matching • Explanation building 	Valid and tested coding techniques
External validity	Establishing the domain to which a study's findings can be generalised	<ul style="list-style-type: none"> • Replication logic in multiple case studies 	Inclusion of multiple cases, and cross border comparison. Respondent validation through interview method. Reviewing subsequent inputs to managers
Reliability	Demonstrating that the operations of the study can be replicated	<ul style="list-style-type: none"> • Use case study protocol • Develop case study database 	Structured approach to analysis and use of NVivo to collate all data and related material

Table 5-9 – Application of Case Study Quality Test. Source: Yin, 1994

5-5.3.2 Eisenhardt Steps (1989)

Eisenhardt (1989), building on the grounded theory work of Glaser & Strauss (1967), Strauss (1987), and Miles and Huberman (1984), provides a roadmap for undertaking successful case study. Eisenhardt's work is recognised as a key contribution to the field (Yin, 2003b, Cassell and Symon, 1994a, Easterby-Smith et al., 2002), and as providing a structured basis for building valid theory from case studies. An outline of Eisenhardt's roadmap and an explanation of how it is applied to this research are shown in Table 5-10 below.

Step	Activity	Reason	Application
Getting Started	Definition of research question Possibility of <i>a priori</i> constructs Prefer neither theory nor hypotheses	Focuses efforts Provides better grounding of construct measures Retains theoretical flexibility	<ul style="list-style-type: none"> • Experience in field (Chapter 2) • Identify research problem and review literature (Chapter 2,3, 4) • Identify research questions (Chapter 6) • Develop OL model of PM (Chapter 6)
Selecting Cases	Specified population Theoretical, not random, sampling	Constrains extraneous variation and sharpens external validity Focuses efforts on theoretically useful cases—i.e., those that replicate or extend theory by filling conceptual categories	<ul style="list-style-type: none"> • Choice of cases based on use of performance management in context of research problem • (Chapter 5)
Crafting Instruments and Protocols	Multiple data collection methods Qualitative and quantitative data combined Multiple investigators	Strengthens grounding of theory by triangulation of evidence Synergistic view of evidence Fosters divergent perspectives and strengthens grounding	<ul style="list-style-type: none"> • Choice of Interviews, Observation and Collation of Documentation • Single investigator (Chapter 5)
Entering the Field	Overlap data collection and analysis, including field notes Flexible and opportunistic data collection methods	Speeds analyses and reveals helpful adjustments to data collection Allows investigators to take advantage of emergent themes and unique case features	<ul style="list-style-type: none"> • Pilot case study allows data collection then analysis before further data collection. • Both planned and opportunistic data collection used (Chapter 8)
Analyzing Data	Within-case analysis Cross-case pattern search	Gains familiarity with data and preliminary theory generation Forces investigators to look beyond initial impressions and see evidence through multiple lenses	<ul style="list-style-type: none"> • Initial data analysis structured around provisional model • Elements described and relationships identified • Influencing factors identified • Cross case analysis to consider variation (Chapters 8,9,10 &11)

Shaping Hypotheses	Iterative tabulation of evidence for each construct Replication, not sampling, logic across cases Search evidence for "why" behind relationships	Sharpens construct definition, validity, and measurability Confirms, extends, and sharpens theory Builds internal validity	<ul style="list-style-type: none"> • Building themes, concepts and relationships in NVivo. (Chapters 8, 9, 10, 11)
Enfolding Literature	Comparison with conflicting literature Comparison with similar literature	Builds internal validity, raises theoretical level, and sharpens construct definitions Sharpens generalisability, improves construct definition, and raises theoretical level	<ul style="list-style-type: none"> • Review of findings in light of extant literature (Chapters 12)
Reaching Closure	Theoretical saturation when possible	Ends process when marginal improvement becomes small	<ul style="list-style-type: none"> • Completion of Retroductive process (Chapters 12)

Table 5-10 –Steps to Addressing Validity. Source: Adapted from Eisenhardt (1989)

5-6 DEVELOPING THE RESEARCH METHOD

As outlined above, to promote validity in the research process, the steps proposed by Eisenhardt (1989) are followed (see Table 5-10). How these steps are applied to the research process is now discussed in more detail.

5-6.1 Getting Started

The author is an experienced serving officer within a Scottish Police Force with extensive knowledge of the practitioner aspects of the field of performance management. A network of contacts in other Forces was already established.

As shown in the review of the literature, the ability of the extant literature to address the issue of OL practice is limited. There is therefore a need to develop an *a priori* construct, that is, a provisional model of the operation of PM within an OL framework. This would

provide a hypothetical model that can focus the data collection without restricting its validity.

Eisenhardt (1989) considers this use of *a priori* constructs as necessary in order to provide better grounding of construct measures and cites the example study of strategic decision making in top management teams of Bourgeois and Eisenhardt (1988). In that study several potentially important constructs were identified from the literature on decision making and were subsequently explicitly measured in the interview protocol and questionnaires.

Based on OL and PM literature, a number of propositions regarding the operation of PM may be made. The use of OL theory is based on the premise that PM is intended to adapt the behaviour of the organisation through the use of performance information acquired from the internal or external environment. Chapter 6 explains how an OL Model of PM is developed from the existing models in the literature, and how a set of Research Questions are structured around this to address the Research Problem.

5-6.2 Case Selection

Stake (1995) points out that Case Study research is not sampling research. Multiple case study design depends on replication logic, not sampling logic (Yin, 2003b, Glaser and Strauss, 1967) or theoretical sampling rather than random sampling (Bourgeois and Eisenhardt, 1988). The aim is not to provide statistical significance but to identify significant cases or those from which learning can be maximised, rather than identify the typical. These theoretically useful cases are identified by historical and contextual influences that make practice distinct and from which it is planned to identify the causes of that uniqueness. Therefore the choice of cases here is theoretical not literal, that is, the cases are anticipated to provide contrasting results, but for predictable reasons.

Eisenhardt (1989) suggests that in multiple case approach, 4 to 10 case studies usually work well, and Yin (2003b) suggests 6 to 10.

The choice of cases within this research is based on use of PM in the context of the Research Problem. In this research, each “case” is the practice of PM within the boundary of the organisation (a Police Force within the UK). Whilst subject to similar structures and constraints, each is distinct, each is different, each has similar influences, and each cooperate to an extent in the development of practice. As identified in Chapter 2, the different areas of the UK have differing influences and performance management practice is known to vary. It was decided that in order to address the fundamental research problem, it is necessary to develop a broader picture of PM practice within these differing contexts of Scotland and the England, and Northern Ireland.

Whilst the author has conducted five Case Studies, the detailed nature of Case Study has made it impractical to address these sufficiently within a PhD thesis. Three Cases from across the UK have therefore been reported and these are seen as sufficient to address the Research Problem.

5-6.2.1 The Cases

Case	Force	Reason for selection
A	Grampian Police	Recent implementation of performance management system, expectation is that this will make processes easier to identify.
B	Cambridgeshire Constabulary	NPIA were asked to intervene in order to assist in addressing poor performance, it is expected to see evidence of change and impact of change
C	Police Service of Northern Ireland	Unique to Northern Ireland, different from other cases, expected to provide useful contrast

Table 5-11 - Case Selection. Source: Derived by Author

Case Studies reported include one Scottish Police Force and one Police Force each from England and Northern Ireland. The distribution of Forces cannot be seen as geographically representative.

One Case was identified as a pilot. This Case provided ease of access whilst the protocol was fine-tuned; this also provided the opportunity for ease of access if additional material is found to be required. Table 5-11 describes the reason for selection of each case.

These Case Studies will provide a structure in which the Research Questions can be addressed.

5-6.3 Crafting Instruments and Protocols

Theory-building researchers typically combine multiple data collection methods and the resultant triangulation provides stronger substantiation of constructs and hypotheses (Eisenhardt, 1989). The field studies largely consisted of semi-structured interviews with staff involved in the various performance related processes, semi structured interviews with senior staff responsible for setting policy and strategic direction, observation of decision making meeting as well as collation of artefacts and documents used in the processes. A single researcher conducted the Case Studies.

It is accepted that the concept of OL will be unfamiliar to the research participants and that direct questioning as to its nature would be unproductive. It is therefore proposed to structure the Research Questions around the elements of OL. The Research Questions are then translated into interview questions.

From the literature review and the work undertaken to determine the research context, it can be seen that PM has several aspects and is understood in many different ways. Again, it is not considered possible to directly question participants on the nature of PM. The data collection process must therefore find ways of extracting the experience of the participants of PM practice and how they see it's functioning.

5-6.4 Entering the Field

The pilot case study is selected to provide an opportunity to develop the method in practice. The experience gained in the pilot case allows the precise content of interviewees to be adapted depending on the issues raised there.

Given the limited number of cases which can usually be studied, it makes sense to choose cases such as extreme situations and polar types in which the process of interest is "transparently observable" (Pettigrew, 1990).

In choosing a pilot, the advice of Stake is taken.

"My choice would be to examine the case from which we feel we can learn the most. That may mean taking the one most accessible, the one we can spend most time with" (Stake, 1995, p447)

Grampian Police was chosen as the pilot case largely for these practical reasons, but also for opportunistic reasons. The author is familiar with the Force and its PM practice, a flexible approach could be taken to the selection and timing of interviews, there was the opportunity to revisit the case should additional issues become apparent during later case studies.

As the data collection progressed, the Research Questions were monitored to ensure they are being addressed.

5-6.4.1 Selection of Interviewees

As described above, Case Study research is not sampling research (Stake, 1995) and therefore, as with the selection of cases, the basis of interviewee selection was replication logic (Yin, 2003b, Glaser and Strauss, 1967) and theoretical sampling (Bourgeois and Eisenhardt, 1988).

To cover the full range of the OL process within each case, it was necessary to include a range of roles within the data collection. The two areas of knowledge creation and action creation (see Chapter 6) were expected to involve different staff types in different roles.

Specialists were expected to be more involved in the knowledge creation aspect and managers more involved in the action creation aspect, although not uniquely so.

The data collection therefore aimed to obtain views from a cross section of the organisation whilst remaining focused on the key roles involved in or affected by the PM practice. To build a more complete picture in terms of the OL process, interviewees were sought from a diagonal slice through the organisation covering the range of ranks. The interviewees ranged from executive level staff to officers “on the street”, as well as covering both centralised roles and the geographical policing areas within each case.

In the pilot case study, the researcher’s knowledge of these roles assisted in the selection process and it was possible to directly contact interviewees and arrange an interview schedule. Each geographical “Division” was visited and the Divisional Commander and staff in the key roles there were interviewed. This level of detail proved unnecessary in later cases with theoretical saturation being reached more quickly.

In subsequent cases, a liaison person was identified at an early stage within each Force. The aims of the research and the range of roles anticipated were outlined to the liaison person and they were asked to identify those involved in these key OL process roles. Each Force then established a schedule to interview the selected key personnel based on their availability and geographical distribution. The selection was confirmed against the data collected (see each Case Study Chapter for distribution of coding).

In the Northern Ireland case, due to the large number of geographical policing Districts, only a limited selection could be visited. PSNI acknowledged that they were selective in which Districts to involve but this approach was confirmed with the researcher. This was viewed as in line with the Case Study method, in that it involved selecting the sources that could contribute most to the research rather than aiming to provide a representative or random sample.

Where practical, to minimise disruption and to ensure more junior officers felt comfortable, some interviews were conducted as a focus group.

The actual distribution of interviewees is described within each Case Study (see Chapter 7, 8 and 9). The questions used in each interview are identified in Appendix B.

5-6.5 Analysing Data & Shaping Hypotheses

Within the Case Study approach two groups of analysis are commonly adopted, within-case analysis and cross case analysis. Within-case analysis typically aims at providing a well-grounded sense of local reality and involves detailed case study write-ups for each site (Miles and Huberman, 1994). Cross-case analysis enables the researcher to see processes and outcomes across several cases, to understand how they are qualified by local conditions, to develop more sophisticated descriptions and more powerful explanations, and increases generalisability (Miles and Huberman, 1994).

Testing the Case Study data against a model requires a well-defined process in order to be manageable, conclusive and valid. Ensuring high construct validity is a pre-requisite for internal and, ultimately, external validity (Modell, 2009).

Miles and Huberman (1994) identify three steps involved in data analysis:

- Data reduction is the process of selecting, focusing, simplifying, abstracting, and transforming the data from transcriptions, field notes, etc.
- Data display is the assembly of information into organised and compressed format that permits conclusion drawing and action.
- Conclusion drawing/verification may take a variety of forms to explain what things mean e.g. regularities, patterns, explanations, possible configurations, causal flows, and propositions. Conclusions are also verified as the analysis proceeds, through testing plausibility, sturdiness, and validity.

Although expressed and explained here as a linear process, in practice, these stages occur as interacting elements of an evolving process, gradually refining the quality of the product as it takes place (see Figure 5-4).

To support the process of analysis, it is proposed to use QDA software and its use to undertake the data reduction, data display and conclusion drawing/verification phases is now discussed.

There is both optimism and concerns about the development of QDA software, with improved rigour, consistency and transparency on one hand, and fears around the alienation of the researcher and the move from support for analysis to the method of analysis on the other (Kelle, 1995). Debate about the appropriateness of using computers to analyse qualitative data continues (Bazeley, 2007, Richards, 1999, Kelle, 1997, di Gregorio, 2003, Coffey and Atkinson, 1996). The key issue in the use of QDA software remains the extent to which it enhances or detracts from qualitative research (Bringer et al., 2004). A summary of the benefits and drawbacks of using QDA software is shown in Table 5-12.

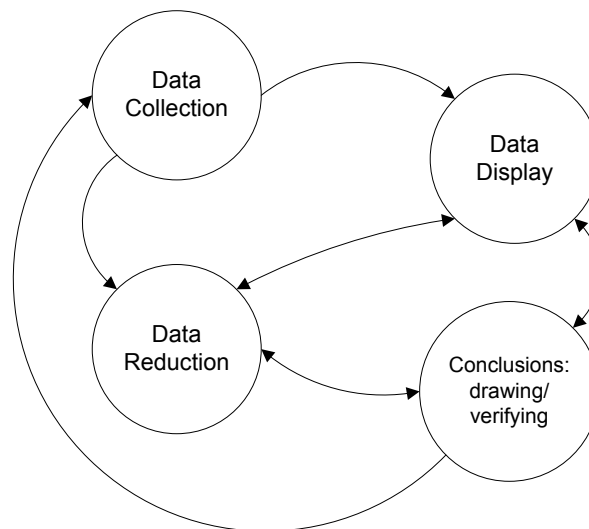


Figure 5-4 - Interactive Model of Data Analysis (after Miles and Huberman, 1994)

In addressing the drawbacks, Bringer et al (2004) identify the need to maximise transparency in the coding approach and theory development in order to underpin any conclusions drawn. NVivo and in particular, good practice associated with its use, facilitates this process (Richards, 1999, di Gregorio, 2006).

<i>Benefits</i>	<i>Drawbacks</i>
<ul style="list-style-type: none"> • Eliminates problems in handling large amounts of data • Easy to recode data and to approach the data from different perspectives • Encourages planning and thinking ahead • Easy to maintain audit trail 	<ul style="list-style-type: none"> • Encourages novice researcher to code without knowledge of analysis • Sophisticated analysis may hide sloppy coding • Quick methods may be used exclusively to produce under-analysed reports

Table 5-12 - Benefits & Drawbacks of QDA software. Source: Adapted from di Gregorio, (2006)

Following recommendations within NVivo training (see di Gregorio, 2006) and to encourage due consideration to the specific aspects of this study, an initial project design is established based on the nature of the research. In doing so, consideration is given to the unit(s) of analysis, the anticipated attributes of these, the time frame in which it would be

undertaken, and the nature of potential data sources (primary and secondary sources of data). From this a skeleton Project was created into which the data could start to be organised as it is collected. Case nodes may be created and appropriately structured to reflect the data collection process. The use of Research, Analysis and Coding Journals allow ideas and decisions to be recorded in text as they occurred, each being entered in the appropriate journal with a time and date stamp to support transparency.

NVivo enables *relationships* to be posited and tested against the data. Also, *models* are used to provide a diagrammatic overview of the relationships between nodes and these can again be posited and tested against the data as the body of data is considered. *Memos* are used to capture and develop ideas, keeping a record of how these develop during the analysis process.

5-6.6 Enfolding Literature & Reaching Closure

Having addressed the Research Questions regarding the nature of the model, the last of Eisenhardt's steps are to review the findings in light of extant literature and to reach closure through contrasting the outcomes against the Research Problem.

Clearly, reviewing the literature has identified the gap in knowledge (see Chapter 3 & 4), but a final review of the literature is aimed at considering the specific literature as it relates more directly to the research findings. This will include both conflicting and supporting literature. It will enable a comparison with existing findings and explanations and further improve the validity of the research outcomes.

The process of retroduction is complete when causal powers have been identified, a model has been developed and this has been tested against the data from the multiple –case design. The output will provide an explanation of the process of PM and the influencing factors from the perspective of OL and will be reliable and meaningful.

5-7 CONCLUSION REGARDING RESEARCH DESIGN AND STRATEGY

At the start of the Chapter, the Research Problem was reviewed. The Chapter has followed an order that reflects a logical primacy of ontology, epistemology and methodology (Guba and Lincoln, 1990).

It has been shown that a Critical Realist position is appropriate to the research. The aim of a Critical Realist approach to research is to explain the phenomena of interest. In this research the phenomena of interest is OL, or more particularly PM as an OL mechanism.

A retroductive approach to drawing conclusions regarding the underlying nature of PM practice has been chosen.

A Case Study methodology has been proposed to address the Research Questions. Case Study focuses on understanding the dynamics present within single settings (Eisenhardt, 1989). Case Study is particularly appropriate where there is a lack of empirical studies on the issues considered in the research, and the study is primarily descriptive and partly explanatory and of a theory-building nature (Yin, 1994).

The aim of the analysis of the case study data is to compare the “reality” of the Case to a provisional OL Model of PM and through this to identify the presence and impact of OL. The data will be analysed using open, structured and thematic analysis of the content supported by the use of NVivo.

The need to ensure validity and reliability in the Case Study method is addressed through the adoption of Eisenhardt’s Steps.

In the absence of a suitable theoretical model, the first stage of the retroductive process is to develop an OL Model of PM. This will provide a greater level of detail and focus the data collection. This is addressed in Chapter 6.

5-8 REFLECTION

Critical Realism proposes reflection as an important source of understanding. In this spirit a brief reflection on the each of the Chapters was introduced.

The development of the researchers thinking around Critical Realism as a research approach has perhaps been the most challenging but ‘enlightening’ aspect of the research. The argument between Positivism and Social Constructivism had seemed largely synthetic until a third option became apparent. This crystallised the real difference between the various positions and took the author on a philosophical journey that had been missing until that point.

Overall the conduct of the case studies and the completion of the analysis proved far more time consuming than anticipated. The use of multiple coding techniques contributed to this but, at the same time, provided much more value in terms of the resulting constructs.

The author was warmly accepted within each Force, and found an openness and willingness to discuss the issues amongst the participants. With more junior staff, they often expressed gratitude that someone was willing to listen to their issues.

Theoretical saturation for model developed quickly but the range of issues affecting factors expanded more than expected.

It was intended to develop *embedded* case study approach (Yin, 2003b), considering the differences in local practice, for example across Divisions. However, this proved impractical at answering the Research Questions.

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6-1 ORGANISATION OF THE CHAPTER

The following table (Table 6-1) is provided to orient the reader to the content and structure of the Chapter and indicates its relationship to the Research Problem and the Research Questions.

Content	Relevance to Research Problem	Comment
Models of Organisational Learning within the Literature	Considers models of OL within the literature to provides the basis for development of new model.	Identifies the concepts and common themes.
Deriving Constructs and Conceptual Framework	Develops a conceptual model which is used to derives a set of constructs and definitions upon which, a OL Model fo PM can be developed to address the Research Problem.	An initial set of questions are derived from the constructs. These are used later in this Chapter to derive set of Research Questions.
The Foundation for a New Model	A provisional theoretical OL Model of PM is derived to provide structure to data collection and analysis and address the research problem.	The model will be tested against the data from Case Studies, see Chapters 8, 9, 10 and 11.
Developing the Knowledge Creation and Action Creation Constructs	Identifies issues that form the basis for research questions.	Detail is added to the basic OL Model to derive elements of process.
Drivers, Factors, Elements and Interfaces	Influences on the process are reviewed. Enables issues to be identified that form the basis for research questions	Considers drivers for OL and factors influencing effectiveness of process
The Research Questions and Interview Questions	Research Questions are derived from the model and its relationship to the Research Problem.	A set of outline Interview Questions are also proposed.

Table 6-1 - Organisation of the Chapter

This chapter considers Models of OL and their suitability for addressing the research problem. It then derives a conceptual framework of mechanisms, causal powers and influences from the Literature.

6-2 INTRODUCTION

Chapter 3, the review of the literature on Organisational Learning, and Chapter 4, the review of the literature on Performance Management, identified the conceptual overlap in the two fields. Chapter 5, Research Design and Strategy, identified a Critical Realist approach to the Research Problem using retroductive reasoning.

Based on the relevant literature and using the approach identified, this Chapter aims to build a hypothetical model of OL in practice that will provide a basis for the identification of questions with which to structure Case Studies.

This Chapter is in two logical parts. The first considers the models of OL within the literature, and identifies the basic constructs of such models. The second develops a new OL Model of PM and derives Research Questions to address the Research Problem based on the model.

6-3 PART I - MODELS OF ORGANISATIONAL LEARNING WITHIN THE LITERATURE

A number of authors have developed theoretical models of OL (see Table 1 below), both in an attempt to amalgamate the various aspects of the field and to provide a basis for further development. This section identifies and critically reviews frequently cited models of OL. The ability of these models to address an investigation of PM practice is considered and the gap in the literature is identified in relation to the application of OL to practice such as PM (discussed further in Chapter 4). Outline conclusions are reached about the nature of the OL as a process involving the creation of knowledge that provides the organisation the ability to act more appropriately within its environment in the achievement of its goals.

The section concludes by deriving a conceptual framework based on the recurring themes within the literature and outlines subsequent research questions.

Just as learning can be considered either as an outcome or as a process, Organisational Learning (OL) can be considered as an outcome or the process that leads to that outcome. Here, a process is considered as a sequence of behaviours (Cyert & March, 1963). With its focus on practical application of OL theory to performance management approaches in policing, this research is focussed on the contributing processes that create the outcome rather than the outcome itself. To address the research problem, this research poses the question '*How does OL occur?*' rather than '*What is the result of OL?*'.

OL Model	Author(s)
Model of Organisational Decision Making	Cyert and March (1963, 1992)
Adaptive Model of OL	Cangelosi and Dill (1965)
The Complete Cycle of Choice	March and Olsen (1975)
Stimulus Response model	Hedberg (1981)
Model of Organisations as Interpretation Systems	Daft & Weick (1984)
Organisational Learning Process	Huber (1991)
Conceptual Framework for the Learning Organisation	Watkins & Marsick (1993)
Spiral of Knowledge Creation	Nonaka and Takeuchi (1995)
The 4I model of Organisational Learning	Crossan et al (1999)
Simplified Process Model of OL and Conceptual Framework	Pawlowski (2001)
Socio-Cognitive Framework	Akgün et al. (2003)
The Multi-facet Model	Lipshitz et al (2007)

Table 6-2 - Models of OL in the Literature. Source: As cited author.

A systems approach is used by many of the authors of OL Models, often implicitly (for example Hedberg, 1981) but sometimes explicitly (for example Crossan et al., 1999, Pawlowski, 2001, Watkins and Marsick, 1993). General systems theory was outlined by Bertalanffy (1950) as a means of linking different disciplines. In particular, its value lies in

the ability to describe the dynamics of a reality rather than merely representing a static or stable phenomenon. Hence, it is particularly pertinent for use in describing both OL and PM, where the dynamics of the process are so important.

Models proposed by key authors that address the dynamics of the OL process are now considered (see Table 6-2). These models are selected to broadly match those considered by Crossan et al (1999) with the addition of three more recent models which are seen as making a significant contribution.

6-3.1 Comparing Models of OL

Six recurring themes within the literature on OL Models, namely perspectives, process, drivers, elements, interfaces and factors, are used to provide a comparison. This is summarised in Table 6-3.

Recurring Themes in OL Models	
Perspective	Considers the nature of learning discussed by the model, largely cognitive or behavioural approaches are adopted
Process	Considers the dynamic nature of the creation of knowledge and learning outcomes (generally these are graphically represented)
Drivers	Considers the triggers, or impetus for the learning process
Elements	Considers the components of the process and their description
Interfaces	Considers the relationships between the components as well as their context
Factors	Considers what influences the operation of the process and the completion of OL

Table 6-3 - Recurring Themes in OL Models. Source: Author derived from literature

Considering each of these aspects in terms of the position adopted by the author(s), the fit of the model to the context of the research problem is identified. Prior to that comparison, in

order to introduce each model and to describe the graphical representation, each model is briefly discussed below.

6-3.1.1 Cyert and March (1963, 1992) – Model of Organisational Decision Making

As an example, the model of the organisational decision making process (Cyert and March, 1963, 1992, p175) proposed four levels of decision making that depend on the ease with which answers are available. At the highest level, goals, rules, or search methods must be adapted in order to resolve the issue. Cyert and March propose that this is where OL occurs, that is, the modification of the routines and procedures within the organisation, or adaptation of organisational responses to the environment. Therefore, OL was seen as a potential outcome of the decision making process.

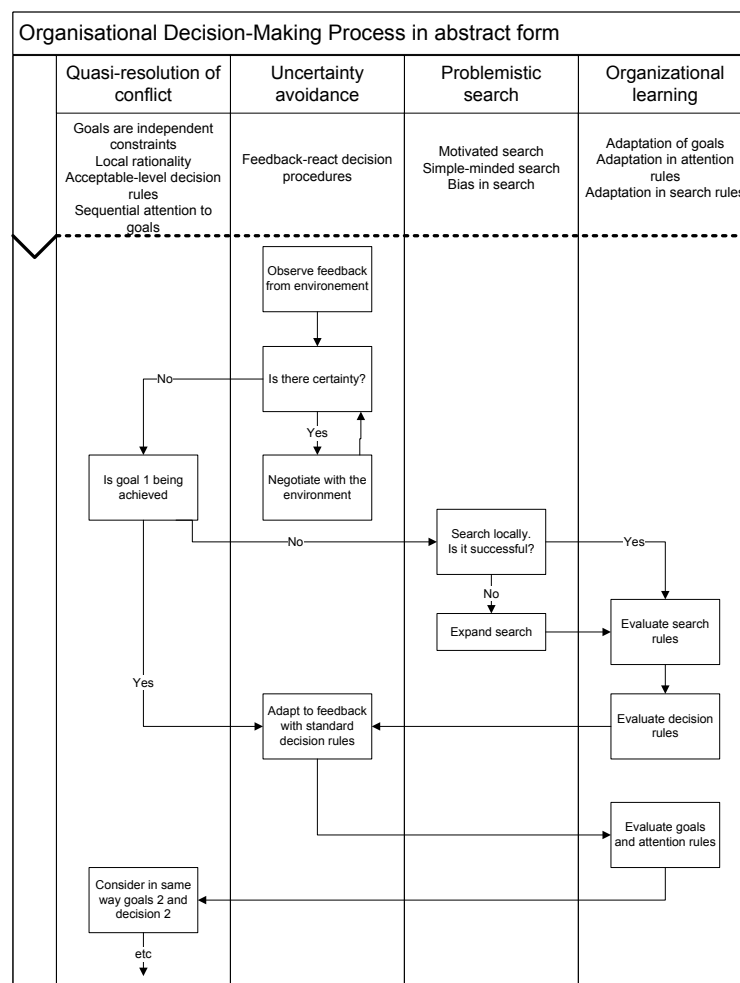


Figure 6-1 – Organisational Decision-Making. (Cyert & March, 1963, 1992, p175)

As we saw earlier, in the review of the OL literature, the *Behavioural Theory of the Firm* (Cyert and March, 1963, 1992) considered the organisation as existing to influence the state of the world in line with its preferences. The environment in which the organisation operates is changeable, resulting in shocks to the organisation. The organisation operates through the development of rules and standard operating procedures, and these are modified through internal decisions and environment shocks. More successful choices regarding behaviour (in terms of the aims of the organisation) are reinforced.

Cyert and March describe a “feedback-react” decision procedure. That is, information from the environment is the stimulus for decision-making and the outcome is continued organisational behaviour within the existing operating procedures or organisational change at level of search rules, decision rules or attention rules in order to deal with the environment.

6-3.1.2 Cangelosi and Dill (1965) - Adaptive Model of OL

Whilst researching decision making within a complex management exercise, Cangelosi and Dill (1965) observed a process that monitored a simulated air traffic pattern, interpreted the results of that surveillance, and dispatched intercept aircraft as necessary. Like Cyert and March (1963, 1992) their work viewed the organisation as an adaptive system.

The basic concept of the model is that organizational learning must be viewed as a series of interactions between adaptation at the individual or subgroup level and adaptation at the organizational level (Cangelosi and Dill, 1965). They considered that OL occurred in a sporadic and stepwise manner rather than being continuous and gradual.

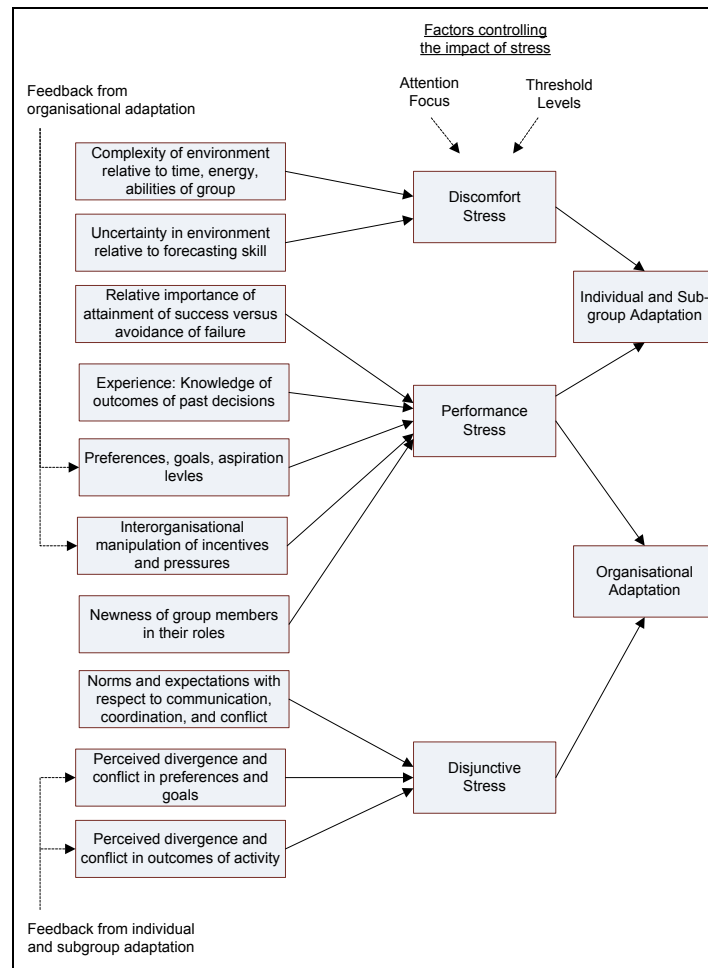


Figure 6-2 - Adaptive Model of OL (Cangelosi & Dill, 1965)

6-3.1.3 March and Olsen (1975)

March and Olsen critique the simple model for the OL process (See Figure 6-3 - The Complete Cycle of Choice (March & Olsen, 1975, p150)) and identified that this simple model is affected by different modes of learning under circumstances of ambiguity. These circumstances include role constrained experiential learning, superstitious learning and audience experiential learning.

At a certain point in time, some participants see a discrepancy between what they think the world ought to be (given present possibilities or constraints) and what the world actually is. This discrepancy produces individual behaviour, which is aggregated in collective (organisational) action or choices. The

outside world then “responds” to this choice in some way that affects individual assessments of both the state of the world and the efficacy of the actions. (March and Olsen, 1975, p149)

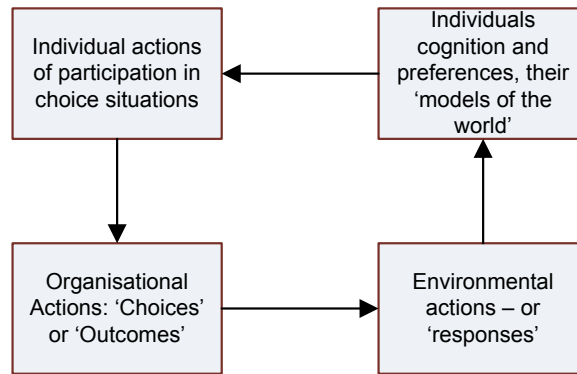


Figure 6-3 - The Complete Cycle of Choice (March & Olsen, 1975, p150)

These choices regarding present alternatives use feedback from previous experience and result in new behaviour by the organisation. March and Olsen (1975) considered that decision making about new, more appropriate, organisational behaviour, although often assumed to be in terms of a simple cycle of choice, was in fact influenced by a range of factors that impacted on the process of learning. They contest that decisions regarding action are made solely on a rational basis.

6-3.1.4 Hedberg (1981) - Stimulus Response Model

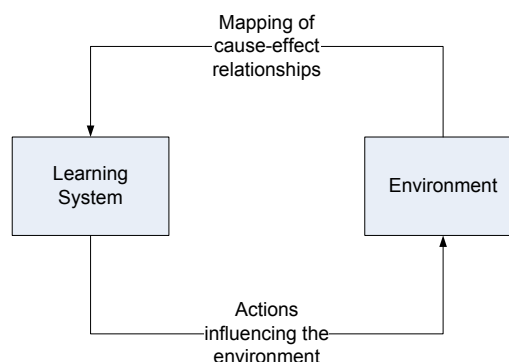


Figure 6-4 - Adaptive-manipulative relationship (Hedberg, 1981)

He describes a stimulus – response model (see Figure 6) where organisations select the stimuli to which they respond because they typically face much more information than they can sensibly process and where organisations aggregate the selected stimuli into compound stimuli that supposedly map their environments (Hedberg, 1981). Perceptual filters interpret stimuli in a way that is meaningful to an observer, but introduce bias in beliefs and actions. Behaviour is influenced by theories of action and behaviour repertoires.

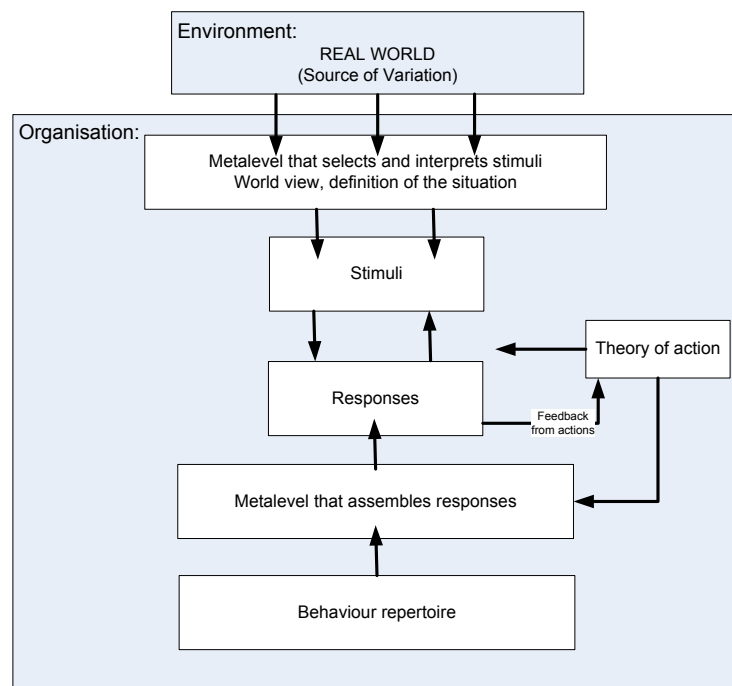


Figure 6-5 - Stimulus Response interaction model (Hedberg, 1981)

Triggers of OL	
Problems	Particularly in terms of a gap between actual performance and expectations, or a reduction in organisational ‘slack’ such as in times of crisis, were seen as triggering the focus of attention on specific areas and stimulating organisation learning.
Opportunities	When organisations found they had sufficient resources to explore alternative modes of operation.
People	Organisational members triggering changes in practice such as changes in leadership, or changes in membership.

Table 6-4 - Triggers of OL (Hedberg, 1981)

Three key triggers of Organisational Learning, namely problems, opportunities and people (see Table 6-4) are identified by Hedberg (1981).

Unlearning is a key concept introduced by Hedberg. The process of unlearning whilst variously described relates to the intentional discarding of “obsolete or misleading knowledge” (Hedberg, 1981, p3). This can be equated to the ability to recognise a difference between relevant and obsolete information, that is, discrimination. That is, new information takes precedence or adjusts existing Organisation Knowledge.

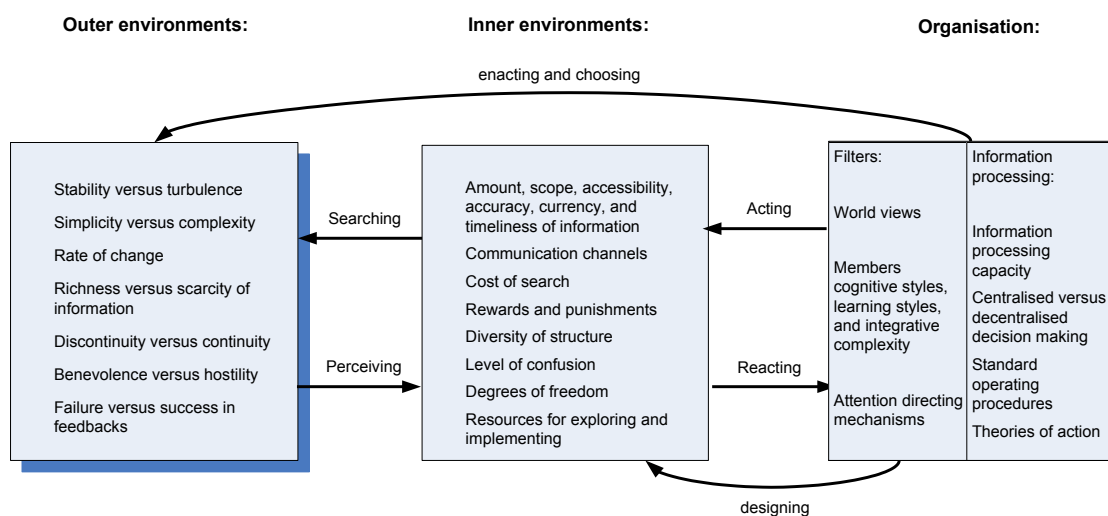


Figure 6-6 - Environmental Determinants of Organisations' Learning (Hedberg, 1981)

Environmental determinants of organisations' learning are examined by Hedberg (see Figure 6-6) and the roles of the outer environment, the inner environment and the organisation itself are established. His model highlights the roles of information processing capacity, the nature of decision-making, standard operating procedures and theories of action in influencing OL.

6-3.1.5 Daft & Weick (1984) – Model of Organisations as Interpretation Systems

For Daft & Weick (1984), organisational action is the output of organisational learning. This, in turn, creates a feedback in terms of impact that provides source for new knowledge. “Scanning” and “Interpretation” form the knowledge creation phase of their model.

Their focus is on the modes of interpretation and can therefore be categorised as cognitive, however, they describe the relationships between this interpretation and the elements of scanning and learning is shown in Figure 6-7.

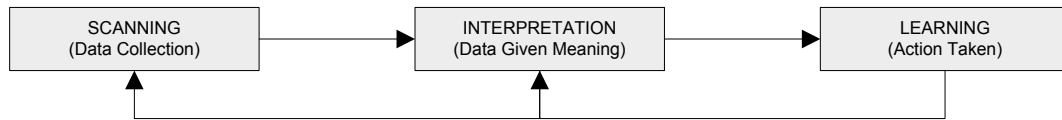


Figure 6-7 - Scanning, Interpretation, and Learning (Daft & Weick, 1984)

The role of interpretation is to understand what the organisation has done, and to advise what it should do next. Building up interpretations about the environment is seen as a basic requirement of organisations.

6-3.1.6 Huber (1991) - Organisational Learning Process

One of the most frequently cited process models of Organisational Learning is that of Huber (1991). The model, which was derived from a review of the literature, revealed four recurring themes, information acquisition, information distribution, information interpretation and Organisational Memory.

The resulting model is essentially a Knowledge Management model qualified by a behaviourist approach in that the outcome of the process must be a change in organisational behaviour (thus demonstrating that “learning” has occurred). The model is normative in that the assumption is that the direction of behavioural change can be described as positive, i.e. it leads to improved organisational performance. Discussion on the behavioural or action aspects is limited as the model focuses on the cognitive or knowledge aspects of OL.

Huber (1991) argues that knowledge acquisition may occur through a variety of processes. Huber represents these processes and constructs in a diagram and this is reproduced in Figure 6-8.

The “Searching and Noticing” process refers to both the deliberate seeking of information for learning by the organisation, and the information that comes to the attention of the organisation. Specifically mentioned in this process is “Performance Monitoring”, referring to both focused and wide-ranging sensing of the organization's effectiveness in fulfilling its own pre-established goals or the requirements of stakeholders.

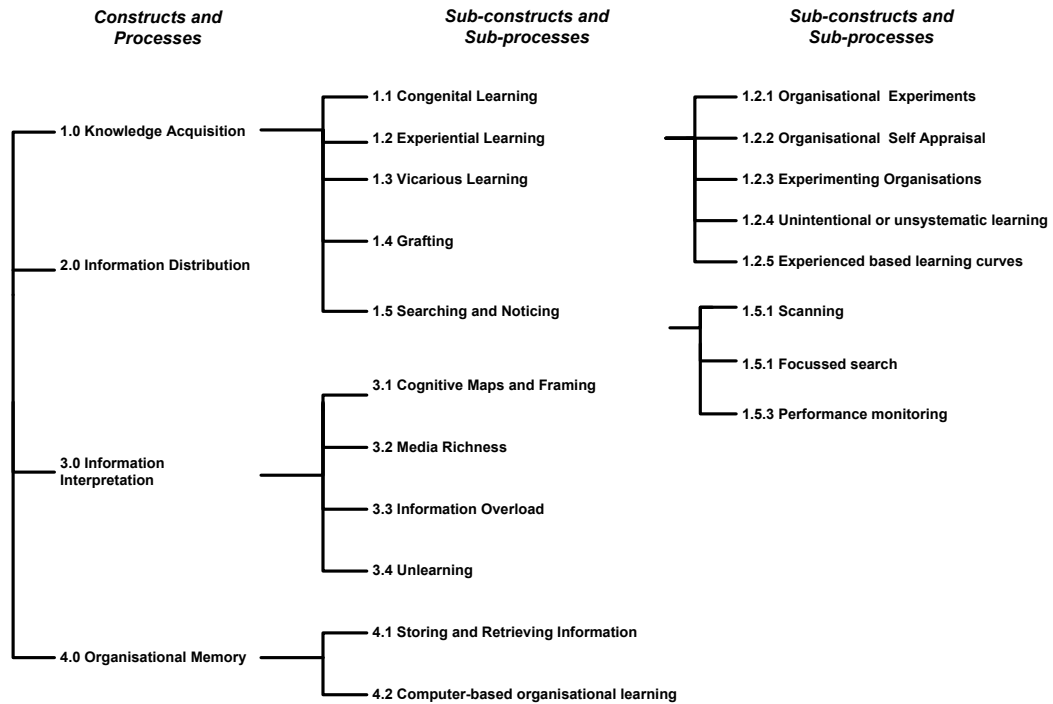


Figure 6-8 - Huber’s Learning Process (Huber, 1991)

The process of Information Distribution is described by Huber as the sharing of information from different sources whereby new information or understanding is developed. It is seen as a determinant of both the occurrence and breadth of organizational learning. Information distribution can be seen as a key element of Knowledge Management approaches and this reflects Huber’s technical approach to OL. However, the concept of information distribution is only briefly discussed by Huber.

The construct of “information interpretation” is described as the process by which distributed information is given one or more commonly understood interpretations. Huber refers to the achievement of a shared interpretation, rather than an individual interpretation

of raw information. This construct therefore includes elements such as group and organisational decision-making.

“Organisational memory” is described by Huber as the means by which knowledge is stored for future use. As an early adopter of the concept of knowledge management, Huber was very aware of the detrimental effect on organisations of the loss of knowledge through turnover of personnel, failure to anticipate future need for information, misplacing of information, for example. He saw these elements as having a strong impact on the capacity of an organisation and, as such, having a deleterious effect on the learning ability of the organisation.

6-3.1.7 Watkins & Marsick (1993) - Conceptual Framework for the Learning Organisation

Whilst referring to the Learning Organisation, the conceptual framework developed by Watkins and Marsick (1993) is pragmatic and has clear relevance to OL. OL is seen as changed organisational capacity for doing something. The model is largely development of a previous model of Meyer (1982) which, unlike most of the other models, is research based.

In this model, the organisation responds to the stimulus of environmental change according to its interpretation of the ‘jolt’ based on its theory of action. Theory of action is a combination of strategy and culture (ideology), while the organisational response is influenced by structure and available reserves (slack). The whole process is influenced by the organisation’s ability to deal with environmental shock and its capacity to retain new behaviours (resilience and retention).

The focus of Meyer’s study was environmental jolts, which were seen as transitory singular events and he placed strong caveats on the model being applied to wider organisational learning scenarios.

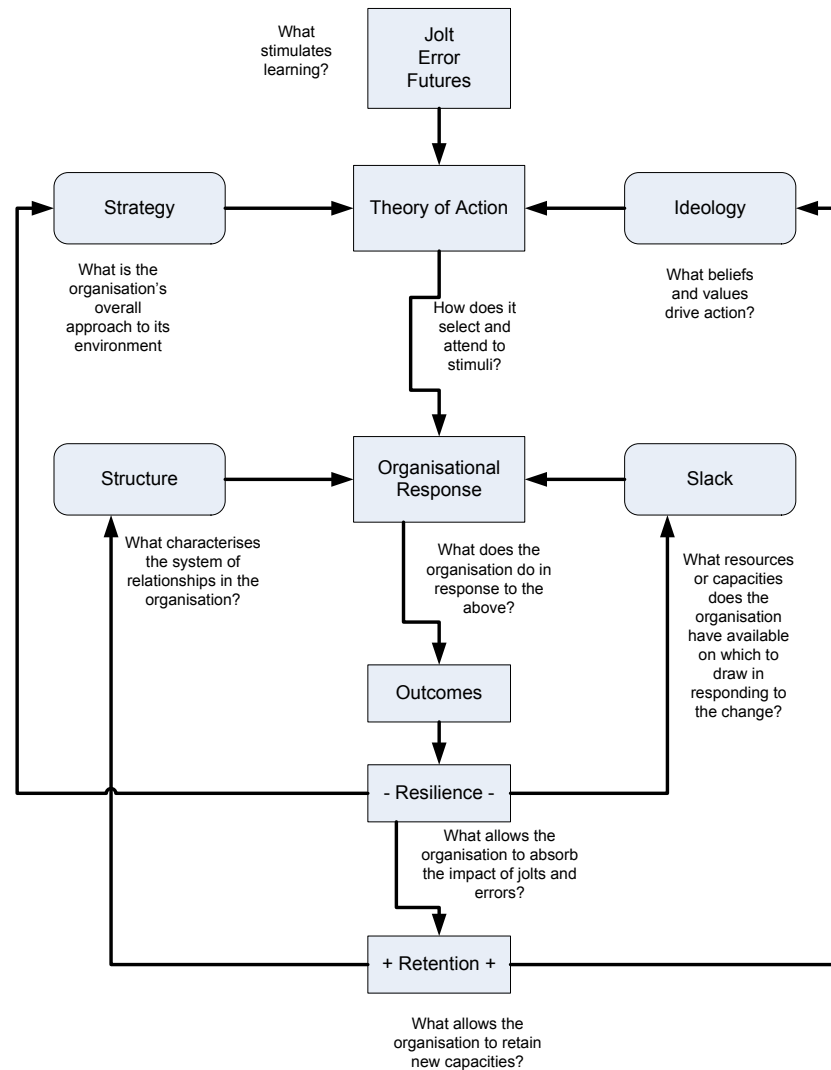


Figure 6-9 - Learning Organisation Framework (from Watkins and Marsick, 1993, p149)

6-3.1.8 Nonaka and Takeuchi (1995) - Spiral of Knowledge Creation

Whilst not strictly a model of Organisational Learning, the Spiral of Knowledge Creation (Nonaka and Takeuchi, 1995) provides a more in depth look at a key element of other models (although expressed in other terms). Nonaka and Takeuchi saw OL as being trapped in a behaviourist perspective and unable to recognise fully the concept of knowledge creation. They argued that, far from being a specific one off event, knowledge creation is something that continuously occurs within organisations.

		Tacit Knowledge	To	Explicit Knowledge
From	Tacit Knowledge	(Socialization) Sympathized Knowledge		(Externalization) Conceptual Knowledge
	Explicit Knowledge	(Internalization) Operational Knowledge		(Combination) Systemic Knowledge

Figure 6-10 - Knowledge Created by four modes (Nonaka & Takeuchi, 1995, p.72)

Nonaka and Takeuchi (1995) considered that the creation of knowledge involves both obtaining knowledge to solve specific problems based on existing premises, and establishing new premises to override the existing ones, or, single loop-learning and double loop learning of Argyris and Schön (1978). Four modes of knowledge creation are identified Socialization, Externalization, Internalization, and Combination (see Figure 6-10).

Unlike the OL authors, Nonaka and Takeuchi pay specific attention to the means through which the interface between human actors and the process takes place. This interaction between tacit and explicit knowledge was seen as occurring through developing a field of interaction, dialogue or collective reflection, networking newly created knowledge, and learning by doing to trigger internalisation.

The four modes of knowledge creation interact to create a dynamic spiral (or a cyclical movement over time) that transfers knowledge through the organisation (see Figure 11).

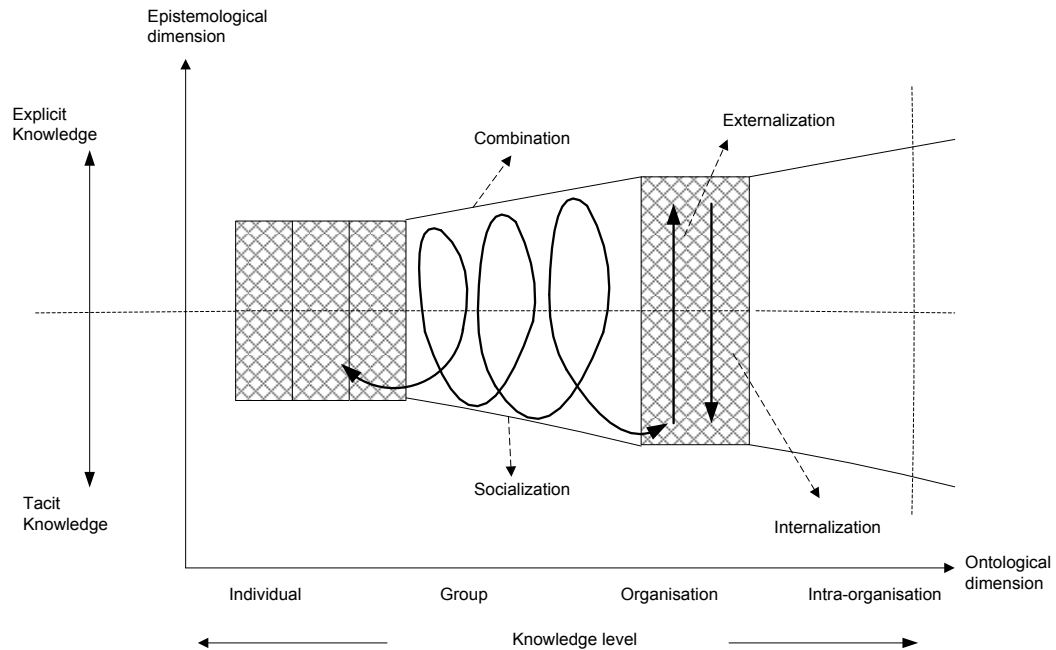


Figure 6-11 - Spiral of Knowledge Creation (Nonaka & Takeuchi, 1995, p73)

Organisational Intention was seen as the driver for the process, that is, the organisation's aspirations towards its goals and this may be expressed in the form of strategy. Four other factors Nonaka and Takeuchi (1995) identified as promoting the process of Knowledge Creation were:

- i. Autonomy (ability of individual members to act autonomously)
- ii. Fluctuation / Creative Chaos (stimulating the interaction between the organisation and the external environment)
- iii. Redundancy (intentional overlapping of information about business activities, management responsibilities, and the company as a whole)
- iv. Requisite Variety (the match between the organisations internal complexity and the environments)

6-3.1.9 Crossan et al - The 4I Model of Organisational Learning

Crossan et al (1999) defined OL as consisting of four processes - intuiting, interpreting, integrating, and institutionalising - linking the individual, group and organisation levels. Figure 10 represents the 4I Model of OL.

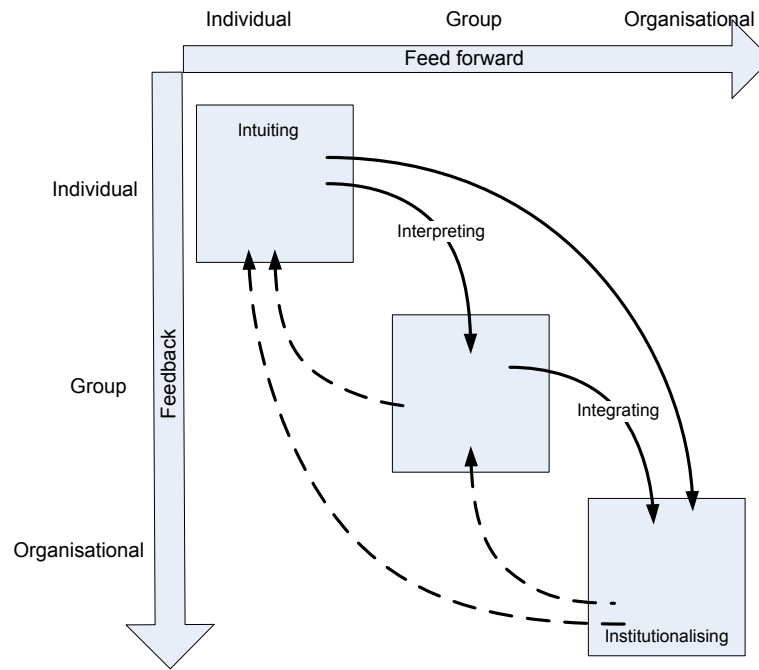


Figure 6-12 - The 4I Model of OL (Crossan et al, 1999)

The 4I model for Organisational Learning is proposed as a dynamic process of strategic renewal. It elaborates on the feed-forward processes in which individual ideas become institutionalised in the form of systems, structures, strategies, and procedures, and the feedback processes that in turn influence group and individual behaviour. When individual and group learning becomes institutionalised, organisation learning occurs and knowledge is embedded in non-human repositories such as routines, systems structures, culture and strategy (Crossan et al., 1999).

The 4I model describes Organisational Learning resulting from a constant interaction of intuiting occurring at the individual level, a transfer to the group level through interpretation and a subsequent transfer to the organisation level through integration, with institutionalisation occurring at the organisational level. While aimed at making explicit the tension between exploration and exploitation, the model focuses on the structural nature of organisational learning and does not attempt to include cultural and social aspects or to examine more closely how the exchanges between stages of the process occur.

Element	Definition
Intuiting	Intuiting is the preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience. This process can affect the intuitive individual's actions, but it only affects others when they attempt to (inter)act with that individual
Interpreting	Interpreting is the explaining, through words and/or actions, of an insight or idea to one's self and to others. This process goes from the preverbal to the verbal, resulting in the development of language.
Integrating	Integrating is the process of developing shared understanding among individuals and of taking coordinated action through mutual adjustment. Dialogue and joint action are crucial to the development of shared understanding. This process will initially be ad hoc and informal, but if the coordinated action taking is recurring and significant, it will be institutionalised
Institutionalising	Institutionalising is the process of ensuring that routinised actions occur. Tasks are defined, actions specified, and organisational mechanisms put in place to ensure that certain actions occur. Institutionalising is the process of embedding learning that has occurred by individuals and groups into the organisation, and it includes systems, structures, procedures, and strategy

Table 6-5 - Elements of the 4I Model (Crossan et al., 1999, p525)

The wide adoption of the 4I Model of OL as a reflection of the OL process is attributed to its clarity and simplicity. However, that high-level nature, whilst perhaps relevant to PM makes it difficult to apply at a practice level.

6-3.1.10 Pawlowski (2001) – Simplified Process Model of OL and Conceptual Framework

Pawlowski (2001) approaches the subject of OL from the perspective of management science which needs to understand the importance of the transformation of information and knowledge resources. As such, he adopts a position that is more clearly associated with a performance management approach. Performance measurement is provided as an example of the evolution of knowledge oriented practice. Recognising that management has to consider transformation of knowledge into work systems, the role of OL is seen as related to

business success. The use of wide ranging indicators of operations is therefore argued as essential to promoting effective corporate strategies.

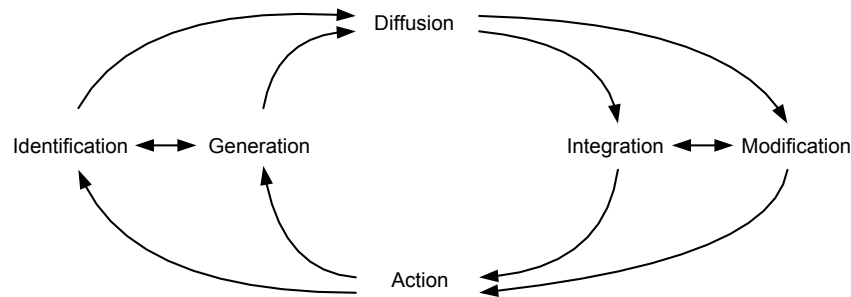


Figure 6-13 - A simplified process model of OL (Pawlowski, 2001)

Based on a review of the OL literature, the “simplified process model of OL” (Pawlowski, 2001) considers OL a modification in the organisational knowledge system that enables organisations to improve their understanding and evaluation of the internal and external environments (see Figure 6-13). As such, knowledge systems are proposed as both antecedents and results of OL processes. The model describes a broadly cyclical, but not necessarily sequential, process that involves identification and creation of knowledge, transfer of knowledge through the organisation, as well as the integration of that knowledge into systems, ultimately affecting action or organisational behaviour.

Considering perspectives of decision-making, systems thinking, as well as cognitive, cultural, and action learning modes, Pawlowski clearly identifies these as influencing the content and flow of the process. Although specific drivers for OL process are not discussed, OL is considered as something to be managed by organisation in order to deliver effectiveness.

His analysis of the literature identifies System levels, Learning modes, Learning types and the Learning process are broadly identified as influencing the conduct and outcome of OL and this is reflected in a Conceptual Model of OL (see Figure 6-14).

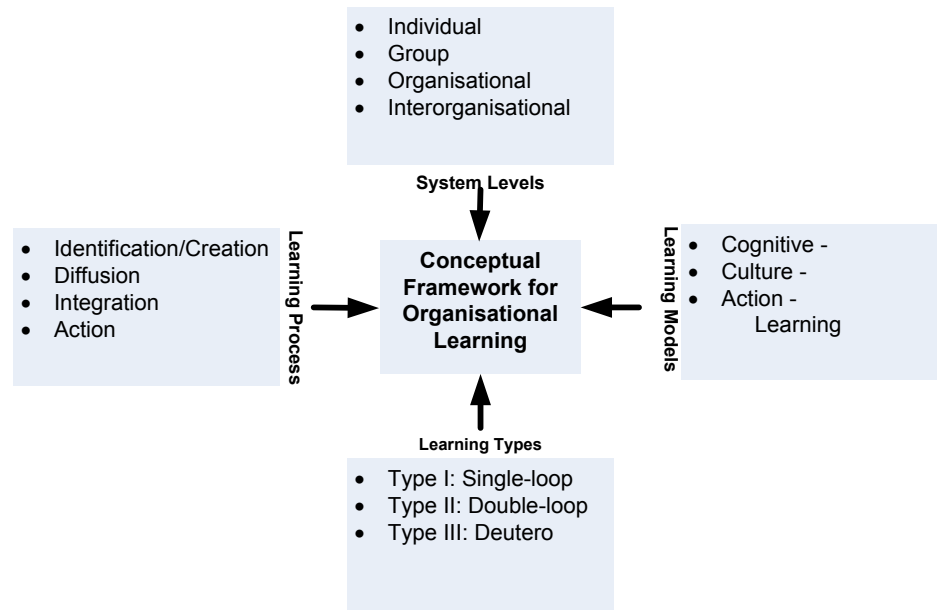


Figure 6-14 - A Conceptual Framework for the Management of OL (Pawłowski, 2001)

To improve organisational effectiveness, Pawłowski (2001) proposes managers should consider OL processes in terms of systems, considering different learning modes and by selecting appropriate learning types that are useful under different learning circumstances, as well as taking into account different obstacles to the OL process.

Pawłowski's model may be able to reflect performance management practice, but like many models, it is not backed by empirical evidence and not tested in practice. Although providing more detailed insight than other models, its simplicity does not make it suitable for an in depth investigation of PM practice.

6-3.1.11 Akgün et al (2003) - Socio Cognitive Framework

Unlike the other models selected for review, Akgün et al (2003) do not provide a graphical representation of their model. The authors set out to examine OL from the field of social cognition and a key aspect of this model is its focus on the interface between knowledge creation and action. The reason for its selection is to demonstrate potential for models to consider such interfaces in more detail.

Variable	Definition
Information Acquisition	The collection of primary and secondary information from a variety of sources
Information Implementation	Applying market and technical information to influence market strategy and technical related actions
Information Dissemination	The process by which information from different sources is distributed and shared
Thinking	Decision making, problem solving, judgment, creativity
Unlearning	Changing the organizational beliefs, norms, values, procedures, behavioral routines, and physical artifacts
Improvisation	Continuous improvement experimenting
Emotions	Motivation, anxiety, stress, feelings, love, empathy, enthusiasm, fear, joy, envy, guilt
Sensemaking	Information coding, summarizing and organizing
Memory	Core competencies, culture, structure, beliefs, physical structure
Intelligence	Capability to gather information from outside the organization (for example, customers, vendors, suppliers libraries, consultants, etc.), to generate different market and technology scenarios, to interpret the environmental signals, to transfer customer needs to product design specs

Table 6-6 - Definition of Socio Cognitive Elements (Akgün et al, 2003, p846)

The Socio Cognitive Framework (Akgün et al., 2003) examines the multi-level nature of cognition within organisational culture and routines. It proposes that social cognition is important for OL by integrating the social and cognitive constructs of learning. Their model examines how individual knowledge becomes part of social knowledge of the organisation and therefore underpins new behaviour. It also identifies that individuals are both the source and the target of influence in the organisation.

The key elements of this model are the acquisition, implementation, and dissemination of information. Correlated factors influencing the socio-cognitive process are also included.

The meanings attributed by Akgün et al. (2003) are given in Table 6-6.

Like several of the authors of OL models, Akgün et al. (2003) emphasise the need for research into the operationalisation of socio-cognition.

6-3.1.12 Lipshitz et al (2007) - Organisational Learning Mechanisms

Lipshitz et al (2007) build on the definition of Organisational Learning as the detection and correction of error (see Argyris and Schön, 1996) to which they add the discovery and exploitation of opportunity. OL is viewed as a cyclical process involving the evaluation of past behaviour, the discovery of error and opportunity, the invention of new behaviours, and their implementation. Figure 6-15 represents this process diagrammatically.

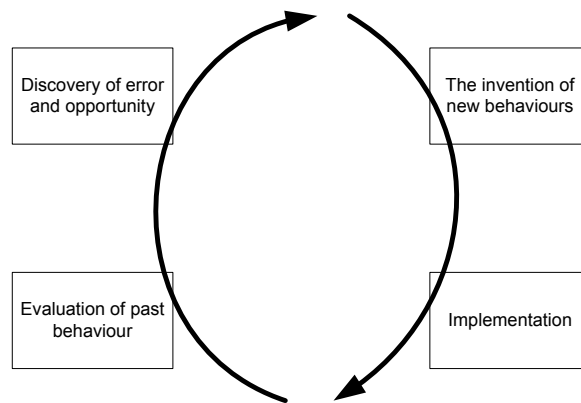


Figure 6-15 - Process of OL (author derived from Lipshitz et al, 2007)

The aspects, or facets, that contribute to “productive learning” are examined. Productive learning is determined by two criteria, 1) learning results in intended organisational outcomes, 2) learning results in organisational *action* based on *valid* knowledge (Lipshitz et al., 2007, p16 with original emphasis). They recognise that the first of these criteria is often difficult to establish a clear causal connection, if not impossible, and determining what is useful is open to interpretation. ‘Valid knowledge’ is that which withstands critical evaluation and is not based on wilfully distorted information or unquestioned interpretations. Knowledge must inform the behaviour of organisational actors, even if such a link to intended outcomes cannot be clearly established. Their model is represented in Figure 6-15.

Five sets of factors that determine the extent to which learning is organisational and productive are identified (see Figure 6-16 - Facets of OL).

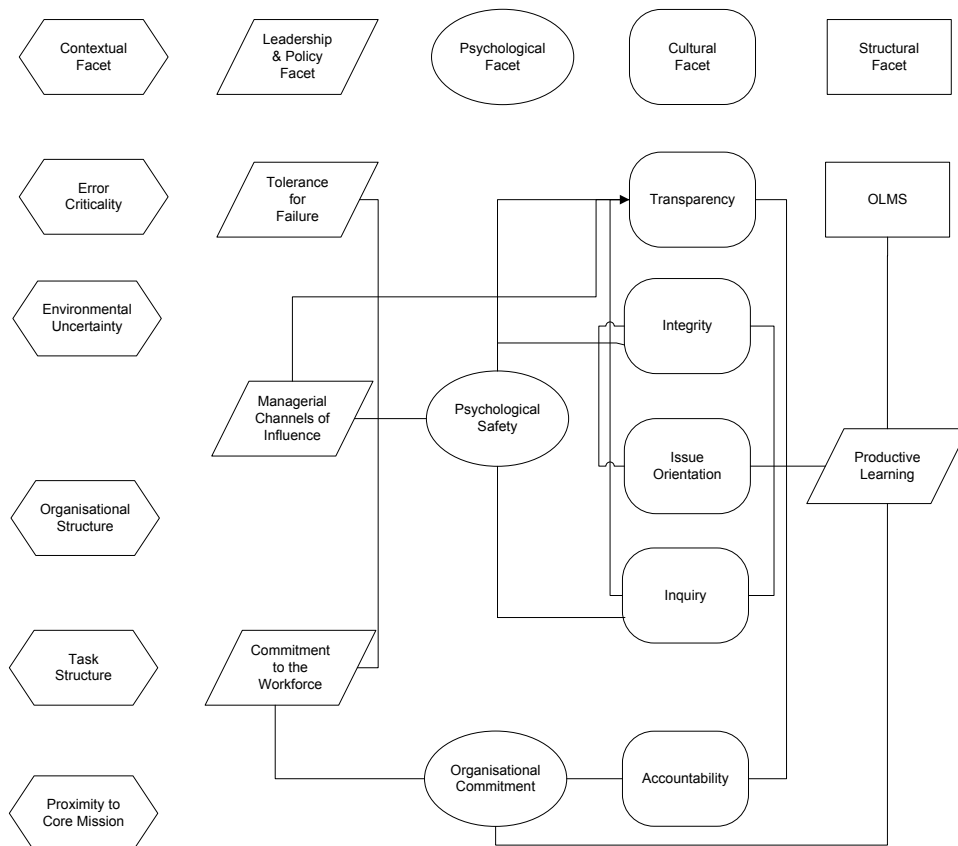


Figure 6-16 - Facets of OL (Lipshitz, 2007)

Moving beyond the “black boxes” of previous authors, Lipshitz et al, define Organisational Learning Mechanisms (OLMs) as the processes through which learning occurs. They go on to identify a wide range of OLMs but primarily focus on data retrieved from organisational actors. The concept of OLMs is useful for considering PM practice. PM can be seen as one of many mechanisms the organisation may use in to learn from its environment.

The concept of productive learning is also seen as important. It is useful in distinguishing knowledge from information by providing a context, and it places the concept of OL clearly in the area of improving organisational effectiveness. This gives OL a positive value to the organisation in terms of its aims and role.

6-3.1.13 Models of OL

To introduce each, in terms of the position adopted by the authors, the models identified in Table 6-2 - Models of OL in the Literature have been briefly described and discussed. It has been shown that the models vary considerably, each having a distinct approach, but each also having some contribution to make to the field as a whole.

The Chapter now goes on to consider each of these aspects, to develop a set of constructs from these models, and to propose questions the research must address.

6-4 DERIVING CONSTRUCTS AND CONCEPTUAL FRAMEWORK

As identified by (Reed, 2005) Critical Realism is based on the assumption that reality, including the social reality represented by OL, has an inherent nature or structure. This we may hope and try to identify through various kinds of epistemological devices, conceptual models and methodological procedures that cluster together as science and the knowledge that practising scientists produce (see Chapter 5). The Research Problem is to be addressed through a search for generative structures or mechanisms from the observation of ‘surface’ events and regularities.

The following table (Table 6-7 - Aspects of OL Models), compiles the key aspects of the models described above in relation to the perspective adopted, the process identified, drivers for the process, the elements and interfaces present, the factors influencing OL. Based on this material, a definition of each of these aspects is derived and a simple model is proposed. The latter part of this Chapter goes on to develop this simple model and to establish the fit to the research.

The aspects considered for each model are the process, drivers involved, the elements, interfaces identified, factors that influence the process and the relevance of each model to Performance Management practice. This provides a thorough overview of the models identified earlier.

Table 6-7 - Aspects of OL Models. Source: Author derived from literature.

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
Model of Organisational Decision Making (Cyert and March, 1963, 1992)	The modification of the routines and procedures within the organisation, or adaptation of organisational responses to the environment (Cognitive)	Feedback is considered and modification to behaviour applied	Conflict with goals, rules, constraints Environmental shock	Information from the environment Decision-making Continued organisational behaviour within the existing operating procedures or organisational change	Decision making is seen as the key mediator between feedback and adaptation	Uncertainty in the meaning of feedback Consider information in the context of the goals of the organisation Adaptation rules Difficulties in finding appropriate solution Attending to some part of the environment and not others	Provides the ability to distinguish routine decision making from organisational learning. Does not provide sufficient detail to explain performance management practice
Adaptive Model of OL (Cangelosi and Dill, 1965)	A learning process in which growing insights and successively restructurings of the problems as it	Insights lead to adaptation	Discomfort stress Failure stress Disjunctive stress	Initial Phase, Searching phase, Comprehending phase, Consolidating Phase	Decision making process is explored as interface between feedback and	Complexity Uncertainty Relative importance Experience	Performance stress opens the possibility for a clearer relationship with PM to be established Does not provide

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
	appears to the humans dealing with it, reflect themselves in the structural elements of the organisation itself. (Cognitive)				Adaptation	Preferences and goals Norms and expectations Divergence from goals and outcomes	sufficient detail to explain PM practice
The Complete Cycle of Choice (March and Olsen, 1975)	To address discrepancy between what the environment ought to be and what it actually is, organisations evaluate the information regarding the environment in order to determine how it can be brought in line with the organisations goals. (Behavioural)	A cyclical process where participants see a discrepancy between what they think the world ought to be and what the world actually is. This produces individual behaviour, which is aggregated in organisational action or choices. The outside world “responds” to this choice in some way that affects individual	The need to make choices regarding action	Environmental Action Individual Cognition Individual Action Organisational Action	Contests that decisions regarding action are made solely on a rational basis.	Model is affected by different modes of learning under circumstances of ambiguity. These include role constrained experiential learning, superstitious learning and audience experiential learning.	Does not provide sufficient detail to explain PM practice

Chapter 6 - Developing a Conceptual Framework

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
		assessments of the state of the world and the efficacy of the actions					
Stimulus Response model (Hedberg, 1981)	Includes both the processes by which organizations adjust themselves defensively to reality and the processes by which knowledge is used offensively to improve the fit between organizations and their environments. (Behavioural)	A stimulus – response model that is influenced by theories of action and that recognises the role of interpretation and the role of behaviour repertoires.	Problems Opportunities People	Searching Perceiving Acting Reacting Designing Enacting and Choosing	Theory of Action Cause and Effect Influence of Actions	Perceptual filters Information processing capacity Nature of decision making Standard operating procedures Theory of action Unlearning	Explains presence of PM but does not provide sufficient detail to examine PM practice
Model of Organisations as Interpretation Systems (Daft and Weick,	“Scanning” and “Interpretation” form the knowledge creation phase of their model. (Cognitive) Organisational action is the output of	Organisational action is the output of organisational learning. This, in turn, creates a feedback in terms of impact that provides source for	Building up interpretations about the environment is seen as a basic requirement of organisations	Scanning Characteristics Interpretation Process Equivocality Reduction Assembly Rules	Not discussed	Beliefs Politics Goals Perceptions	Does not provide sufficient detail to explain PM practice

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
1984)	organisational learning (Behavioural)	new knowledge.		Strategy Formulation and Decision Making Organisational Action Enacting Discovering Undirected viewing Conditioned viewing			
Organisational Learning Process (Huber, 1991)	A cognitive /knowledge management perspective that sees the OL as the creation of knowledge within the organisation. An entity learns if, through its processing of information, the range of its potential behaviours is changed. (Cognitive)	Whilst clearly identifying the process and constructs (elements) of OL, Huber is not specific about how these interact (interfaces) and it is difficult to conceive the overall process of OL other than to describe it as a flow.	Does not explicitly cover the nature of drivers for the process of OL. However, the diversity of sources he identified indicates the range of types of OL processes ongoing at any one time, each of which potentially has its own drivers.	Information acquisition Information distribution Information interpretation Organisational memory	Considers decision-making as an aside to experiential learning and it is not seen as part of the process of learning.	Cognitive maps Framing of the information Richness of media Information load Superstitious learning Process competence	Specifically identifies performance monitoring as a potential sub-construct. Does not provide sufficient detail to explain PM practice

Chapter 6 - Developing a Conceptual Framework

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
Conceptual Framework for the Learning Organisation (Watkins and Marsick, 1993)	OL is changed organisational capacity for doing something. (Cognitive)	Stimulus response model. Depends on interpretation by combination of strategy and culture. Influenced by structure and available reserves.	Jolt Error Futures	Organisational Response Outcomes	Theory of Action	Structure Slack Strategy Ideology	Does not provide sufficient detail to explain PM practice
Spiral of Knowledge Creation (Nonaka and Takeuchi, 1995)	Obtaining knowledge to solve specific problems based on existing premises, and establishing new premises to override the existing ones, interact to create a dynamic spiral. (Cognitive)	An ongoing spiral of transfer between tacit and explicit knowledge (and vice versa) occurring between levels of the organisation.	Organisational Intention	Socialisation Externalisation Internalisation Combination	The interaction between tacit and explicit knowledge occurs through Field Building, Dialogue, Linking, Networking, and Learning by Doing	In addition to Organisational Intention four other factors were seen as promoting the process Autonomy Fluctuation / Creative Chaos Redundancy Requisite Variety	Focuses on Knowledge Creation aspect and is seen as representative of that field. Demonstrates the need for detail in the elements of OL process.
The 4I model of Organisational	This model considers the cognition of information as occurring through the	Dynamic feedback and feed-forward occur through four elements situated	Exploitation Exploration	Intuiting Interpretation Integrating Institutionalising	Experiences, Images, Metaphors, Language,	Not elaborated	Integrates organisational levels, flow, and elements. Does not provide

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
Learning (Crossan et al., 1999)	medium of individual organisational members. Behavioural change is seen as being enacted through routines, systems and structures, with OL being completed when changes to these become embedded. (Cognitive)	in different organisational levels Cognition affects action (and vice versa). Their feed- forward and feedback elements describe the flow of knowledge and action between the levels of the organisation.			Cognitive Map, Conversation/dia logue, Shared Understanding, Mutual Adjustment, Interactive systems, Routines, Diagnostic systems. Rules & procedures		sufficient detail to explain PM practice
Simplified Process Model of OL and Conceptual Framework (Pawlowski, 2001)	OL can be considered a modification in the organisational knowledge system that enables organisations to improve their understanding and evaluation of the internal and external environments. (Behavioural)	Broadly cyclical but not necessarily sequential process which involves identification and creation of knowledge, transfer of knowledge, integration into systems, affecting organisational	Does not identify specific drivers for OL process, although considers OL as something to be managed by organisation in order to deliver effectiveness.	Identification - Generation Diffusion Integration - Modification Action	Decision Making, Systems Thinking, cognitive, culture, and action learning modes all seen as influencing the content and flow of the process	System levels Learning modes Learning types Learning process are broadly identified as influencing the conduct and outcome of OL	Approaches the problem from the perspective of management of OL and recognises cognitive, culture, and action learning. The simplicity of the model does not allow it to be tested against the detail of practice.

Model	Perspective	Process	Drivers	Elements	Interfaces	Factors	Relevance
		behaviour					
Socio Cognitive Framework (Akgün et al., 2003)	Examines the multi-level nature of cognition within organisational culture and routines. (Cognitive)	Multifaceted and multidimensional consisting to 10 correlated but distinct elements.	Not considered	Information Acquisition Information implementation Information dissemination Thinking Unlearning Improvisation Emotions Sensemaking Memory Intelligence	Focus on the interface between knowledge and action, examining how individual knowledge becomes part of social knowledge of organisation and therefore underpins new behaviour.	Organisational culture	Important in identifying the detailed nature of the interface between element and the potential for multi-disciplinary approaches to assist in examining this. Does not provide sufficient detail to explain PM practice
The Multi-facet Model (Lipshitz et al., 2007)	Productive learning leads to organisational outcomes , informs the behaviour of actors (Cognitive and Behavioural aspects)	Occurs through a cyclical process involving feedback and new behaviour	Not discussed	Evaluation of past behaviour Discovery of error Invention of new behaviour Implementation	OLM's join elements through variety of operational processes	Structural (types of OLM's) Cultural Psychological Leadership & Policy Contextual	Explains the 'black boxes' of other models as OLMs. Provides some basis for explaining PM as OLM, but insufficient detail to describe or analyse PM practice

6-4.1.1 *Summarising Aspects of OL Models*

The aspects of each of the OL models, summarised in Table 6-7 above, have been considered in terms of the perspective adopted by the authors, the process drivers involved, the elements and interfaces identified, factors that influence the process, and the relevance of each model to Performance Management practice.

Key themes included a stimulus response concept and the need for OL to be completed by productive action related to organisational goals. The following section considers the implications of these in more detail and goes on to derive a set of definitions upon which a more detailed model can be established.

6-4.2 **Developing the Conceptual Framework**

The OL literature posits many definitions components, points of view and problems (Akgün et al., 2003). The depth, range and diversity of the models make it unlikely that a single overarching model representing all aspect can be achieved. However, although qualified in different ways depending on the approach and subject of particular research, the basic stimulus-response concept underpins all these models. The two dominant areas of discussion can be viewed as the creation of knowledge and the creation of action. These two phases of OL relate to each other and act in a (feedback/feed forward) cyclical manner as shown in Figure 6-17.

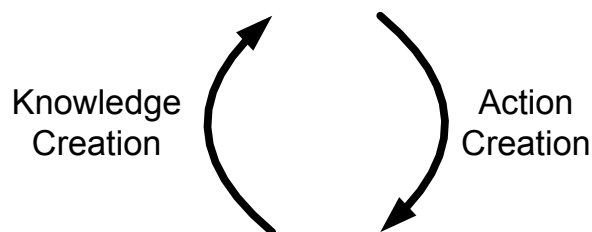


Figure 6-17 - The Cycle of Knowledge Creation and Action Creation. Source: Author derived from literature.

6-4.2.1 *The Context*

In order to discriminate general knowledge collection and distribution from OL, it is proposed that the qualifier of “productive learning” (identified by Lipshitz et al 2007) is extended to the two phases. They identified that productive learning could be determined by two criteria, 1) Learning results in intended organisational outcomes, 2) learning results in organisational action based on valid knowledge). To maintain this distinction between knowledge and learning, that concept is extended to each phase of OL (Knowledge Creation and Action Creation) as follows:

- 1) The outcome of the Knowledge Creation phase must be productive knowledge, that is, knowledge is both a) valid, in that withstands critical evaluation and is not based on wilfully distorted information or unquestioned interpretations, and b) contributes the organisations ability to choose appropriate action that will contribute to intended organisational outcomes.
- 2) The outcome of the Action Creation phase must be productive action, that is, a) choice of action is based on valid knowledge, and b) the behaviour of organisational members must contribute to intended organisational outcomes.

Cyert and March (1963, 1992) also saw that information needed to be considered in the context of organisational goals.

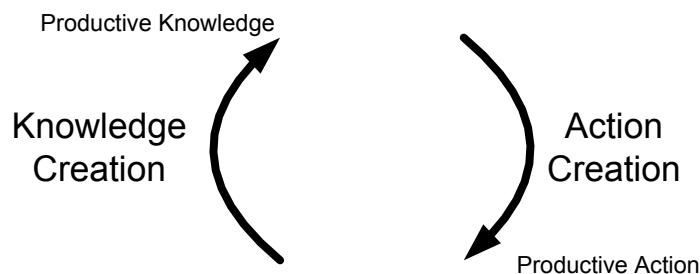


Figure 6-18 - The Basis OL. Source: Author derived from literature.

To meet the criteria for OL then, it is accepted that the creation of knowledge and the creation of action, must therefore qualify as “productive” in relation to intended organisational outcomes (see Figure 6-18).

6-4.2.2 The Components

To provide a structure around which the research process can be developed, a conceptual framework of the context of OL is proposed (see Figure 6-19).

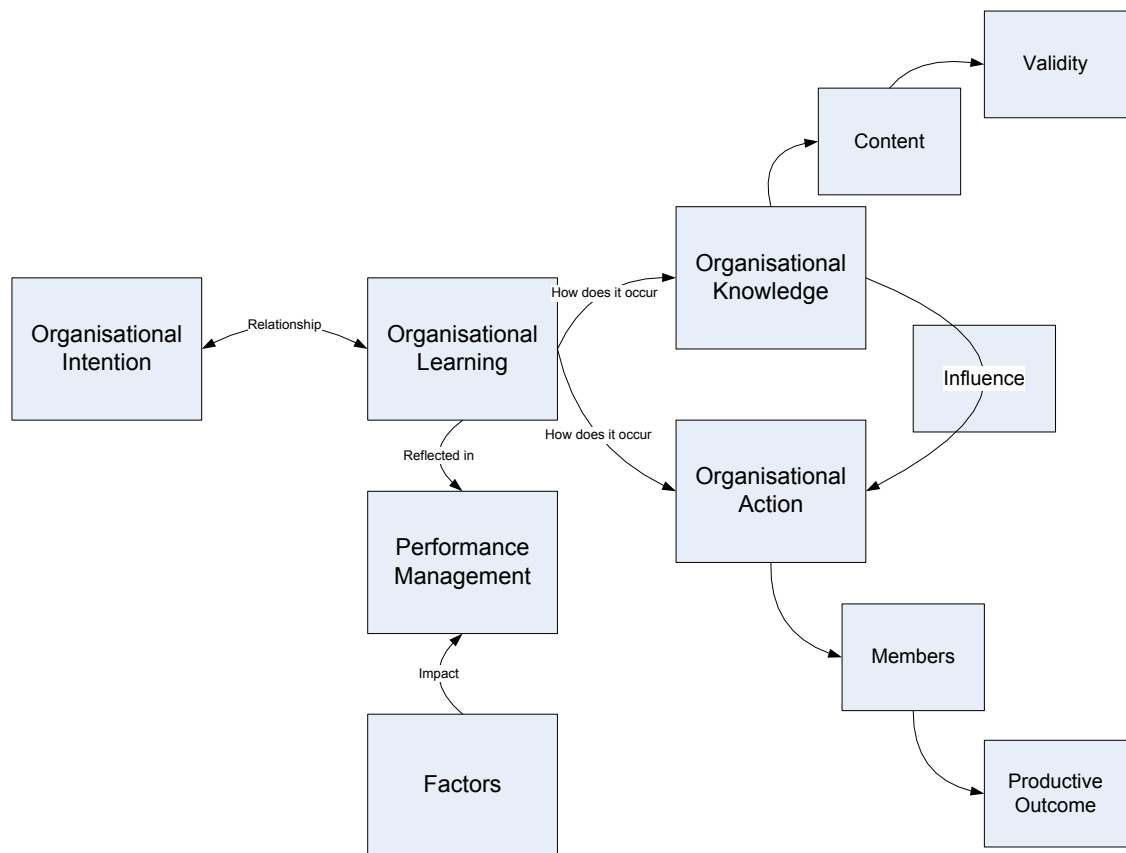


Figure 6-19 - OL and PM Causal Network. Source: Author derived from data

A conceptual framework explains, either graphically or in narrative form, the main things to be studied and the presumed relationships between them (Miles and Huberman, 1994). The value of such conceptual frameworks is that they make assumptions more explicit and enable some boundaries to be set for the research. This then, provides the basis for developing the research questions later in this Chapter.

The causal network (refer to Figure 6-19) demonstrates the context of OL through the relationship between two primary constructs, Organisational Knowledge and Organisational Action. Table 6-8 explains the meanings attributed to the terms, their working definitions and the implications for this research in terms of issues arising.

This conceptual framework could not be applied to all forms of organisational learning within the literature; rather it reflects the specific type of OL relating to behavioural adaption. While the overall concept of OL described in this framework is behaviourist, it recognises the cognitive role within in it.

Item	OL Context	Working definition	Issues Arising
Organisational Intention	The intention of the organisation is derived from its reason for existence, or its purpose, and is expressed through mission or strategy.	Organisational Intention is the implied influence on the environment implication derived from the purpose of the organisation.	How does Organisational Intention manifest itself within the process of OL?
Knowledge Creation	Knowledge creation involves the use of feedback from the organisation's environment through attributing meaning to raw data in a way which supports the management of behaviour Valid knowledge withstands critical evaluation and is not based on wilfully distorted information or unquestioned interpretations (Lipshitz et al., 2007)	Knowledge Creation is the process of collecting data from the environment about relevant things, attributing meaning, distributing	What influences the choice and nature of that information? How is performance knowledge created from raw information? Is the knowledge created "valid" knowledge? How does it inform the identification of appropriate organisational behaviour
Action Creation	Organisations attempt to enact their intention through members and operating procedures. Using the knowledge resources of the	Action Creation is the use organisational or performance Knowledge to determine appropriate behaviour, and influencing	How is performance knowledge used to determine behaviour? How is behaviour influenced?

	organisation, choices are made regarding appropriate behaviour and organisational members are then influenced to adopt that behaviour.	organisational members, processes and products with the intention of impacting the environment in line with organisational intentions.	What behaviour results from management? Does behaviour result in productive activity?
Organisation Learning	OL then involves, a) the creation of knowledge from feedback regarding the organisational impact; b) the use of that knowledge to decide new behaviour and to influence the behaviour of members; and c) the resulting productive activity of members; all of which is defined by the Organisational Intention	OL is the acquisition and use of knowledge to move the organisation towards the achievement of its intentions.	When is OL complete? Does PM practice reflect OL? What factors influence practice? How does process operate and what are elements and interfaces?

Table 6-8 - OL Constructs and Issues Arising. Source: Author derived from literature

OL is being considered as a process, but it must also be established when an OL output is produced, that is, when is the OL process complete?

Based on the literature identified above it is proposed that the criteria for the completion of OL are firstly, Organisational Action must be based on ‘knowledge’ derived from performance (performance knowledge), secondly, that Organisational Action must contribute to Organisational Purpose, and thirdly, that the required organisational behaviour must be sustained. These conditions exclude changes in behaviour based on other existing Organisational Knowledge, changes in organisational behaviour that do not contribute to Organisational Purpose and lastly, it excludes short lived behaviour change before reverting to previous behaviour.

6-4.2.3 *PM Components of a Model*

Whilst the general conceptual framework developed above describes the overall process and constructs of OL, like the other models of OL reviewed, it is insufficiently detailed to provide the basis for meaningful data gathering. To be able to address this, an OL Model of PM that reflects the elements and interfaces involved in the process of PM, but also reflects the drivers, factors and context (see Figure 6-20) is required.

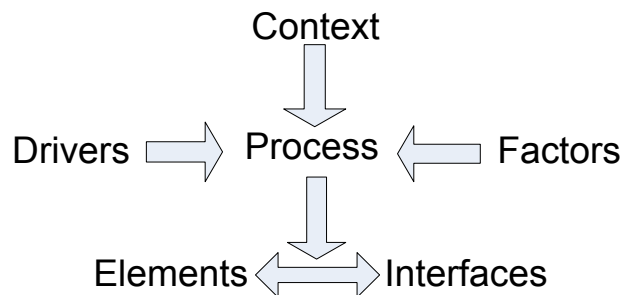


Figure 6-20 - The Components of an OL Model of PM. Source Author derived

6-4.2.4 *Definition of Terms*

The definitions of the terms used in such a model are defined in Table 6-8 and issues regarding the specific nature of PM are identified.

Item	Relevance to Research Context	Working definition	Issues Arising
Performance	As the subject of PM, understanding performance in the context of OL is essential. Performance has been seen to be relative to organisational purpose and to aid the conceptual link, it is useful to state in similar terms to OL such as productive activity. However, productive activity must be based	Performance is the result of productive activity, that is, a) organisational behaviour that results in intended organisational outcomes, and b) is based on organisational knowledge.	In PM practice, what drives the direction of behaviour? How is knowledge about organisational performance created?

	on performance knowledge, rather than say luck, in order to qualify as genuine performance.		
Performance Management	Management involves the adaptation of organisational behaviour. Based on information from knowledge creation”, management practice influences organisational behaviour in the direction of organisational goals (productive activity).	Performance Management is the attempt to create productive activity, based on the use of feedback about performance in the form of indicators	How is productive activity identified?
Context	The political and social contexts of performance management are anticipated to be different across the UK resulting in variations in mechanisms and the degree to which OL occurs.	Includes extra-organisational influences on the process of performance management.	In what contexts does PM occur and how do these impact on practice?
Drivers	A wide range of drivers are identified in the literature. These can be summarised as either organisational or environmental and related to a tension between the intended impact on the environment and the actual impact on the environment.	Drivers are influences that stimulate activity within the process of OL	What are the drivers for the practice of PM?
Elements	The constituent parts of OL are not widely described within the models.	Elements are the identifiable constituent parts or sub-processes within the overall process or mechanism	What are the constituent elements of the PM process? Do these vary across Forces and can these be described in an overall model of PM?

Interface	The interfaces between elements are broadly ignored in Models of OL. The creation of knowledge and the creation of action is readily identified but key interfaces between them are not sufficiently explored	Interfaces occur between the flow of the process and the actors involved in the processes.	What is involved in the interface between the process of OL and the human actors involved?
Factors	Reflecting the broad range of potential OL behaviours, a wide range of factors are identified in the studies. It is not possible to distinguish those that may be applicable to PM practice.	Factors include organisational influences on the operation and outcome of the process of OL.	Which factors affect the OL process of PM and how do these influence the OL outcome? How are these factors influenced in practice?

Table 6-9 - Definition of Terms. Source: Author derived.

6-4.3 Conclusions Regarding Models of OL in the Literature

There has been little consensus or convergence on what is meant by OL (Fiol and Lyles, 1985, Huber, 1991, Crossan et al., 1999, Kim, 1993) and it is unsurprising that models of OL vary widely. These reflect different research perspectives and different perspectives of the nature of OL. Essentially, rather than the models competing, they describe different aspects of the multifaceted phenomena that is OL. However, when reviewed from a more basic level rather than a more detailed level, the similarities in the literature become apparent.

The majority of models derive from a synthesis of the literature. There is little testing of these against the reality of management practice. This is indicative of the high-level nature of the models in the literature. This significant gap can only be filled with a sufficiently detailed model.

This section has developed a set of model constructs based on reviewing previously developed models. The aim here is to provide a broad theoretical basis upon which further development may be constructed. These components, or constructs, have been broadly defined in the context of PM practice within the context of the existing literature.

It has been shown that whilst aspects of models may be broadly relevant to PM practice, there is no overall comprehensive model that can be applied. Other than Pawlowski (2001), those who propose models of OL do not provide a level of detail that can directly be applied to PM practice.

Furthermore, the dearth of research into the success and failure of the implementation of performance measures is an important deficiency in our knowledge of performance measurement (Bourne et al., 2003). Providing a theoretical model of the creation of knowledge from performance measurement, and how management translate this into “doing” at the organisational level, is key to examining such questions.

There is a clear need for an OL Model with which to consider PM practice.

Based on a review of the existing models of OL, a conceptual framework for Organisational Learning and Performance Management has been proposed and the key constructs have been identified and defined. A number of questions have been posed about the nature and relationships of these constructs.

The issues raised by the conceptual framework are summarised as:

1. Does organisational intention influence OL practice?
2. How is OL manifested?
3. Is OL reflected in PM practice?
4. What factors influence PM practice, can these be related to OL, and what mitigation is applied?
5. How does Performance Knowledge influence Organisational Behaviour?

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6. How is Performance Knowledge created, what is its content, and how is its validity managed?
 7. How is Organisational Behaviour created, how are members influenced, and how is productive outcome managed?

The next section goes on to provide a more detailed comparison of the existing models and addresses the need for a new OL Model of PM by synthesising the underlying elements from the models discussed earlier.

6-5 PART II - THE FOUNDATION FOR A NEW MODEL

Above, it has been demonstrated that:

- a) models of OL vary widely;
- b) they describe different aspects of the multifaceted phenomena that is OL;
- c) little testing of these against the reality of management practice;
- d) there is no overall comprehensive model that can be applied to PM practice;
- e) existing models of OL do not provide a level of detail that can directly be applied to PM practice.

In this part of the Chapter, having established the need for a new model, aspects required within such a model are considered in more detail. A provisional theoretical OL Model of PM is derived to provide structure to data collection and analysis.

Without a provisional model (or theory), any research into the presence or nature of OL would have to proceed on the basis of allowing the emic issues to develop to inform the development of new theory (e.g. Grounded Theory (Glaser and Strauss, 1967)). One aim of developing and deploying a model is to structure the data collection but there is still a desire to sufficiently sensitive to the emic issues to inform the development of a richer, more comprehensive model.

Huber (1991) identified performance monitoring as a source of information that may contribute to organisational learning. This chapter adopts the approach of considering that the function of PM is to contribute to OL. That is, the role of performance feedback is to help inform the organisation as to when and how to adjust its behaviour.

To provide a basis for the data collection, it is proposed further examine the literature to elaborate on the processes of Knowledge Creation and Action Creation and to provide propositions regarding the following:

1. The elements and interfaces of these processes.
2. How performance knowledge affects Organisational Action.
3. Examine factors the influence the process.

6-5.1 Approach to Model Development

In developing a new model, key considerations revealed by the literature are:

1. The model must identify the phenomena of interest (Crossan et al., 1999);
2. The key premise or assumptions underlying the framework need to be stated (Bacharach, 1989);
3. The relationship among the elements need to be described (Weick, 1995);
4. As a model is a form of theory, it therefore must be capable of withstanding the same level of scrutiny (Weick, 1995).

Therefore, a new model must provide an overview of the basic process of OL, make clear the context of the organisation and its role, and establish fundamental components of the process. It must also withstand testing against real life.

The role of a new model is to provide a foundation from which the process of PM can be examined from the perspective of OL. As such, the model needs to provide a structure that can be applied to the examination of data collected during the case studies. However, in

order to support a retroductive case study approach, the model must remain sufficiently “high-level”.

The key premise in developing such a model is that PM operates as an OL mechanism and can be described as a process.

The model will be scrutinised by comparing the fit of PM practice to the model. Practice will be identified through interviews with practitioners, observation of processes, and examination of related documents. This will allow gaps in the model to be identified and to assess whether the model helps to explain practice.

6-6 DEVELOPING THE KNOWLEDGE CREATION AND ACTION CREATION CONSTRUCTS

Concluding earlier, the key process of Knowledge Creation and Action Creation were identified (see Figure 6-18). Here, these are examined in more detail to build a more refined OL Model of PM and to start to develop the questions that the case studies must address. It is not intended to oversimplify what is obviously a complex process, but to provide a structure that can be tested and developed. It represents a simple feedback process only, as to design a model that is precise and accurate may be to lose the phenomena of interest (Daft and Weick, 1984).

The two phases of the conceptual framework, Knowledge Creation and Action Creation are now each considered in more detail.

6-6.1 The Knowledge Creation Phase

Earlier in this Chapter, it was identified that the outcome of the Knowledge Creation phase must be productive knowledge. That is, knowledge is both a) valid (withstands critical evaluation and is not based on wilfully distorted information or unquestioned interpretations)

and b) contributes the organisations ability to choose appropriate action that will contribute to intended organisational outcomes.

Knowledge Creation was defined as the process of sensing collecting data from the environment (both internal and external), attributing meaning, and distributing the results in order to influence behaviour. From this definition, three aspects of Knowledge Creation are exposed as:

1. Gathering feedback.
2. Producing valid knowledge.
3. Informing organisational choice.

These aspects are now considered in terms of the OL model literature in Table 6-10.

Author	Gathering Feedback	Producing Valid Knowledge	Informing Organisational Choice
Cyert and March (1963, 1992)	Environmental feedback regarding achievement of organisational goals organizations learn to attend to some criteria and ignore others	Uncertainty avoidance – avoiding dependency on predicting uncertain future events	Information from the environment is the stimulus for decision-making.
Cangelosi and Dill (1965)	Searching phase – feedback from organisational adaptation, and from individual and subgroup adaptation	Comprehending phase – emergence of analytical quantitative approaches	Consolidation phase – described but not clearly defined
March and Olsen (1975)	Organizations, and the people in them, learn from their experience. They act and observe the consequences of their action.	Individuals impose order, attribute meaning, and provide explanations. They try to make sense of their experience, even when that experience is ambiguous or misleading.	Inferences are made about consequences, and implications drawn for future action.
Hedberg (1981)	Perception of environmental stimuli	Interpretation of stimuli	Members cognitive styles, learning styles, and

	Organisations select stimuli to which they respond	Perceptual filters and definitions	integrative complexity
Daft & Weick (1984)	Highly specialised information receptors that interact with the environment. Depends on Organisational Intrusiveness (actively searching or passive)	Interpretation is undertaken by people. Depends on assumptions about analysability of the environment.	A distinctive feature of organisation level information activity is sharing
Huber (1991)	Many formal and informal organizational activities are intended to acquire information or knowledge.	Is not explicit about how information is given meaning other than referring to Daft & Weick (1984)	The transfer and sharing of information throughout the organization by formal communication and informal communication, training, job rotation, informal networks, stories, myths, etc
Watkins & Marsick (1993)	Strategy and culture determine what cues the organisational will pay attention to.	Interpretation in light of theory of action which is a combination of its strategy and culture	Strategy and culture determine nature of response
Nonaka and Takeuchi (1995)	Socialization - sharing tacit knowledge	Creating concepts	Building an archetype
Crossan et al (1999)	Intuiting is the preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience.	Interpretation - explaining, through words and/or actions, of an insight or idea to one's self and to others	Integration - developing shared understanding among individuals and of taking coordinated action through mutual adjustment
Pawlowski (2001)	Identification	Generation	Diffusion
Akgün et al.(2003)	Information Acquisition	Sensemaking	Information Dissemination Mechanisms for connecting socio-cognitive constructs, thereby merging micro-level and macro-level cognitions with social constructs.
Lipshitz et al.(2007)	Source of data not discussed	Evaluation Discovery of Error	Not discussed

Table 6-10 - Implicit Elements of Knowledge Creation. Source: as cited Author.

6-6.1.1 *Discussion regarding Knowledge Creation Phase*

In terms of each of the elements of Knowledge Creation identified, the implications of the literature are now discussed.

Gathering Feedback

When considering the identification of information that may be used to provide feedback, authors identify various positions but there is widespread acceptance of the organisations deliberate sensing of the environment to acquire information. This is dependent on the intrusiveness of the organisation and assumptions regarding the environment made by the organisation (Daft and Weick, 1984).

In the context of PM, performance indicators provide the highly specialised information receptors that interact with the environment (Daft and Weick, 1984). Unlike the broad definition of Intuiting as 'the preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience' (Crossan et al., 1999, p525), in the context of PM, the acquisition of information from the environment is deliberate and predetermined and is undertaken by the organisation (as it forms a procedure) rather than by individuals. This fits more closely with Nonaka and Takeuchi's (1995) explanation of knowledge gathering as a mix of regular production, research and development. Strategy and culture will determine the selection of indicators (Watkins and Marsick, 1993).

Reverting to an anthropomorphic view, measures, as that which makes things visible, can be compared to the human perception through the senses. It equates to the adaptation of the senses to receive specific types of information, which is then transmitted as raw data to the brain for interpretation. As with the senses, the raw data requires to be analysed before it can be turned into something meaningful. In addition, like the senses, the data can be misinterpreted, making us see something that is not there.

This process of creating deliberate "senses" through which it can perceive a version of reality is, in the case of strategic performance management, strongly affected by strategic

objectives. The quality of this perception will be determined by both the nature of the objectives and the availability and suitability of the measure used. Rather than the “preconscious recognition” described by Crossan et al (1999), the “sensing” of performance measurement is a conscious, planned and deliberate process. Additionally, the choice and use of performance measures will have a significant impact on the interpretation of reality. Performance measures do not indicate reality or “actual performance”, but rather a version of reality or “apparent performance”, the extent to which this is understood and the skills of the analyst will affect the interpretation of what factors are important. On this note, unlike “intuiting”, “sensing” does not occur at the individual level, and the development and use of performance measures are suggested to occur at the group or organisational level.

Thus the choices made by the organisation regarding where and how to gather feedback, define its focus of attention. This is not suggesting that organisations have conscious awareness, but like OL, it forms a useful metaphor for the way in which the organisation focuses its efforts in particular areas in order to provide a sense of its environment. The use of performance indicators is a specific subset of this sensing activity. The form the attention takes may tell us something about the organisation's view of the world and how it intends to influence its environment.

Producing Valid Knowledge

Although organisations try to avoid dependency on predicting uncertain future events (Cyert and March, 1963, 1992), the environment contains some level of uncertainty, so the organization must seek information and then base organizational action on that information (Daft and Weick, 1984). Although the terms "information" and "knowledge" are often used interchangeably, there is a clear distinction between information and knowledge (Nonaka, 1994). Raw information must be given meaning to produce knowledge. Organizations must have mechanisms to interpret ambiguous events and to provide meaning and direction for participants (Daft and Weick, 1984).

To support its aims the organisation must develop information-processing mechanisms capable of detecting trends, events, competitors, markets, and technological developments relevant to their survival (Daft and Weick, 1984). To support OL, the output of this interpretation must therefore be valid knowledge or ‘justified true belief’ (Nonaka, 1994). Valid knowledge must withstand critical evaluation and is not based on wilfully distorted information or unquestioned interpretations (Lipshitz et al., 2007).

Interpretation is undertaken by people (Crossan et al., 1999) but depends on organisation assumptions about analysability of the environment (Daft and Weick, 1984). Interpretation occurs in the light of theory of action which is a combination of its strategy and culture (Watkins and Marsick, 1993). Understanding how individual interpretation is influenced by strategy and culture needs further exploration.

Unlike later elements of this model, the process of interpretation here is limited to creating individual understanding as opposed to developing shared understanding among individuals and of taking coordinated action through mutual adjustment. This is an antecedent to shared understanding. To distinguish this from other “interpretation” concepts in the literature, the production of valid knowledge requires the application of tools to derive meaning, and is therefore best considered as analysis. This is particularly relevant to the interpretation of predominantly quantitative data derived from performance metrics.

Within the literature, specific methods of analysis applied to support OL are not considered. It is therefore difficult to establish the extent to which analysis produces valid knowledge and to what extent it supports OL. The potential for overload (Hedberg, 1981, Huber, 1991), and a range of other factors to influence the results of analysis within PM practice is considerable.

Informing Organisational Choice

Having developed “knowledge” at the individual level in the previous stages, to continue to move towards an OL outcome, this information must be disseminated to the group level (Crossan et al., 1999).

Learning, as a social process and is mediated by artefacts (Akgün et al., 2003). Artefacts play a key role here as an interface between the individual level and the group level, for example, media richness is a determinant of the extent to which information is given common meaning by the sender and receiver of a message (Huber, 1991). A number of factors influencing this element are identified in the literature (e.g. Huber, 1991, Argyris and Schön, 1978, Hedberg, 1981). Factors are discussed in more detail later.

From the author’s experience in the field, it is viewed that, communication of performance information forms a major part of the total effort that goes into PM. The nature of that effort involves the individual who has interpreted, or analysed, the raw data, then has to influence the perception of the group who will use the information to determine appropriate action (or reaction). The artefact then becomes a means of influencing or advising the group level.

Due to the inefficiencies in this stage, it is normal for the whole to be less than the sum of the parts (Argyris and Schön, 1978). Exposing and understanding these influences can contribute to making the completion of OL more likely.

6-6.1.2 Knowledge Creation - Working Definitions

Element	Working Definition
Attention	In order to receive feedback on the achievement of its aims and objectives, the organisation directs its attention to its internal and external environments through the use of performance indicators.
Analysis	The feedback from performance indicators (performance information) must be interpreted and analysed in order to ascertain its actual meaning.

Advising	The meaning of performance information must be communicated to, and understood by, those in a position to take decisions regarding the need for adjusting behaviour of the organisation (or part thereof).
Knowledge Creation	The knowledge creation phase may be viewed as involving three main elements, 1) focussing the attention of the organisation, 2) attributing meaning to the data collected, and 3) communicating that information, in context, to the other parts of the organisation. These elements are referred to as Attention, Analysis and Advising.

Table 6-11 - Elements of Knowledge Creation. Source: Author derived

In light of the above, Table 6-11 proposes working definition of Knowledge Creation and its elements. Figure 6-21 represents the flow of Knowledge Creation through these three elements.

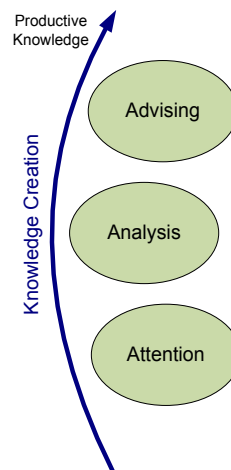


Figure 6-21 - Elements of Knowledge Creation. Source: Author derived

6-6.1.3 *Questions Raised by the Knowledge Creation Construct*

Based on this simple model of Knowledge Creation initial research questions can be derived as follows:

- How is knowledge created within PM practice?
- What is the nature of elements within each case?
- In practice, what factors influence the Knowledge Creation process?

6-6.2 The Action Creation Phase

Earlier in this Chapter, it was identified that the outcome of the Action Creation phase must be productive activity, that is, activity that results in intended organisational outcomes, and is based on *valid* knowledge (Lipshitz et al., 2007)

Action Creation was defined as using valid Organisational Knowledge to determine appropriate behaviour, influencing organisational members, processes and products, with the intention of influencing the environment in line with organisational intentions.

From this definition, three aspects of Action Creation are identified as:

1. Using valid Organisational Knowledge to determine appropriate behaviour
2. Influencing behaviour (members, processes and products) - Changing organisational behaviour
3. Achieving desired impact - impact on the environment

These aspects are now considered in terms of the OL and PM literature and summarised in Table 6-12.

Author	Determine appropriate behaviour	Influencing behaviour	Achieving desired impact
Cyert and March (1963, 1992)	Development of rules and standard operating procedures, modified through internal decisions and environment shocks	Adaptation of goals, attention rules, or search rules.	Quasi-resolution of conflict around goals
Cangelosi and Dill (1965)	All described broadly as “Consolidating Phase” but not clearly defined		
March and Olsen (1975)	Ideal - Participants see discrepancy between what they think the world ought to be and what the world actually is and this produces individual	Ideal - Individual behaviour is aggregated into collective (organizational) action or choices.	Ideal - The outside world then responds to this choice in some way Actual – the

	behaviour. Actual - the decision-making process is not strongly related to the organizational action.	Actual - Organizational action is conspicuously independent of internal process.	environment is not stable
Hedberg (1981)	Competing myths struggle for dominance Dependent on theory of action	Adjustment in existing action or switching back and forth between repertoires of behaviour	Not discussed other than under general heading of "Reaction"
Daft & Weick (1984)	The "shared view" of information is decided at the top manager level. Depends on assumptions about analysability of the environment.	Organisational outcomes such as strategy, structure, and decision making may be influenced	Depends on Organisational Intrusiveness – actively manipulating environment or passively observing
Huber (1991)	His Model focuses on creation of organizational memory but not how this is used to contribute to changes in the range of an organization's potential behaviours.	Learning need not result in observable changes in behaviour. It may result in new and significant insights and awareness that dictate no behavioural change	Not considered
(Watkins and Marsick, 1993)	Strategy and culture determine the fundamental nature of organisations response which is also influenced by structure and available resources.	Their model is complete once new capacity is created and does not reflect a behavioural outcome.	What the organisation learns may not be positive or profitable.
Nonaka and Takeuchi (1995)	Middle managers play a key role in the knowledge-creation process by synthesizing tacit knowledge, make it explicit, and incorporate it into new products and technologies.	What makes sense in one context can change or even lose meaning when communicated to people in a different context. The major job of managers is to direct this confusion toward purposeful knowledge creation	Discussed from context of product development only.
Crossan et al (1999)	(As Informing Organisation Choice) Integration - developing shared understanding among individuals and of taking coordinated action through mutual	The process of institutionalising embeds learned behaviours that have worked in the past into the routines of the organization. Institutionalised learning	Cognition affects action (and vice versa)

	adjustment	(what has already been learned) impedes the assimilation of new learning. Fully assimilating new learning requires the feed forward of learning from the individual and group to become institutionalized within the organization.	
Pawlowski (2001)	Depends on organisational perspective adopted: decision-making, systems-theory, cognitive, cultural, and action-learning. Both learning and decision-making depend on the structure of the knowledge system	Groups are not only the link between the individual and the organization but also the crucial intervening social system in which 'sharing' learning and organizational behaviour take place. Groups are where the individual's view of the world is shared, mediated, and influenced.	Not discussed
Akgün et al.(2003)	Organizational culture infuses spirit to individual and collective constructs, and causes them to act together in an organizational setting.	Collective activity cannot be reduced into individual actions or understood as an aggregation of them.	Reciprocal interactions between information acquisition, information dissemination, information implementation, unlearning, thinking, improvisation, sensemaking, intelligence, emotion, and memory lead to organizational learning.
Lipshitz et al.(2007)	The invention of new behaviours	Organizational learning produces changes in norms, doctrines, standard operating procedures, structures, and cultures.	Productive learning

Table 6-12 - Implicit Elements of Action Creation. Source: As cited author

6-6.2.1 Discussion on Action Creation Phase

In terms of each of the elements of Action Creation identified, the implications of the literature are now discussed.

Determine appropriate behaviour

The Knowledge Creation phase results in group members increasing their awareness of the environment. The organisation must be able to convert that knowledge into action.

Rules and standard operating procedures are modified through internal decisions (Cyert and March, 1963, 1992). The nature of the decision making depends on the structure of the knowledge system (Pawlowski, 2001) and assumptions about analysability of the environment (March and Olsen, 1975).

Decision making groups play a key role by synthesizing tacit knowledge, making it explicit, and incorporating it into new organisational behaviour (Nonaka and Takeuchi, 1995). Organisational Memory, which contains the experience to the group members, also influences the nature of organisational response to new information (Huber, 1991). Organisational Memory may take the form of competing myths held by members of the group and which struggle for dominance (Hedberg, 1981).

The resulting shared view of information is determined at this group level (Daft and Weick, 1984). Decisions regarding the fundamental nature of organisations response are based on strategy and culture, but are also influenced by structure and available resources (Watkins and Marsick, 1993). The approach to decision taking also depends on organisational perspective adopted (Pawlowski, 2001) and theory of action (Hedberg, 1981).

The outcome of decision making is the adjustment of organisational behaviour through invention of new behaviours (Lipshitz et al., 2007), however the decision-making process is not strongly related to the organizational action (March and Olsen, 1975). This indicates the need to understand more clearly, not just the choice of new organisational behaviour, but also how that is influenced. In addition, whether that influence results in the impact intended by the organisation. These are represented by the following two stages.

Influencing behaviour

Having identified new, more appropriate behaviour, the next stage is to influence the behaviour of organisational members towards that. This is the basis of management.

This may take place through adjustment in existing action or switching back and forth between repertoires of behaviour (Hedberg, 1981), through the adaptation of goals, attention rules, or search rules (Cyert and March, 1963, 1992), through organisational outcomes such as strategy, structure, (Daft and Weick, 1984), or changes in norms, doctrines, standard operating procedures, structures, and cultures (Lipshitz et al., 2007).

Obviously, those authors taking a cognitive view of OL do not consider organisational behavioural outcomes. For example, OL need not result in observable changes in behaviour as it may result in new and significant insights and awareness that dictate no behavioural change (Huber, 1991). This makes identification of OL problematic. Even the description of institutionalising (Crossan et al., 1999) where learned behaviours that have worked in the past are embedded into the routines of the organization would be difficult to identify sufficiently well to establish cause and effect.

Groups are where the individual's view of the world is shared, mediated, and influenced (Pawlowski, 2001). However, it is the means through which the group decision is transmitted to individual action on behalf of the organisation that is of key interest here. If this is not successfully achieved then the outcome of OL is inevitably reduced or limited.

However, Organizational Action is seen as conspicuously independent of internal process (March and Olsen, 1975). Factors, such as previously institutionalized learning impeding the assimilation of new learning (Nonaka and Takeuchi, 1995) and the role of unlearning (Hedberg, 1981) have to be considered. Historically, the focus on performance measurement has meant that the outcome of “management” was ignored. This is seen as crucial to supporting the development of the PM field by understanding not just how to gather data and influence decisions, but how this results in the behaviour of the organisation being adjusted.

Achieving desired impact

Of the elements identified, this is least discussed by the authors. It is often accepted that if behaviour of members has been influenced, then OL is complete. However, like productive learning (Lipshitz et al., 2007), here the intended organisational outcome is only seen as complete if that organisational behaviour results in productive activity. That is the desired impact, or moving towards the desired impact of the organisation results.

6-6.2.2 *Action Creation – Working Definitions*

In light of the above, working definitions of Action Creation and the associated Elements are proposed in Table 6-13.

Element	Working Definition
Adjusting	Based on the performance information and the collective experience of the organisation and the decision making group, decisions must be taken, regarding whether organisational behaviour needs to be adjusted, and about the type of behaviour required to better achieve the aims or objectives.
Affecting	To influence the behaviour of organisational members, the decisions about required action must be communicated in a manner that will engender their cooperation towards the achievement of organisational aims and objectives
Achieving	Organisational Learning is achieved when, based on the feedback, new more productive activity, appropriate to the aims or objectives of the organisation, results.
Action Creation	The process of behaviour change may also be viewed as involving three elements, recognising the need for adjusting behaviour, affecting the behaviour of organisational members, resulting in behaviour that may provide greater achievement of goals or objectives. These elements are referred to as Adjusting, Affecting and Achieving.

Table 6-13 - Elements of Action Creation. Source: Author derived

Figure 6-22 represents the flow of Knowledge Creation through these three elements.

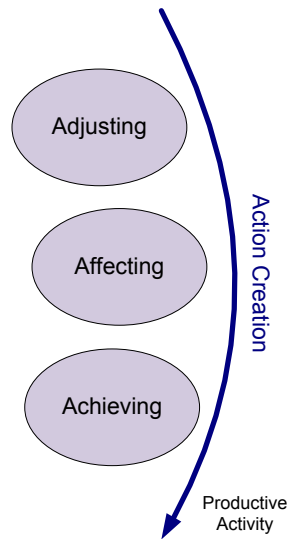


Figure 6-22 - Elements of Action Creation. Source: Author derived

6-6.2.3 *Questions Raised by Action Creation*

Based on this simple model of Action Creation initial research questions can be derived as follows:

- How is action created within PM practice?
- What is the nature of elements within each case?
- In practice, what factors influence the Action Creation process?

6-6.3 **Summarising the elements of OL**

The above analysis has shown that while different approaches and focus are taken by authors of OL Models, a synthesis of these is possible through considering Knowledge Creation and Action Creation phases of OL. This synthesis considers the elements within each of the models in terms as:

1. **Attention** - Sensing and sources of information
2. **Analysis** - Attributing meaning to the data

-
3. **Advising** - Dissemination of meaning to decision makers
 4. **Adjusting** - The decision making process
 5. **Affecting** - How behaviour is influenced towards the aims of the organisation
 6. **Achieving** - The desired organisational impact on the environment

As is the nature of synthesis, the similarities in the underlying principles of the models are emphasised rather than the differences, leading to a unified model of Organisational Learning that is the result of a cyclical process involving the accumulation of knowledge that culminates, from a cognitive perspective the potentially for new action, or from a behavioural perspective in action.

Putting the Knowledge Creation phase and the Action Creation phases together in a graphical representation reflects the cyclical, feed-forward/feedback nature of OL described by many authors. This is represented in Figure 6-23 -The basic OL Model of PM.

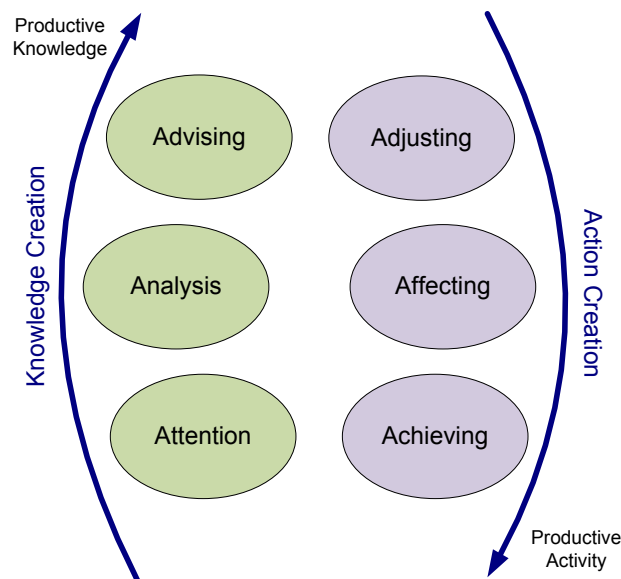


Figure 6-23 - A Basic OL Model of PM. Source: Author derived

The practice of performance management involves both feedback and feed-forward interaction between the environment and the organisation. This process comprises in six distinct elements as described above. These elements may be undertaken by various actors

within the organisation, occur at different levels and involve different items of information or activity.

Daft and Weick (1984) argued for higher levels of complexity when conceptualising organisations and their systems. This model is deliberately developed in a simplistic manner in order to provide a structure upon which a more detailed analysis can be built. By applying this simple model to the practice of PM, it is intended that the elements of organisational learning process can be observed leading to understanding of the process rather than description.

The consideration of OL as a process emphasises the dynamics of the process of learning but the issue of whether learning results in increased performance/outcome is diminished (Akgün et al., 2003). This model maintains the context of the outcome as this is seen as crucial to understanding the “why” of OL as well as the “how”.

6-6.3.1 An OL Model of PM

As a basis on which to conduct the Case Studies, OL can be represented by a Knowledge Creation phase and an Action Creation phase but these need to be understood in terms of productive knowledge and productive activity.

Bringing Knowledge Creation and Action Creation together results in two further research questions, namely:

- Does performance knowledge influence organisational behaviour?
- In practice, do the knowledge creation and action creation processes operate and interact to create OL?

The research questions identified so far are considered sufficient to develop an understanding of how OL operates and what the output is within the context of PM. The following section considers in more detail “why” the process operates, through considering

the drivers for the OL process, and why it operates the way it does, but considering the factors that may influence the process.

6-7 DRIVERS, FACTORS, ELEMENTS AND INTERFACES

As identified earlier, the key constructs of an OL Model of PM are process elements and interfaces (as discussed above) as well as Context, Drivers and Factors (see Figure 6-24)

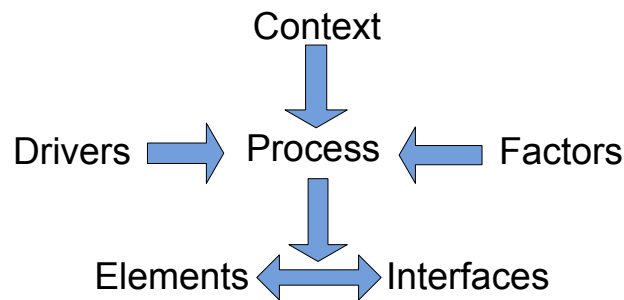


Figure 6-24 - The Required Components of an OL Model of PM (Author derived)

6-7.1 Drivers for the OL Process

Internal organisational processes consume energy and resource and therefore need some impetus to make them operate. The process of OL does not occur spontaneously but in response to triggers and tensions.

Author		OL Drivers
Cyert and March (1963, 1992)		Environmental feedback regarding achievement of organisational goals
Cangelosi and Dill (1965)		Discomfort stress Performance Stress Disjunctive Stress
March and Olsen (1975)		Discrepancy between what they think the world ought to be (given present possibilities and constraints) and what the world actually is
Hedberg (1981)		Defensive adjustment to reality Offensive improvement to fit between organisation and

	their environment
Daft & Weick (1984)	Organisational Intrusiveness and its assumptions about analysability of the environment.
Huber (1991)	Not discussed
(Watkins and Marsick, 1993)	Jolt, error, future stimulate learning.
Nonaka and Takeuchi (1995)	The knowledge spiral is driven by organizational intention, which is defined as an organization's aspiration to its goals
(Crossan et al., 1999)	System survival and prosperity
(Pawlowski, 2001)	Organizational learning occurs when individuals within an organization experience a problematic situation and inquire into it on the organization's behalf
(Akgün et al., 2003)	Reciprocal interactions between information acquisition, information dissemination, information implementation, unlearning, thinking, improvisation, sensemaking, intelligence, emotion, and memory lead to organizational learning.
(Lipshitz et al., 2007)	Environmental uncertainty, task uncertainty, error criticality, task structure, proximity to core mission, organisations structure

Table 6-14 - Drivers for the Process of OL. Source: as Cited Author

Specifically, when organizational learning is considered to be a process, the dynamics of the process of learning are highlighted, and the issue of whether learning results in increased performance/outcome is diminished (Pawlowski, 2001).

Several authors have described various drivers for the OL process and these are summarised in Table 6-14. This variation in the perception of drivers for OL can be seen as resulting from differences in the aspects of performance considered, differences in the study approach taken, or different views of what is important.

The key element within each of these is the relationship to the organisational purpose described above, that is, OL is driven by the purpose or intention of the organisation. These types are distinguished by some of the authors:

-
- a) Reacting to environmental change or failure to achieve purpose.
 - b) Proactively creating capacity to achieve purpose.

It can be anticipated that as well as drivers for the overall process of OL, each element of the process may have specific triggers and stimuli. Understanding what drives PM practice has implications for understanding OL and its completion. Therefore, the questions this raises for the case studies are:

- a) Are drivers for PM practice known by actors, and if so, how are these expressed?
- b) Do elements have different drivers, and if so, what are they?
- c) To what extent are these drivers present within the cases?

6-7.2 Factors Influencing the Effectiveness of the Process of OL

Wide ranges of factors that may influence the operation of the OL process are identified within the models reviewed. For example, factors affecting the stocks and flows of learning (Crossan et al., 1999), factors impacting the cycle of choice (March and Olsen, 1975), and the presence and effectiveness of interpreting systems and the mode of interpreting the external environment (Daft and Weick, 1984). It is anticipated that each element of the proposed model, and each interface between them, will have a unique set of challenges that will influence the overall outcome of the process March and Olsen (1975). There is a need to elaborate and understand these impact factors as a) they provide insight into the nature of the elements and interfaces, and b) addressing these factors is the most direct way of providing practical suggestions for improvement of OL processes or for creating high quality learning (Lipshitz et al., 2007).

This research cannot hope to identify every factor and to do so would likely mask the primary aim of understanding the overall process. At this stage therefore, Table 6-15 lists the key factors identified or deduced from the nature of the models reviewed and organises these by the elements of the OL Model of PM.

	Key Factors	Author
Attention	Choice of indicators	Cyert and March (1963, 1992)
	Cost of search	Hedberg (1981)
	Amount, scope, accessibility, accuracy, currency, and timeliness of information	Hedberg (1981)
	Attention directing mechanisms	Hedberg (1981)
	Organisational Intrusiveness	Daft & Weick (1984)
Analysis	Uncertainty in the meaning of feedback,	Cyert and March (1963, 1992)
	Environmental complexities.	Cangelosi and Dill (1965)
	Richness versus scarcity of information	Hedberg (1981)
	Information processing capacity	Hedberg (1981)
	Assumptions about Environment	Daft & Weick (1984)
	Presence, effectiveness and mode of interpreting systems	Daft & Weick (1984)
	Information overload	Huber (1991)
	Management practice, in particular the need to make sense of information on behalf of the organisation	Daft & Weick (1984)
	Theories of action	Hedberg (1981)
	Thinking, Improvisation, Emotion, Intelligence	Akgün et al. (2003)
	Learning modes	Pawlowski (2001)
Advising	Communication norms	Cangelosi and Dill (1965)
	Communication channels	Hedberg (1981)
Adjusting	Decision making regarding appropriateness of current fit of existing adaptation rules	Cyert and March (1963, 1992)
	The difficulties in finding a appropriate solution – “problemistic search”.	Cyert and March (1963, 1992)
	Justifying performance, rather than improving performance	Cangelosi and Dill (1965)
	Future uncertainty (and present)	Cangelosi and Dill (1965)
	Newness of group members in their roles	Cangelosi and Dill (1965)
	Uncertainty about the future	Cangelosi and Dill (1965)
	Members cognitive styles, learning styles, and integrative complexity	Hedberg (1981)
	Centralised versus decentralised decision making	Hedberg (1981)

	Tunnel vision	Watkins and Marsick (1993)
	Actions and emotions, Social cognition	Akgün et al. (2003)
	Cultural norms, leadership,	Lipshitz et al. (2007)
Affecting	Inadequate incentives	Cangelosi and Dill (1965)
	The ability to unlearn previous behaviours	Hedberg (1981)
	Rate of change	Hedberg (1981)
	Rewards and punishments	Hedberg (1981)
	Resources for exploring and implementing	Hedberg (1981)
	Standard operating procedures	Hedberg (1981)
	“unlearning”	Huber (1991)
	Truncated learning	Watkins and Marsick (1993)
	Learned helplessness	Watkins and Marsick (1993)
	Bureaucracy hobbles individual initiative because of its strong propensity for control and can be dysfunctional in periods of uncertainty and rapid change	Nonaka and Takeuchi (1995)
	The task force is indispensable in generating new knowledge through socialization and externalization	Nonaka and Takeuchi (1995)
	Institutionalization can easily drive out intuition	Crossan et al (1999)
	Integrating entails the development of shared understanding and the taking of coordinated action by members of a workgroup.	Crossan et al (1999)
Achieving	Effective interaction between the stages of OL	Crossan et al (1999)
	Outer Environment	Hedberg (1981)
	Alignment of knowledge with corporate vision as enabling further knowledge creation	Nonaka and Takeuchi (1995)
	Experience	Cangelosi and Dill (1965)
	The need to consider information in the context of the goals of the organisation	Cyert and March (1963, 1992)
	Levels of learning, Learning Types	Pawlowski (2001)

Table 6-15 - Summary of Key Factors affecting OL*. Source: as Cited Author

**N.B. for clarity of display, factors are listed under the most relevant heading although, as not all authors express these in the same way, the most relevant heading is applied here.*

There is a great variety of assumptions about the determining factors of organizational learning but almost no knowledge about the effects or consequences those factors have for organizations

(Pawlowski, 2001). Such an extensive range of factors cannot be easily converted into Case Study questions. Therefore, the approach adopted for the data gathering part of the research will be to elicit factors identified from interviewees, documentation, etc. and to compare those to the factors listed above. This will provide confirmation of factors proposed in what are largely theoretical models and help to identify methods through which these are addressed in practice.

6-7.2.1 Factors and Research Questions

Based on the above, it is seen that the complexity of organisational dynamics will variously affect each element of the model and the interactions between them and these will act as catalysts or inhibitors to the process. Their value can be judged against whether they contribute to or detract from the completion of OL and delivery of intended organisational outcomes.

The aim of developing and deploying the model was to structure the data collection but to allow the emic issues to inform the development of a richer, more comprehensive model. It is therefore proposed that instead of asking about specific factors, the research questions should be general in nature. Identifying changes in practice and the reasons for this will elicit issues that have been seen as influencing practice. In addition, directly asking interview subjects to identify the issues they see as relevant to their area of expertise will be useful.

Research questions relating to factors are therefore as follows:

- In practice, what factors influence the PM process?
- What is the relationship between these factors and the individual elements of the process?
- Which factors influence the completion of OL?

The author's experience of PM practice has helped to verify that the constructs being proposed are relevant. The question is whether this ultimately limited experience can be applied to the wider field of practice not yet experienced.

Considering performance management from an organisational learning perspective provides a practical test of espoused theory and provides new insight into the functioning of performance management as a process of aligning strategic aims with organisational activity. From the model outlined in Figure 1, this theoretical approach indicates that the 4I model, while a useful basis for understanding the process, requires modification if it is to be applicable in a performance management environment. On this note, it is proposed that within police performance management, the institutionalisation of strategy occurs through a continual process of sensing, interpreting and realigning activity. OL at this level may occur largely outside the awareness of managers. Clarifying the catalysts and inhibitors for the processes involved, will make management of the OL process possible and aid its optimisation.

Any model is itself a somewhat arbitrary interpretation imposed on organized activity and involves trade-offs and unavoidable weaknesses (Daft and Weick, 1984). The greatest weakness of this model is its elementary nature but this is also a strength as it provides an ability to cover the range of OL behaviours. Like March and Olsen's Cycle of Choice (1975), this model provides the "perfect" scenario of knowledge and action. Examining and comparing the reality of performance management practice will allow factors influencing the completion of the process of OL to be identified and mitigating factors to be proposed.

This new model accounts for a greater range of factors and should be useful in helping to identify factors affecting how well the organisational learning process is working within an organisation.

6-8.1 Summarising Research Questions

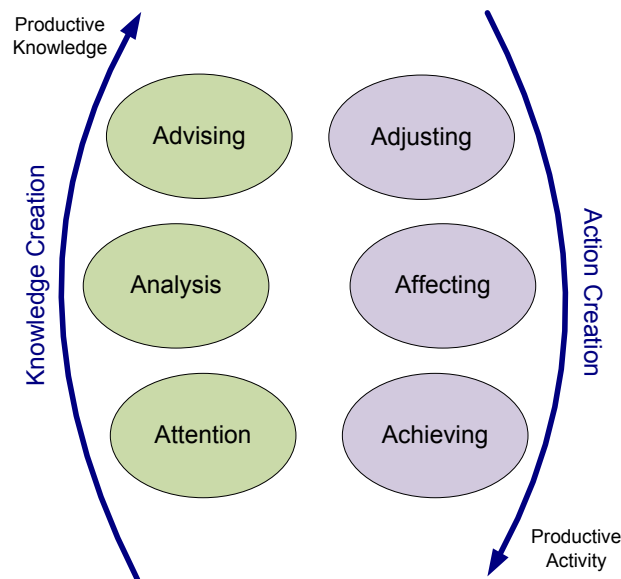


Figure 6-25 – Provisional OL Model of PM. Source: Author derived from literature

The rationale for clearly defining the research questions is identified by Eisenhardt (1989) as being the same as it is in hypothesis-testing research in that, without a research focus, it is easy to become overwhelmed by the volume of data. The need to manage complexity is particularly relevant given the discussion above, the complexity of the OL/PM paradigm revealed by the literature, and the need to support the development of both theory and practice.

It's a direct step from conceptual framework to research questions (Miles and Huberman, 1994, p22).

Detailed Research Questions are derived here by reviewing the Research Problem in the light of the provisional OL Model of PM developed above and the conceptual framework for an investigation of the process of OL (refer to Figure 6-24).

The role of a conceptual framework is to identify the main things to be studied and the presumed relationships between them (Miles and Huberman, 1994). From this, a list of

issues is derived relating to aspects of the process of OL and its organisational context, as well as a list of questions specifically relating to PM practice. Based on the provisional model, and the issues identified, a set of Research Questions has been developed. Table 6-16 shows these in relation to each of Research Problem areas of *impact* and *prevalence* as well as the potential output.

	Research Questions	Comment	Theory
Impact	RQ1. How is knowledge created within PM practice? RQ2. How is action created within PM practice? RQ3. Does performance knowledge influence organisational behaviour? RQ4. What is the nature of elements within each case?	Description of Elements and flow	Process
	RQ4. What is the nature of elements within each case? RQ5. In practice, what factors influence the PM process?	Description of Drivers, Factors, Relationships	Influences
Prevalence	RQ7. Which factors influence the completion of OL? RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?	Evidence of OL outcomes	Completion of OL

Table 6-16 - Summary Research Questions

6-8.2 Developing Interview Questions

To capture the necessary data to address the Research Questions a series of semi-structured interviews are planned (see Chapter 5). This will provide a consistent approach across the case studies, whilst providing sufficient flexibility to capture descriptive detail and issues from a cross section of staff involved in a range of roles impacted by the phenomena in question.

Interview Question Topics	Research Questions	RQ1. How is knowledge created within PM practice?	RQ2. How is action created within PM practice?	RQ3. Does performance knowledge influence organisational behaviour?	RQ4. What is the nature of elements within each case?	RQ5. In practice, what factors influence the PM process?	RQ6. What is the relationship to individual elements of the process?	RQ7. Which factors influence the completion of OL?	RQ8. In practice, do KC and AC processes operate and interact to create OL?
Contextual information (e.g. interviewees role and experience of PM)								X	
What is interviewees perception of performance					X				
What is interviewees perception of management		X			X				
What is interviewees perception of the role of PM					X	X			
Describe general process of using performance information to support managing				X	X				X
Decision making processes				X	X				
Drivers for procedures adopted		X		X	X	X	X	X	
Change in practice over time, causes and impact					X	X		X	
Description of process of knowledge creation					X	X	X		
Description of process of action creation		X			X		X		
Perception of factors influencing processes					X		X	X	
The nature and operation of related meetings, e.g. who is involved, what is		X		X	X		X		

content, the role								
Description of knowledge artefacts created			X	X				
Organisational Behaviour outcomes resulting from PM				X				X

Table 6-17 - Relationship between Interview Questions and Research Questions

Source: Author derived

Table 6-17 broadly shows the nature of the questions deployed and how these relate to the Research Questions. This must be read in conjunction with the conceptual frameworks developed in earlier in this Chapter that describe the development of an OL Model of PM and provides the theoretical basis for these questions.

Rather than being a list of ‘questions’ to ask the interviewee, the table above (Table 6-17) represents the subject areas to be discussed. Actual questions will be framed in ways appropriate to the interviewee’s role and experiences of practice, and in an open manner that maximises the interviewees opportunity to provide their view without bias.

6-9 CONCLUSION

The aim of this chapter was to develop a hypothetical construct with which the role and nature of performance management in police Forces in Scotland can be clarified and compared to other UK areas.

The development of an OL Model of PM from the literature is the first step in addressing the research problem and the gap in the literature. It aims to refine the model to understand the nature of the elements and the interfaces, the context, drivers and factors that influence the process. The model will potentially influence both theory and practice.

Based on the literature two key aspects of OL were identified as Knowledge Creation and Action Creation. Three elements of Knowledge Creation have been identified as Attention, Analysis, and Advising and the outcome has been defined as *productive knowledge*. In addition, three elements of Action Creation have been identified as Adjusting, Affecting, and Achieving and the outcome has been defined as *productive activity*.

Combining these two phases of OL, a provisional theoretical OL Model of PM has been developed.

Proactive and reactive aspects of process drivers have been identified and it is anticipated that in practice each element will also have specific sets of drivers.

A wide range of factors, acting as both catalysts and inhibitors has been identified. This range is so wide that it is proposed to follow a more open approach to this subject in interviews, allowing the relevant factors to be identified by participants.

This model makes a major contribution to the existing OL and PM literature and it provides a basis for the data collection to be undertaken in a systematic manner.

The OL Model of PM provides a significant advance from the literature identified earlier in this Chapter and enables a greater level of detail to be considered within the Case Studies. This Chapter has developed a set of specific questions, covering each of the areas discussed, to structure the data collection aspect of the research.

Appendix A describes the strategy adopted for interpreting the meaning of the data and developing theoretical outcomes from it. The following chapter goes on to describe the pilot Case Study.

Although the Literature Review established the basic nature of OL, this Chapter was added to provide a more systematic basis for the development of the OL Model of PM. This was prompted following the submission of a paper to the BAM Conference in 2008. Feedback on that paper indicated that there was too much of a leap from the literature to the model proposed in that paper and that the source of the constructs required greater acknowledgement. This Chapter fills that gap.

This addition however came at a point after the commencement of the first Case Study. Updating the literature review also meant that concepts that had not previously been identified were introduced. These were found to have some resonance with the data from the first Case Study. In writing up this Thesis then, the idea of a linear timeline is perhaps broken, but the clarity this Chapter adds is considered essential.

It was quickly established that the existing literature was unable to address adequately a research study into PM. As a result, from very early in the research process an OL Model of PM was considered. It has therefore gone through many evolutions before reaching the stage described in this Chapter and in the light of the research findings has been revised further. The model outlined here was intended to underpin the data collection, and not to be all-encompassing. It will be shown in Chapters 8 through 11 that it was suitable for this purpose.

The position of this Chapter within the Thesis has been considered and revised on several occasions. This is largely due to the proportion of content that relates to the literature and it would therefore sit neatly within that section. However, the need for a model is determined by the approach outlined in Chapter 5 and, whilst containing reference to the literature, the content is about the need for, and development of, a new model upon which to base the data gathering. It therefore sits logically between the Research Method Chapter and the Case Studies.

This Chapter was originally devised as two separate Chapters, the first considering the literature and the second developing the model. However, it was found that this resulted in a great deal of duplication and reference between Chapters. The resulting single Chapter contains the whole development of the model, a key aspect of the research, in one place.

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**An Investigation of the Prevalence and Impact of
Organisational Learning in UK Police Forces**

VOLUME II

STEPHEN HARVEY RITCHIE

**A thesis, comprising two volumes, submitted
in partial fulfilment of the requirements of
The Robert Gordon University
for the degree of Doctor of Philosophy**

**This research programme was carried out with the support of a
Fellowship from the National Police Leadership Centre, Bramshill**

December 2010

7-1 ORGANISATION OF THE CHAPTER

The following table (Table 7-1) is provided to orient the reader to the content and structure of the chapter and to indicate its relationship to the Research Questions.

Content	Relevance to Research Questions	Comment
The OL Model of PM	Establishes the basis on which this Case Study was analysed.	Derived in Chapter 6
Case A – Description	Describes the attributes of the Case and Case Study.	Provides context to findings.
The Elements and Flow of PM	Generally addresses RQ1 to RQ4 RQ1. How is knowledge created within PM practice? RQ2. How is action created within PM practice? RQ3. Does organisational knowledge influence organisational behaviour? RQ4. What is the nature of elements within each case?	Results in theory of OL process in Case A. Helps to address the research problem in relation to the impact of OL.
Factors and Dimensions	Generally addresses RQ5 & RQ6 RQ5. In practice, what factors influence the PM process? RQ6. What is the relationship between these factors and the individual elements of the process?	Results in theory of influences in Case A. Helps to address the research problem in relation to the impact of OL.
Completion of OL	Generally addresses RQ7 and RQ8 RQ7. Which factors influence the completion of OL? RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?	Results in theory of completion of OL in Case A. Helps to address the research problem in relation to the prevalence of OL.
An Evolution of the OL Model of PM	Develops the theoretical model by applying the results of the Research Questions	Considers the implications of Case findings for development of OL Model of PM

Table 7-1 – Organisation of the Chapter

This Chapter details the conduct and findings from a pilot Case Study. The provisional OL Model of PM is tested through its ability explain the findings and an evolution of the Model is proposed. The implications for further Cases are identified.

7-2 CHAPTER INTRODUCTION

The Chapters up to this point have discussed how to address the Research Problem. This resulted in the development of a hypothetical OL Model of PM and the choice of a Case Study methodology with which to test that model against the “reality” of PM practice. A set of Research Questions were derived from the OL Model of PM (see Table 7-1 and Figure 7-1). This Chapter describes a pilot case study aimed at answering those questions and discusses the findings.

This Chapter aims to describe, explain and understand an instance of PM practice and through this to establish the presence and impact of OL. To do this, the Chapter will establish the fit of the provisional OL Model of PM to the data gathered, identify factors influencing practice and refine the model for use in further Cases.

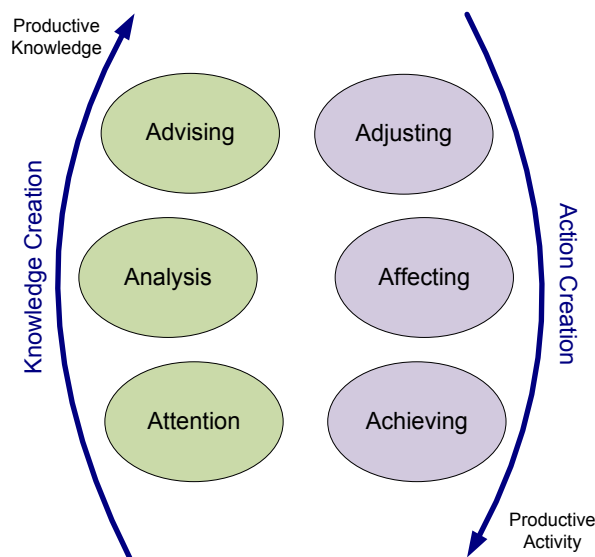


Figure 7-1 - The Provisional OL Model of PM. Source: See Chapter 6

7-3 WITHIN-CASE ANALYSIS

Within-case analysis typically involves detailed case study write-ups for each site and can help investigators cope with the deluge of data (Eisenhardt, 1989). However, as there is no standard format adopted, the key principle of the generation of insight has guided the content and format of these write ups (see Eisenhardt, 1989, Gersick, 1988, Pettigrew, 1990). The aim of this within-case analysis is to understand the Case as a whole in the context of the OL Model of PM. It asks, what does this Case tell us about practice?

Unlike quantitative approaches the product of qualitative analysis is an evolving and interactive process that is complete when the outcome is both valid and applicable.

Based on the OL Model of PM, a detailed analysis of each case has been undertaken. This has considered Elements of the model and Factors influencing the process. A detailed description, highlighting the unique aspects in the Case, is provided.

Each case study involved interviews with organisational members involved in a wide range of aspects of PM practice. For example, interviewees ranged from staff on the street that were subject to PM practice, to decision makers and to people involved in analysis of data. The interviews were aimed at obtaining a description of aspects of practice within the knowledge of the interviewee.

7-4 CASE A – A POLICE FORCE IN SCOTLAND

The following section introduces the attributes of the Case before the Chapter goes on to review the findings from the analysis of data from the pilot Case Study (referred to here as Case A). Later, based on the evidence from the analysis of the data, conclusions are drawn regarding the Research Questions in the form of three theories regarding, a) the process of OL, b) the underlying influences on the process, and c) the completion of OL.

7-4.1 Case A – Description of Case

Geographical

This pilot Case involves one of eight Police Forces in Scotland. It is a medium size Force serving a population of around 0.53 million in both rural and urban areas covering in 3373 square miles. With around 2500 police and support staff, the Force operates in three geographical 'Divisions' and has nine 'business areas'.

Background

Organisational Priorities are derived through a strategic assessment of risks to the environment and risks to the organisations ability to address these.

It was seen that PM practice was operating at various levels within the Force as well as externally to governance and scrutinising bodies. The use of PM became less consistent at 'lower' levels, such as Divisional. At these lower levels, practice was determined by the experience of the senior management team in the Division, whilst when dealing with the Police Board and HMIC, practice was prescribed nationally and in more detail.

The Police Force in question had recently implemented an IT system to support its performance management processes and this has provided a catalyst for the development of a 'performance oriented culture' resulting in a wide range of performance practice, not just focussed on the IT system. In order to capture the greatest impact on organisational behaviour, the study focused largely on operational areas, where the majority of staff were deployed.

As this was the researchers 'home' Force, this provided several advantages, including:

1. Ease of access.
2. Easier planning and greater flexibility resulting in the potential for a more thorough pilot case and the ability to adjust where required.

3. The ability to return to it if required to realign data collection based on lessons learned.
4. The researcher's extensive knowledge of the Force and its performance management practice made it easier to select and contact the relevant individuals, meetings and documentation.

Performance Management Processes

Key management processes present in this case were a formal Performance Management process used at a strategic level. The Force also used the Tasking and Coordinating process as described within the National Intelligence Model (John and Maguire, 2004). Divisional level performance management processes were locally derived and varied between Divisions.

An individual performance monitoring process in the form of an Annual Performance review was also in place but was not specifically considered by this study.

7-4.2 Case A -The Conduct of the Case

This Case Study was undertaken during February 2008. It was undertaken with the consent of ACPOS and the Deputy Chief Constable.

Interviews

Interviews were semi-structured in nature, covering key points indicated by *a priori* constructs (the OL Model of PM) developed from the literature (see Eisenhardt, 1989) but varied according to the specific experience and views of the interviewees. The interviews were aimed at obtaining a description of aspects of practice within the knowledge or experience of the interviewee.

Twenty-five people were interviewed, either individually or in pairs. Most lasted around an hour. Interviews covered a range of actors in the performance process, from members of the Force Executive, to officers on the ‘front line’. The interviewees were as listed in Table 7-2. This created a ‘diagonal slice’ through the PM process within the organisation.

Rank	Number of interviewees
Executive level	3
Operational Superintendent	4
Operational Chief Inspector	1
Support Chief Inspector	1
Inspector	2
Sergeant and Constable	14

Table 7-2 - Interviewees by Rank/Role. Source: Derived from data

All the interviews were digitally recorded and later transcribed. NVivo was used to collate the transcripts, researchers’ notes, and other Case Study data.

Observation

In addition to the interviews, a number of key performance management meetings were attended as an observer. These included:

- Five Divisional Performance Management Meetings
- One Force Performance Management Meeting

Observation notes were taken and these were collated using NVivo.

Artefacts

Additional relevant material was collated including artefacts used during the performance process, or describing aspects of it; Strategic documentation outlining Force aims and objectives and the processes for delivering these; Observation notes from meetings at which

performance information was used to support decision-making. Where permissible and practical these were also collated or noted using NVivo.

7-4.3 Case A - The Role of PM

At an early stage in the research process different roles of PM were identified (see Chapter 2). This section describes the role PM practice played within Case A. This will have more relevance when considering the differences between cases in the cross case analysis contained in Chapter 10, but in the meantime helps to set the scene and provide context to the findings discussed later.

In this case, the role of PM practice differed in terms of what was being managed. The three subjects of management, namely People, Resources and Processes, were all present in Case A. Figure 7-2 describes the distribution of interview content as determined by the subject of management.

Two main PM roles are seen as operating, these are related to accountability and learning (improvement) processes. These processes involve different structures and goals but have some overlap in terms of the use of performance information.

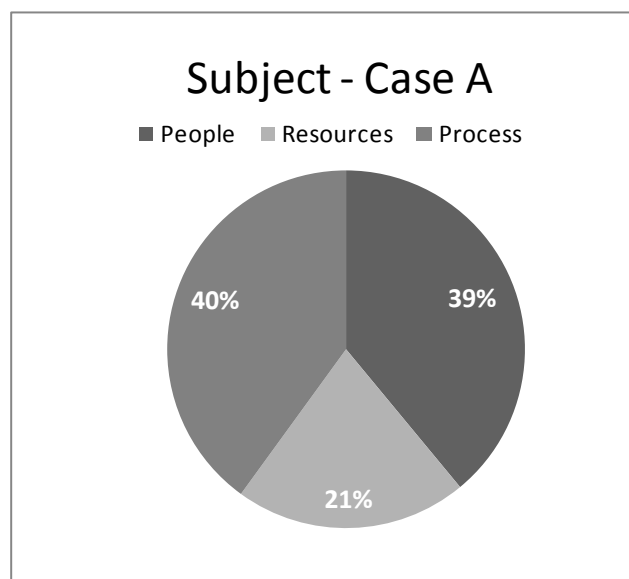


Figure 7-2 – The Subject of Management. Source: Derived from data

As this was a Pilot case, some analysis was undertaken on what interviewees perceived performance and performance management to be. After coding this data in NVivo, the resulting nodes were then restructured according to the nature of the reference made by the interviewee. These were categorised based on their content as Object, Output level, Subject level, Descriptive level and Context level. This was modelled to assist with interpretation (see Figure 7-3).

Based on this data, at the Output level, performance was seen as the achievement of objectives, standards, plans or targets. It was also seen as the effectiveness or productivity of individuals. These two aspects to the concept of performance are explained due to an on-going change in performance culture which started to evolve in Scottish policing. Overall there was a move from individual performance towards organisational performance.

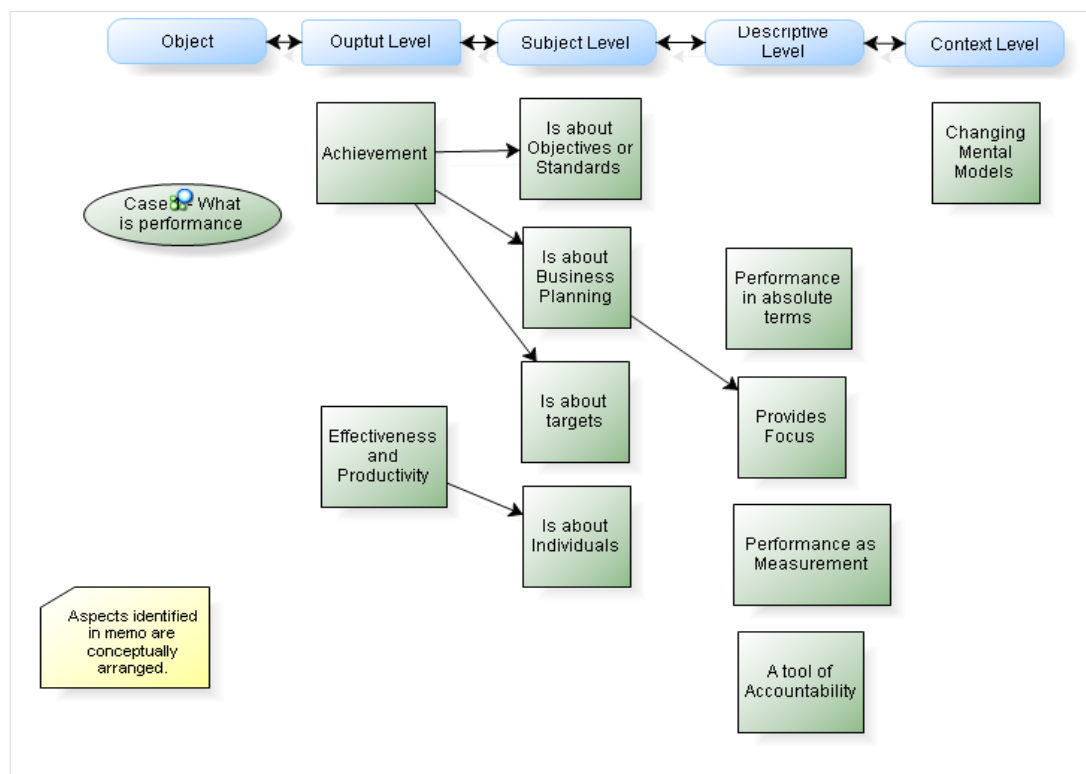


Figure 7-3 - Meaning of Performance. Source: Derived from data.

This dual meaning for 'performance' meant that care was required when interviewing, coding and analysis that this was accounted for.

7-5 THE ELEMENTS AND FLOW OF PM PRACTICE

This section considers the results in terms of the constituent elements of PM practice and how this process converts awareness of the environment into organisational action.

The section starts by reviewing the content of the interviews in terms of the elements of the provisional OL Model of PM. The elements are then considered in more detail. The general findings for each element are identified and the definitions derived from the literature are compared with the data from the case study. Revised definitions are provided.

A query of the data within each Case A interview which had been coded at each element of the OL Model of PM provided a matrix of the coding distribution (see Table 7-1). The same source data is displayed as a pie chart representing the distribution of coding within the Case as a whole by each element (see Table 7-3).

	A : Int 101 OpSupt	B : Int 102 SpCI	C : Int 103 SpMgr	D : Int 104 OpSupt	E : Int 105 Analyst	F : Int 106 OpCI DIV_A	G : Int 107 Exec X	H : Int 108 OpSupt DIV_B	I : Int 110 OpSupt DivA	J : Int 111 OpInsp DIV_A	K : Int 112 PerInsp	L : Int 113 Exec Y	M : Int 114 PerInsp DIV_D	N : Int 115 Exec Z	O : Int 116 PPerfAnalyst	P : Int 117 PSgt	Q : Int 118 OpInsp DIV_D	R : Int 119 OpSupt DIV_C	S : Int 120 OpInsp1 DIV_D	T : Int 124 Insp DivB	U : Int 125 PC DivB	V : Int 126 Op Sgt DivA	W : Int 127 Op PC DivA
1 : Attention	4	6	0	0	6	9	2	1	3	0	6	3	0	1	6	4	1	2	1	3	2	1	3
2 : Analysis	5	2	0	1	10	3	4	1	4	0	0	2	0	1	3	3	0	7	2	0	0	0	0
3 : Advising	7	1	0	1	7	9	7	0	4	0	0	7	4	3	5	4	4	8	1	4	3	4	2
4 : Adjusting	8	8	3	9	3	9	4	3	3	0	1	4	3	5	1	3	4	12	2	1	0	1	0
5 : Affecting	3	1	1	1	2	6	2	5	9	2	12	3	3	3	0	4	2	4	6	4	5	8	0
6 : Achieving	7	0	0	1	6	7	3	1	3	0	1	3	3	8	1	2	10	3	2	2	2	2	0

Table 7-3 – Element Related Coding References by Interview. Source: Derived from data

The variation seen in Table 7-3 is expected due to the different roles and experience of the interviewees, each being involved more in one aspect than another. From Figure 7-4 it can be seen that whilst individual interviews varied in content, the overall distribution of data adequately covered each of the Elements.

A wide range of issues and topics were raised by interviewees. Many of these, although interesting and worthy of further investigation at another time, did not relate directly to the research questions and is therefore outwith the scope of this thesis.

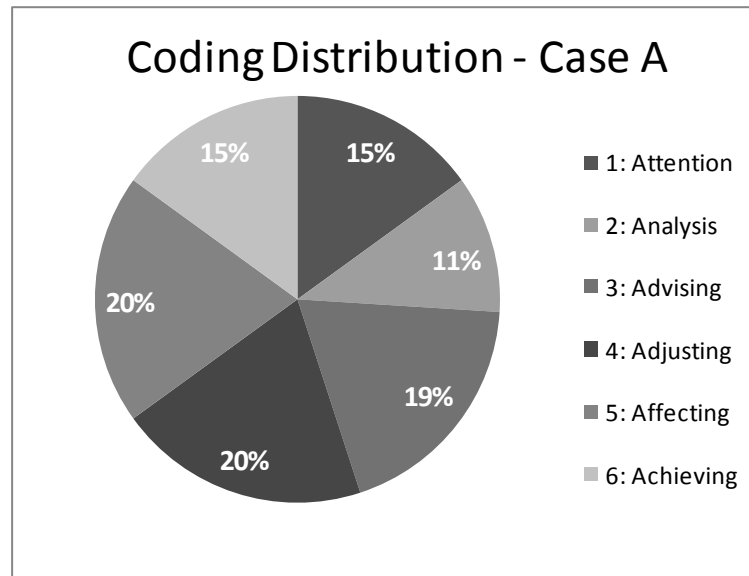


Figure 7-4 –Distribution of Coding across Elements. Source: Derived from data

7-5.1 Refining the Elements

One aim of this Case Study was to provide an initial test of the provisional OL Model of PM and to establish whether the model, as developed from the literature, was relevant to practice. The relevant research questions are:

- RQ1. How is knowledge created within PM practice?
- RQ2. How is action created within PM practice?
- RQ3. Does organisational knowledge influence organisational behaviour?
- RQ4. What is the nature of elements within each case?

However, as this was a pilot Case Study, rather than attempt to answer each question specifically, the analysis here groups these four questions together and considers the Elements of the model first.

The provisional OL model of PM was found useful in structuring the case study but, unsurprisingly, has developed as a result of findings. The main areas of development are the rigidity of the model, the context of the model and the organisational levels at which the model can be applied.

The data indicates that whilst all the Elements of the model are relevant, when considering PM practice the model is not as rigid as first proposed. In the different contexts of different levels of performance management and different management methods, elements can be absent, merged together, or sometimes even occur in a different order. The Analysis element is the most common element that varies.

Organisational Learning is by definition only relevant at an organisational level, but the same underlying performance processes are operating at group and individual level and still contributing to the overall organisational behaviour. In the particular circumstances of this case, the group level is complex, with several layers of management interacting.

Each of the model Elements is now reviewed in more detail.

7-5.1.1 Attention Element

Attention - Initial Definition

A working definition of the Attention Element was derived from the literature (see Chapter 6).

In order to receive feedback on the achievement of its aims and objectives, the organisation directs its attention to its internal and external environments through the use of performance indicators.

Attention - Findings

By triangulating interview content with the content of performance related reports, within the different processes operating attention can be seen to be related to the goals, aims or

objectives relevant to that process. For example, Force level processes were focussed on strategic goals, related to planning, addressing crime and disorder, or organisational development. At team level, attention was mainly focussed on measures of productivity. In addition Attention could be seen to be closely related to the drivers for the particular performance process. The content of the Attention node therefore can be seen as related to the role of performance.

Measures in use included aspects of both the organisation and its external environment. Types of measures in use included, measurement of activity, measurement of outcomes, measurement of resources, or inputs. At Force level, measures used to provide relative context, such as the number of staff, or the number of vehicle kilometres travelled, were also apparent. The use of quality measures was limited, with customer satisfaction having been absent as an indicator for almost two years.

In Force level performance processes, the use of additional information textual (qualitative) information was also sought to provide meaning to the numerical information (quantitative). For example, when consider violent crime statistics, this would be placed against information relating activity that would be likely to affect the statistics, such as specific operations to tackle known offenders.

At Force level, indicators used were structured around a framework, specifically the SPPF. At Divisional level, the SPPF structure was seen to have some influence on the choice of indicators. The control strategy was another strong influence on the choice of indicators but no discernable structure was seen to their choice (e.g. leading, lagging, outcome, activity, or resources).

Indicators around strategic planning were focussed on the extent of progress against a specific task. Indicators based on the impact or outcome from the task were rarely seen.

At team level, the choice of indicators was largely seen to be influenced by the Divisional Commander; however there was no discernable theory behind their choice.

At an individual level, indicators were seen to be influenced by line management. This reflected initial training in the Personal Development Review (PDR) system and a culture that had developed around the use of SMART indicators (i.e. Specific, Measurable, Achievable, Relevant, and Time-bound).

A range of drivers were indicated as affecting the Attention element. As these became apparent from the data, a tree node was created to record these. It was found that the majority of drivers for performance in general, also directly influence the attention element.

Attention - Updated Definition

Based on the data gathered, the Attention element can now be more clearly defined as follows:

Attention is the focus on the environment (both internal and external) that triggers the creation of performance knowledge by the organisation:

- *Through the use of indicators (both quantitative or qualitative);*
- *In order to inform the relative position in relation to the achievement of goals or objectives or monitor action intended to deliver these goals or objectives.*

The Attention element is applicable in performance management practice at levels below the organisational level and is evident down to individual, process, or specific task levels. Attention is strongly influenced by goals and objectives at the relevant organisational level. However the clarity of connection between the indicator and the objective is poorly understood and cause and effect understanding is often weak.

This change in definition highlights that Attention is the starting point for the Knowledge Creation process. Furthermore, as well as informing action, knowledge may also be created to monitor action. The definition goes on to be more descriptive of aspects of practice. These changes provide a definition more reflective of Attention in practice and these help to draw out some aspects that were less clear in the literature.

7-5.1.2 Analysis Element

Analysis - Initial definition

A working definition of the Analysis Element was derived from the literature (see Chapter 6).

The feedback from performance indicators (performance information) must be interpreted and analysed in order to ascertain its actual meaning.

Analysis - Findings

The need for analysis of performance information was broadly recognised and referred to by many in this Case. Analysis was seen as adding value to the raw performance information.

Whilst there were specific personnel and processes for analysis of performance information, these were found to be present solely within the strategic level processes. It was also found that a large proportion of their effort was directed at the compilation of reports with little recognisable analytical techniques being applied to the data.

At a Divisional level, the collation of performance information was often the responsibility of a Crime Analyst, or a specifically allocated Inspector. This meant that capacity for analysis, both in terms of skill and time, was more limited than at Force level.

In relation to the T&CG process and the analysis of crime related detail, the majority of crime analysis staff were deployed at Divisional level. These staff were generally well trained in the appropriate skills, but did not consider themselves to be performance analysts. This was seen to be related to job descriptions and the focus on intelligence led policing. Performance information was not considered an intelligence product.

A degree of support was provided to all analysts through the use of a management information system. Using the skills of an ex-analyst, data was often structured within standardised reports in a format that would reduce the extent of analysis needed. This can be

considered as a type of analysis that is pre-programmed into the management information system.

Analysis often involved the conversion of raw data into structures based on performance framework an data was placed in context of goals/traffic lights, in context of action/text, in context past performance/comparative) There was little evidence of prediction in order to support decision making.

At team level, analysis was simple, and often limited to formatting the data into tables which showed comparison between teams against results for the various indicators. This was sometimes placed alongside contextual information such as absence or abservations.

External data was usually prepared by collation of the data and structuring this against a standard format dictated by the external body requiring the data.

The exception to this was the when reporting to the police board. The format and structure of this was determined by the Force and allowed an element of interpretation to be included.

The output of analysis was invariably the provision of analysed information in some form of report, either printed or verbal.

Analysis - Updated Definition

Based on the data gathered, the Analysis element can now be more clearly defined as follows:

Analysis is the process of adding value to the raw data from indicators

- *Through collation, structuring, and interpretation of meaning*
- *By individuals, but may also be routinized and partly undertaken by automated systems,*
- *In order to support decision making regard the need to adjust organisational behaviour.*

The extent to which information is analysed is dependent on the skills and techniques available and used. The form and nature of the analysis will largely depend on the process and level. The output is an interpretation artefact which can be passed to others through communication.

The refined definition brings out the essential aspect of adding value to raw information. Different methods of analysis are now included. Differences in terms of skills, techniques, process and levels of practice have been added. An output of Analysis has also been identified in order to link Analysis more clearly to Advising. These changes provide a definition more reflective of Analysis in practice and these help to draw out some aspects that were less clear in the literature.

7-5.1.3 Advising Element

Advising - Initial definition

A working definition of the Attention Element was derived from the literature (see Chapter 6).

The meaning of performance information must be communicated to, and understood by, those in a position to take decisions regarding the need for adjusting behaviour of the organisation (or organisational part).

Advising - Findings

Reporting of the results of performance analysis was seen at stakeholder, strategic, divisional, and team levels. Data was also reported at individual level, but no evidence was gathered of analysis at that level.

The format of reports included verbal, formal presentation, and written reports. The most flexible of these was on-screen presentation of live data direct from the performance management system.

The audience or recipients of Advising included both meetings and individuals.

The structure of the report was often influenced by the recipient. An exception to this was the information presented to the Police Board. The format and structure of this was determined by the Force and was designed to provide the performance statistics in a way that highlighted and explained the meaning of relevant information.

Interviewees who were involved in decision making often referred to difficulties with the content and structure of reports. These difficulties included:

- ‘Too much information’ -high volume of performance information detracted from ‘usability’ of product or artefact.
- ‘Ability to explain why’ – the absence or limitations of analysis that included information contributing to understanding of, or explaining, cause and effect.
- ‘Limit on availability of useful information’- the absence or limitations of useable information due to effort involved in collating data or the inability to capture some measures.

As reports were exclusively compiled by the ‘analyst’ (or the person filling the role of analyst), the ability to produce appropriate reports is limited by analytical capacity. All analysts interviewed described that a great deal of their time was taken up preparing reports. Although all described the benefits of a management information system at assisting them, the result of its introduction had been more sophisticated and larger reports rather than more time to analyse. This is seen as reflecting the demand for performance advice.

The format of reports most often used tables to report data. There was some use of graphs to display information from tables. “Traffic light indicators” (red, amber, green) were often used to help present information against pre-defined values.

Text accompanying reports often explained the content of the tables, or graph. This was reported in simplistic terms such as ‘this is down from last month’, ‘we’re in the green this month’. There was rarely any attempt to attribute reasons to changes. Data was often represented against an average or the average over a period. There was no evidence in the reports of accounting for random variation in values.

Advising – Refined Definition

Based on the data gathered, the Advising element can now be more clearly defined as follows:

Advising is the provision and communication of the results of analysis;

- *Through the creation of a performance artefact and uses verbal, written or electronic media;*
- *By the analyst (or person fulfilling the role of analyst);*

In order to support decision making regarding action more appropriate to the achievement of goals and objectives. The content and structure of the artefact is influence by both the recipient and the analyst. The effect of the communication is affected by the confidence the recipient has in the analyst and the indicators.

This revised definition highlights that Advising involves the communication of the results of analysis and the concept of some form of artefact supporting this. The concept of productive knowledge supporting productive action knowledge is introduced. Aspects influencing practice are introduced. These changes provide a definition more reflective of Adjusting in practice and help to draw out some aspects that were less clear in the literature.

7-5.1.4 Adjusting Element

Adjusting - Initial definition

Based on the performance information and the collective experience of the organisation and the decision making group, decisions must be taken, regarding whether organisational behaviour needs to be adjusted, and about the type of behaviour required to better achieve the aims or objectives.

Adjusting - Findings

Using the knowledge created within the knowledge phase and from the organisational and individual knowledge of the decision making group or body, a decision is reached about whether organisational behaviour needs to be adjusted or not. This decision should be judged against relevant goals or objectives, but these may be unclear or, conflicting.

The decision will be influenced by the 'knowledge' provided to the body through Advising.

The Adjusting element is defined as the stage within the practice of performance management where new knowledge created from performance indicators "performance knowledge" is used to influence decisions regarding the need for changes to action by the organisation (organisational action).

The Adjusting element is present at all organisational levels of the PM process but is less distinct in its manifestation at lower levels.

In addition to being influenced by new "performance knowledge", the Adjusting element is strongly influenced by Organisational Knowledge, especially with regard to the experience of those involved in the decision making body.

In addition to being influenced by performance knowledge, meetings are sometimes influenced by aims of 'higher' levels, and the existence of punishments and rewards. For example, the potential to be shown in comparison to other Divisions or Forces may provide

a punishment or reward depending on the relative position. This relative performance alone can influence a decision making body more than the actual performance information.

Performance information is sometimes analysed 'at the table' by members. Alternative explanations to those posed by analyst may be added. This analysis is often based on personal knowledge of attendees. Extent of evidence for decisions is often limited.

The adjusting element is influenced by goals and objectives; however, this may be personal goals rather than organisational ones.

There are different formal processes in which the Adjusting element is present. The more formal processes tend to consider specific aspects of goals or objectives.

It was found that performance information had a disproportionate impact on management decision-making. Whilst intended to support effective decision making through providing summarised information on key issues, it has been seen that an unusual emphasis is placed on the importance and value of performance information presented. This disproportionate response was exacerbated by the following:

- The importance attributed by senior managers to numerical outcomes;
- The use of targets (accountability/learning imbalance);
- The absence of contextual information or interpreted meaning;
- The absence of effective communication, or avenues of communication that allow meaningful discussion between managers and senior managers on the relative importance of the "performance".

A tendency for management decisions, at Divisional and especially team level, to focus on individual productivity was recognised but was seen as difficult to overcome. There were some examples of attention being paid to process improvement, but the default position for decision making appeared to be that individuals "needed to do more" and this was generally derived from the nature of the indicators being deployed.

There is clear evidence that decision making takes place and that this is goes on to affect behaviour modification amongst organisational members.

Adjusting – Refined Definition

Based on the data collected the original definition can be refined as follows:

Adjusting is the process of triggering change in the behaviour of organisation;

- *Through formal processes (of PM, NIM, or others), or informal, decision taking;*
- *By the person or body with responsibility for that sphere of business,*
- *Through the consideration of performance knowledge created from the acquisition of data from performance feedback;*
- *In the context of existing personal and organisational knowledge;*
- *Taking into account the goals aims objectives relevant to that organisational level;*

In order to -

- *affect organisational behaviour through changes to or new, more appropriate action;*
- *address the need for additional knowledge;*
- *or address the need for greater monitoring.*

Adjusting triggers Affecting.

This definition has been updated to include examples of the types of decision making processes found in the Case. Organisational purpose is more clearly reflected. The role of Adjusting is expanded to reflect not just behaviour change, but also double loop activity such as seeking additional information or further monitoring. The link to Affecting is made explicit. These changes provide a definition more reflective of Adjusting in practice and help to draw out some aspects that were less clear in the literature.

7-5.1.5 Affecting Element

Affecting - Initial definition

To influence the behaviour of organisational members, the decisions about required action must be communicated in a manner that will engender their cooperation towards the achievement of organisational aims and objectives.

Affecting - Findings

Means of influencing staff to change their behaviour were found to include instruction, communications, and formal tasking. Other techniques deployed to influence staff behaviour included, creating competition, the use of comparative performance, and the use of targets.

As well as 'command and control', styles of management also included collaborative, transformational, and systems thinking.

The use of subtle rewards and punishments such as improved prospects of promotion or transfer, or psychological pressure (such as blame), were mentioned by interviewees.

The capability of management to influence behaviour was often equated to training and leadership skill.

The monitoring of the implementation of instructions or behavioural outcomes was mentioned in relation to adjusting and feedback loops to the decision making body were often created.

Staff at operational levels highlighted the frequent absence of explanation of why the new behaviour was appropriate and reported more likelihood of compliance with the instruction if this was understood.

Affecting – Revised Definition

Based on the data collected the original definition can be refined as follows:

Affecting is the creation of behaviour change;

- *In response to decisions taken by responsible body;*
- *Through application of management techniques;*
- *By line management;*
- *And often involving rewards and punishments to increase compliance.*

Affecting contributes to Achievement if the behaviour created is aligned to organisational aims and purpose.

The revised definition has clarified the means of communicating and influencing organisational members. The link to Achieving has been made explicit. These changes provide a definition more reflective of Affecting in practice and help to draw out some aspects that were less clear in the literature.

7-5.1.6 Achieving Element

Achieving - Initial Definition

Organisational Learning is achieved when, based on the feedback, new behaviour, more appropriate to the aims or objectives of the organisation is realised, encouraged and enacted by members.

Achieving - Findings

Compared with the other elements of the model, less data was found that related to the Achievement element. However, some key points that came from the data are described below.

Achievement must be seen as relative to the aims, goals, or purpose of the organisation, i.e. what is the impact on the environment the organisation exists to create. Without the standard of the Force goals to judge behaviour against, it may be seen that a behaviour change results from new knowledge, but that behaviour may be an unintended consequence rather than that desired. Fulfilment of these goals is evidence of OL. Thus learning can be seen as “positive” in that it leads to fulfilment of organisational goals.

Some performance processes, especially at team level, were found to lack clear alignment with overall Force aims.

The behaviour of organisational members does not always conform to that intended by the decision maker(s), and the influence applied by team leaders.

There were examples of unintended consequences (or perverse outcomes) from management techniques applied at team and individual levels.

Short term changes in behaviour are not Achievement.

Conflicting demands were caused by local and national objectives.

The small number of factors found at this level was initially somewhat surprising; however, it is likely that this may reflect both the cumulative effect from the other elements, and the possible lack of fulfilment of this element. Factors are discussed in more detail later.

Evidence of behaviour change is more readily available than evidence of desired impact on environment. There are so many factors influencing the environment, such as a change in the economy, that it is difficult to determine which whether policing is having an impact when only considering factors such as crime levels.

Although an apparent performance change can be seen in this Case, it is difficult to establish a cause and effect relationship between the action of the Force and the outcome.

Achieving - Refined Definition

Based on the data collected the original definition can be refined as follows:

Achieving is the completion of organisational learning,

- *through the greater alignment of organisational behaviour with the overall aims or purpose of the organisation (Force),*
- *enacted through the behaviour of individual members, or embedded in new routines.*

Evidence of environmental impact may be more difficult to obtain than evidence of behaviour change. Change at a local level is not OL unless this is contributing to overall aims of Force or until it has been widened to become the way the organisation operates

The revision to the definition incorporates the concept of productive action, and adds clarity to how organisational behaviour is enacted. A caveat regarding local versus organisational change is also added. These changes provide a definition more reflective of Affecting in practice and help to draw out some aspects that were less clear in the literature.

7-5.2 Summarising the Elements and Flow of PM

In this section, the data collected from the case has been collated according the relevant Element of the OL Model of PM and used to review and revise the definitions derived from the literature.

Based on the above, it can now be said that, as a theoretical proposal, the OL Model of PM has withstood a practical test. It is concluded from the data that the Elements derived from the literature were all relevant and, although minor refinements were possible, the model has not changed significantly. The new definitions provide a better understanding of the nature of each element and how they operate, or flow, together. Performance Management practice

can be seen to be operate towards the delivery of Organisational Learning with the intention of better adaptation of the organisation towards achievement of its goals.

Some factors have started to be identified and discussed but the next section goes on to consider these in more detail.

7-6 DESCRIPTION OF FACTORS AND DIMENSIONS

This section discusses how factors influence the PM process and how these have been grouped to create a list of influencing Dimensions. Through this, the following research questions are addressed:

RQ5 - In practice, what factors influence the PM process?

RQ6 - What is the relationship between these factors and the individual elements of the process?

7-6.1 Factors/Influences by Element

Earlier it was proposed that the complexity of organisational dynamics will variously affect each element of the model and the interactions between them. In addition, these affects will act as catalysts or inhibitors to the process (refer to Chapter 6). Based on emic issues, a wide range of factors identified as having either a positive impact (catalysts) or a negative impact (inhibitors) on the overall process of managing performance were identified.

Factors identified as affecting positive Organisational Learning outcomes (that is, the successful embedding of new behaviours more in line with the organisational mission or purpose) were most often associated with a specific element of the OL model of PM. The relationship between these factors is shown Figure 7-5.

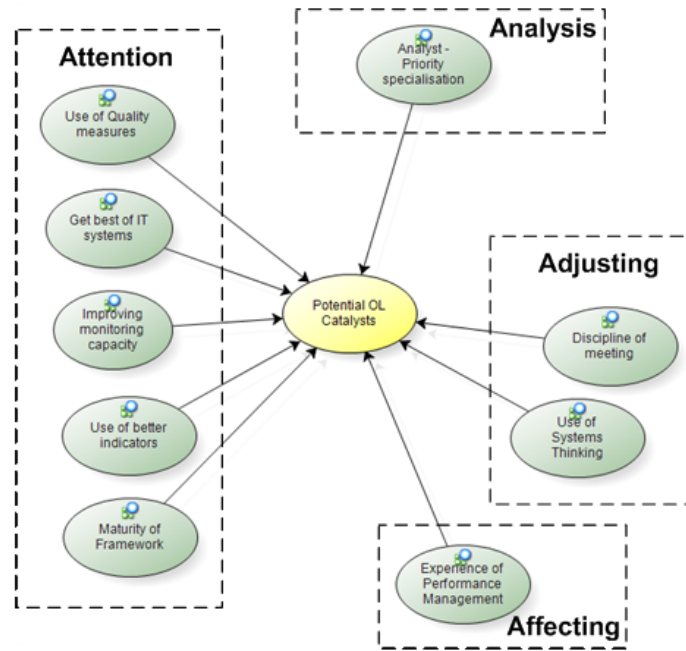


Figure 7-5 - Potential Catalysts by Model Element. Source: Derived from data

The content of interviews tended to focus more on negative influences. These again were often connected with a specific element of the OL model of PM. This is represented in the model shown in Figure 7-6.

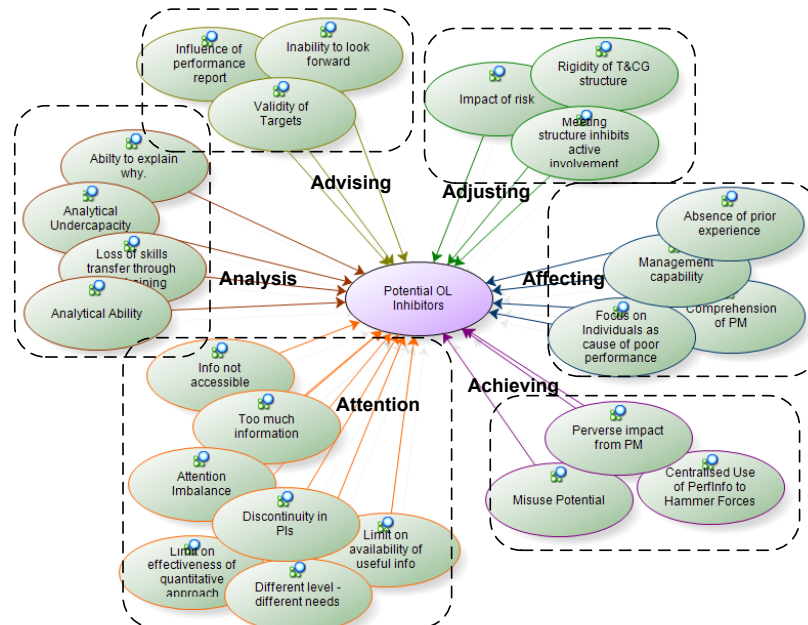


Figure 7-6 - Potential Inhibitors by Model Element. Source: Derived from data

7-6.2 Dimensions of Influence

Earlier it was proposed that to effectively achieve OL, the elements of PM must work efficiently together (refer to Chapter 6). Examination of the data revealed the range of factors affecting the process of performance management and these factors often affected more than one element of the model. To examine these factors more closely, they were first identified as either catalysts or inhibitors, depending on whether they were seen as having a positive or negative impact. However, as these were considered, it was apparent that the impact could be referred to by the presence or absence of a factor. It was therefore decided to consider these as existing along a dimension that influenced the PM process.

For the purpose of this research then, a dimension is defined as having a range of influence, including positive to negative, on aspects of the OL model of PM, and into which factors with common attributes can be logically grouped. The difference between elements and dimensions can best be described as related to structure and function. The elements of the OL model of PM describe the structure of the process, whilst the dimensions impact on the function.

Each of the factors identified were considered and grouped according to their nature into dimensions. For example, discussions relating to the absence of analysis, and discussions relating to the value of analysis, were grouped into a dimension that evolved into Analytical Capability as related items were added to it.

Ten Dimensions were identified, namely; Alignment, Analytical Capability, Context, Culture, Decision Making, Information Value, Leadership, Management Ability, Organisational Knowledge, and Organisational Purpose. Not all Dimensions were equally evidenced or indeed had equal influence. The number of references by Element and Dimension are shown in Table 7-4. This shows that whilst some elements are influenced by a wide range of Dimensions (e.g. Affecting), some influences are more focused (e.g. Analysis).

	Alignment	Analytical Capability	Context	Culture	Decision Making	Information Value	Leadership	Management Ability	Organisational Knowledge	Organisational Purpose	Total
4 Adjusting	25	16	13	3	36	4	10	12	6	67	192
1 Attention	30	6	5	4	11	14	8	7	13	6	104
5 Affecting	24	15	15	0	13	9	2	6	4	5	93
2 Analysis	13	30	8	0	4	5	1	3	1	7	72
3 Advising	12	3	2	0	11	2	5	13	7	5	60
6 Achieving	8	2	2	1	2	2	1	7	8	6	39
Total	112	72	45	8	77	36	27	48	39	96	560

Table 7-4 - Dimension Elements Matrix. Source: Derived from data

Of these ten dimensions created during the analysis, three of these were more frequently referred to and are explored in more detail below. The remaining dimensions are seen as more relevant to specific elements and are discussed later.

7-6.3 Exploring the Dimensions

7-6.3.1 Analytical Capability Dimension of Performance Management

Factors related to a dimension of Analytical Capability were mentioned by eight of the interviewees in this case study. The evidence gleaned from the interviews is supported by the Force documentation and artefacts, as well as the observation at performance related meetings.

These factors relating to Analytical Capability include:

- Ability to explain why.
- Reporting not analysing.
- Management Thinking.
- Analytical Ability.

- Specialisation v Generalisation/Priority Specialisation.
- Cause and Effect.
- Absence of meaningful feedback.

By mapping these factors in terms of their logical connection and influence on one another, a causal network (Miles and Huberman, 1994) with an overall theme of *Analytical Capability* emerges. The resulting causal network is represented in Figure 7-7.

This concept of Analytical Capability can be considered as representing the potential range of factors that impact on the organisational capability to provide meaningful interpretation of performance data in a manner that supports decision making.

Closely related to the element of analysis however, this dimension specifically reflects the analytical capacity, ability, competence, resources applied and potential of the analytical structures to deal with the volume of performance indicators within the various processes of performance management, and the ability to provide meaningful interpretation of the data into usable reports for decision makers.

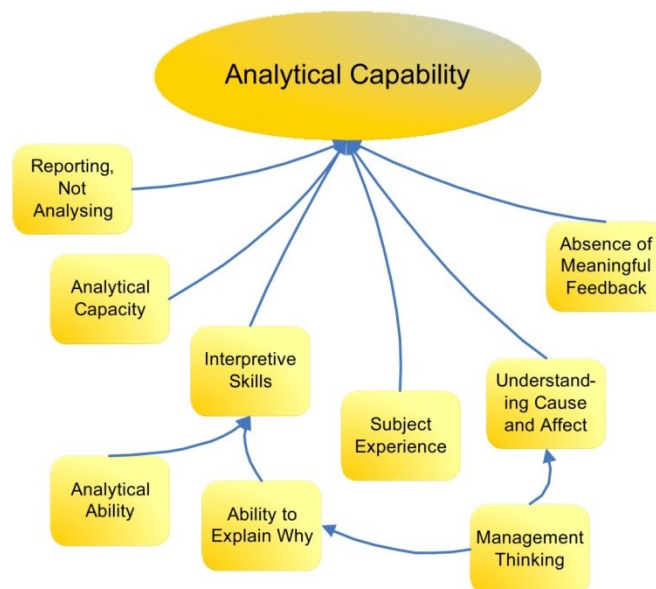


Figure 7-7 - Factors of Analytical Capability Dimension. Source: Derived from data

There is sufficient evidence from the data to conclude that the factors identified are influencing performance management practice. The nature of the qualitative analysis does not allow any conclusion regarding the relative influence of each aspect.

Analytical Capability was found to have an impact across a broad range of the OL process including both Knowledge creation and Action creation phases. Clearly the greatest impact is noticed within the Analysis Element but this appears to also have a subsequent affect in later stages of the PM process.

7-6.3.2 Decision Making structures Dimension of Performance Management

Tasking and Coordinating Groups (T&CG) were held at Force and Divisional levels. Meetings based around the T&CG structure were rigid in format. This format was seen as causing some difficulty when introducing performance information. The T&CG structure does not provide a formal process for introducing performance information. There was discomfort around how performance information should be considered at T&CG meetings and also how this should be formalised into or appended to existing procedures.

The structure for other performance meetings is not rigid. It was not formally established or consistently formatted across the Force. There are different drivers for these performance meetings across the Force. In some areas the structure was formalised with minutes and actions. In the absence of a model to follow, meetings to consider performance are new and are in a state of evolution. They were becoming more formalised over time.

Performance meetings were sometimes held on their own and sometimes joined to management meetings. All Divisions considered their performance at a monthly meeting. Performance was also considered at Force level on a monthly basis.

In one Division, PM meeting drivers are preparation for the Force level meeting. These provide a brief and prepare the representative on emerging issues and issues that may cause

them to be challenged at the meeting. In another Division, the link to Force level T&CG was less apparent.

The means of presenting information to the decision making body varied. At Force level performance data was presented "live" on-screen for a trial period. At Divisional level on-screen and paper were used. Sometimes Crime Analysts presented the data Divisional level and sometimes it was a police officer with specific responsibility for performance.

The conduct of Force meetings was seen by the chair as ineffective, with reluctance on the part of members to contribute meaningfully. This was attributed to members deferring to the dominant position of the chair, but may also be related to leadership style. Leadership has an impact on the structure and conduct of the meeting. Changes in meeting conduct were often mentioned alongside a change of Chair.

The Decision Making Structure Dimension is clearly related to the Adjusting element. From the issues identified above from the data, we can say the Decision Making Dimension had a varied effect on the process of performance management largely through influencing the Adjusting element. Two main modes of Decision Making Structures can be seen as emerging, i.e. accountability, and learning.

7-6.3.3 Management Ability Dimension of Performance Management

Some data to suggest that interpretation is also influenced by the management thinking adopted within the Force was found. However this was not sufficient to explore further other than to say that it is reasonable to expect that the way management see the connection between cause and effect, and therefore the tactics they tend to adopt, will be affected by how they believe members can be influenced in order to achieve the aims of the organisation.

7-6.4 Summarising re Factors/Dimension

This section has explored the data in relation to the research questions on factors influencing the PM process. It was identified that a wide range of factors influenced PM practice in Case A. The list of factors was not reproduced due to the volume of individual factors identified. To address this large volume of factors, they were grouped together and considered as potential Dimensions of influence (see Table 7-5).

Dimensions of Influence
Alignment
Analytical Capability
Context
Culture
Decision Making Structures
Information Value
Leadership
Management Ability
Organisational Knowledge
Organisational Purpose

Table 7-5 - Dimensions of Influence. Source: Derived from data

Based on the data it is proposed that in Case A, the PM process is influenced by the Dimensions identified and that these can have a positive or negative impact on elements of the process. It is further proposed that the effectiveness of the underlying OL process will depend on the nature of these influences. The impact of OL is therefore related to the presence and nature of these dimensions.

7-7 THE COMPLETION OF OL

Two research questions address the prevalence of OL by considering the completion of the OL process, namely:

RQ7. Which factors influence the completion of OL?

RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?

In this case, it was not practical to specifically identify factors influencing the completion of OL. Methods were developed for considering this during the analysis of Cases B and C.

In relation to the overall operation of the OL process, the following discussion covers the nature of the OL process as found in Case A.

7-7.1 Performance processes operating at different levels

Performance information is used in different managerial and structural levels of the Force, these can be generalised as Strategic, Divisional, Team or Area, and Individual levels.

Strategic level - typified by involvement of executive level members, focussed on overall direction of the organisation, and accounting to stakeholders. Performance practice is formalised through planning processes. Stakeholder level processes were also closely monitored at the Force level.

Divisional level – led by a Divisional commander, focussed on delivering the aims of the Force, but taking into account the needs of local communities. Performance practice is enacted through local meetings with less structured approach, keeping one eye on contributing to Force aims and one eye on delivering the day to day service required by local communities.

Team or Area level – led by Team or Area Inspector, directed by Divisional Command, but largely influenced by dealing with day to day demand. Performance practice involves regular team meetings that are relatively unstructured and consider performance information provided at a Divisional level.

Individual level – led by first and second line managers. In some Divisions, performance practice was typified by the need to achieve numeric quotas for specific tasks, these were generally undertaken outwith the activities that deliver the primary service. Performance practice is related to formal annual performance assessment as well as informal discussion between managers and staff.

It was found that practice in all these areas was in state of development with regular changes to practice. Within the Force being studied, the most embedded practice was in one Division that had established regular feedback over nearly two years. Other Divisions had less well developed processes at the Divisional level and were making tentative steps with regard to the use of performance information at area/team level.

The reporting of performance information to external bodies is common practice, with a major proportion of Force performance analysis and reporting capability being applied to this. These performance processes involved the governance (Police Board) and scrutinising bodies (HMIC, Audit Scotland, Scottish Government) as well as ACPOS were also apparent.

Efforts had recently been made through the Scottish Policing Performance Framework (SPPF) to align the reporting requirements of these organisations resulting in a consistent set of data being reported on a quarterly basis, however, previous reporting requirements by HMIC and Audit Scotland had still not been completely eliminated. This resulted in some duplication or less relevant data being reported through legacy performance indicators.

Stakeholder level – Governance processes involved reporting, presenting and discussing performance information in a formal manner to the Police Board on quarterly basis. For scrutinising bodies, performance information was reported but without any explanation of their meaning or interpretation. A recently introduced process of reporting performance information based, on the SPPF, along with appropriate contextual information to which the scrutinising bodies had access had

recently been introduced but was still undergoing significant amounts of development around its content and use.

Whilst the process of performance management (the 6A's) may be applied at any level, it is only an OL model when considering the organisation as a whole.

7-7.1.1 Alignment of Performance Management Processes

Whilst performance processes are operating at different levels, the extent to which these were coordinated varied. This is best described by considering performance management to be defined by what 'performance' is being managed and how it is being managed. We can then classify practice by these types.

The types of 'performance' being managed included:

- *Strategic Goals.* Through control strategy established by the strategic assessment. Largely related to crime levels and detection rates. This largely applied to processes defined by the National Intelligence Model.
- *National Performance Framework.* Through a set of high level objectives established by the SPPF and deployed within the Force.
- *Statutory Performance Indicators.* Through nationally applied indicators agreed with Audit Scotland (that have since been incorporated into the SPPF), and specialised indicators used by HMIC.
- *Team and Individual productivity.* Through monitoring standards, volume, quality of recording and processing of paperwork, etc., established by Divisions.
- *Strategic Planning.* Through monitoring progress against activities and objectives set annually around organisational development needs.

The type of management being applied included:

- NIM - based on formal processes established around a control strategy

- Force Executive Board – considers overall Force performance being reported to stakeholders.
- ‘PIM’– based on informal processes that evolved locally to consider a wide range of
- Performance Appraisal – Formal annual review of performance as defined by personal objectives.
- Locally developed team performance feedback and management. Ad hoc feedback processes established to provide information to team leaders on aspects of their team’s performance.

Whilst at performance related to strategic goals this was successfully cascaded through all areas based on the structures and processes defined within the NIM. However the type of performance information used largely remained restricted to crime statistics.

The development of more formal processes had evolved differently within each Division although there was some evidence of sharing of good practice. It became apparent from the data that, within this case, the performance practice introduced by some Divisional Commanders and some team leaders, was not congruent with the overall Force aims and direction.

At this level, performance practice was often oriented towards team and individual productivity but the links to Force priorities and strategy were not always evident.

Where non-strategy aligned processes were evident, these tended to be driven by a management style that involved ‘holding people to account’. In these circumstances there were reports from front line staff that suggested a higher incidence of unintended consequences being apparent.

7-7.1.2 Strategic Disconnect

Bitichi et al (2000) described interlocking performance processes operating at different organisational levels. However, in this case it has been found that more than one performance process is operating, with varying emphasis being placed in different parts of the Force.

It is considered that this inconsistent application of performance management will have a distorting effect on behaviour.

The importance of the performance goal to the practice of performance management is seen to be critical to coordinating

Essentially, staff are being managed against conflicting or inconsistent goals. Against the background of a consistent NIM structure this makes little sense. However, this diversity can be seen as a direct outcome of the liberal approach to the development of PM practice in the Force and the desire for an evolutionary approach. The principles of evolution only apply however, if there is an overall process in place to limit unsuccessful developments. In this Force, the time is now ripe to pick the best of the crop and develop a consistent approach that maintains the alignment to overall Force (and stakeholder) aims, even if these are locally expressed.

7-7.1.3 Learning or Training processes.

It is proposed that what was being observed was the management of performance but being managed from various perspectives. Each level had the opportunity to learn from performance feedback and to use this to adjust behaviour, but each level was also influenced by higher organisational levels, or in the case of the Force as a whole, by external stakeholders.

As well as operating at different levels, a distinction is noted between the performance process when used for accountability and those used for learning.

Within processes based on accountability, decision making about appropriate action or feedback about appropriate action was not present. Decisions were taken against a pre-defined or imposed objective(s) against which the person (or group) responsible would be judged. That is, performance processes based on accountability, assumed change would occur (in line with the performance indicators) with responsibility for determining the appropriate action being devolved to a person or group, without the need to specifically express the necessary action. A meeting held to hold people to account, that is, to assess whether the objective was achieved, would focus on the objective and would not include discussion about appropriate action. Likewise, performance information presented to the meeting would focus on objectives or targets, and have little or no need for understanding why the results were as they were.

In contrast, within processes based on improvement, decisions were seen to be influenced, or desired to be influenced, more by the performance knowledge based on attributing meaning to the data. This in turn is largely dependent on Analytical Capacity. The influence of the accountability process was based on the availability of rewards and punishments.

Considering this from the perspective of the OL model of PM, it is proposed that the elements of the model remain the same within both, however the content, that is, the information, the analysis, the communication, the mode of decision making, the means of influencing staff, and hence the achievement, will be different. This provides a clear distinction between performance based on accountability and learning, with 'accountability' being the management of one group by a higher organisational level based on defined goals and objectives applied by a higher organisational (or stakeholder) level, and learning being the determination of practice more appropriate to the achievement of organisational purpose by the level with responsibility.

This also opens up the debate around the distinction between performance measurement and performance management. The data gathered indicates that performance measurement by scrutinising bodies does have an influence on decision making. The mere act of collating and presenting data from one Force alongside data from another Force can be seen to have an influence on decision making. The performance measurement by these scrutinising bodies can therefore be said to also be a form of external management.

The distinction therefore becomes whether performance is being managed by the organisation, or whether it is the performance of the organisation that is being managed by the stakeholders.

Performance Management is therefore seen as dependent on who is managing who. It can be both management by the organisation by members or management of the organisation by stakeholders. Management by external stakeholders may be considered as organisational training, (rather than organisational learning) where the aim of the stakeholders is to get the organisation to comply with their objectives through an accountability process and the application of rewards and punishments.

The development of performance frameworks and performance feedback to stakeholders, such as Audit Scotland, Scottish Government, HMICS, Police Boards, places them in a position where they are able to have some element of control over Police Forces. However, the other side to the coin is that the control may have a distorting influence, creating perverse outcomes, as the behaviour is not based on knowledge but the influence of punishments and rewards.

The relative strength of an accountability culture and the strength of the organisational knowledge resulted in either learning or training.

As the Force has matured in its development of performance management, the desire to move from processes based on accountability to processes based on learning has increased, but this has been limited by that Analytical Capacity.

This concept of learning or training can be applied at levels within the organisation. For example, in discussing performance management at team level, we need to consider whether we are discussing how teams manage their own performance, or how (in this case) Divisional Command manipulates the behaviour of teams through the use of rewards and punishments.

The use of performance information to inform decision making at all levels is a critical skill for modern Police Forces. The impact of behavioural change decisions at a management level must effectively be communicated to and enacted at the front-line to achieve the desired change.

Perverse outcomes, by definition, work against the organisational purpose. The frequency of examples of perverse outcomes was surprising and indicated the importance of attending to the performance management process and ensuring its effective operation. At this stage, the findings suggest that management training in the understanding and appropriate use of performance information is key to effective deployment. Managers need to be able to deploy a range of tactical tools, rather than just saying “do more”.

The limitations of management in effectively using performance information can be seen connected to the absence of analysis in any form; however, the direct conversion of low numbers into more action cannot solely be attributed to this. It is apparent that managers lacked options for dealing with achieving lower figures than others, and that the apparent pressure from Senior Management led them to resort to the "do more" tactic. The lack of effective lines of communication with Senior Management to discuss the meaning of performance information is seen as contributing to this limited choice of action. This pressure on staff to do more specific tasks led to competition amongst staff to achieve higher numbers in a context where quality was secondary. Greater options for managers and staff could be created by clearer articulation of the meaning of strategic objectives and how these could translate into tactical options.



Figure 7-8 - The Ideal OL Influence on Adjusting. Source: Author proposed

For a performance management process to be considered as contributing to OL, the original proposal that the knowledge created must contribute to the determination of new action, must be present (See Figure 7-8).



Figure 7-9 - The Actual Influences on Adjusting. Source: Author derived from data

This means that the Adjusting element must be influenced by the performance information rather than existing organisational knowledge or, for example, centrally determined action. In practice, however it has been seen that stakeholders, as well as personal and organisational knowledge, influence decision making (See Figure 7-9). The balance between the relative influence of the stakeholder and the performance knowledge defines the difference between the accountability type of performance management and the learning type.

7-7.2 Summary re Completion of OL

This section has considered the nature of the completion of OL. Discussion has focussed on:

- a) The presence of PM practice at different managerial and structural levels of the Force, which were generalised as Strategic, Divisional, Team or Area, and Individual.
- b) The presence of a strategic disconnect that detracts from the overall achievement of OL.
- c) The difference between learning and training and the influence of external bodies.
- d) The alignment of performance processes operating at different levels.

This discussion has generated a range of theories regarding influences on the completion of OL.

7-8 CONCLUSIONS

As intended, a broader picture of the performance management process has developed based on the evidence collated in this Case Study.

It was found that PM at the organisational level could not be considered in isolation from PM practice occurring at other levels; the organisational learning process needs the context of organisational purpose in order to give it meaning; and the alignment of processes operating at different levels was not as would be anticipated. Each of these concepts is now considered in more detail.

7-8.1 An Evolution of the OL Model of PM

As discussed in Chapter 6, an organisation exists in order to create an impact on the environment around it. It may be considered the concept of the organisation is organising in order to deliver on that purpose. Organisational purpose or intention provides context and

meaning to the concept of organisational learning. Without this, consideration of the individual elements of the model loses direction and cohesion.

Based on consideration of the elements described earlier, it was found that the concept of feed-forward and feedback required the context of the interaction between the organisation and its environment in order to make sense. This interaction is based on the purpose of the organisation, and any organisational learning can be considered as relevant to this context.



Figure 7-10 - OL as Organisation/Environment Interaction. Source: Author derived from data.

Whilst identified in Chapter 6 (Section 6-4.2), organisational intention was not included in the graphical representation of the OL Model of PM. The overall conceptual model (as shown in Figure 7-10) has now been updated to include the concept that the purpose of the organisation is to have an impact on its environment. Achievement of this purpose is managed through a process of creating knowledge about its performance and creating action intended to improve achievement of this purpose.

The OL model of PM was intended to provide a structure in which to examine practice, and

not to provide a comprehensive description of performance management. However, the development of the model, based on the data from this single case study, provides a better understanding of the relationship between the various elements of performance management practice, and clarifies the nature of its relationship to OL.

Research Questions	Addressed Through	Case A Conclusion
RQ1. How is knowledge created within PM practice?	Considering the nature of the Elements, confirming their presence and refining their meaning.	The nature of each element has been considered in light of the data and better understanding of the elements and how they operate, or flow, together has developed. The model has not changed significantly. PM practice can be seen to be operating towards the delivery of OL with the intention of better adaptation of the organisation towards achievement of its goals.
RQ2. How is action created within PM practice?		
RQ3. Does performance knowledge influence organisational behaviour?		
RQ4. What is the nature of elements within each case?		
RQ5. In practice, what factors influence the PM process?	Considering the Dimensions that influence the process of OL and exploring the extent to which each Element is influenced by the Dimensions.	A wide range of factors were identified as influencing PM practice in Case A. These were grouped together and considered as potential Dimensions of influence. The impact of OL was proposed as related to the presence and nature of these dimensions.
RQ6. What is the relationship between these factors and the individual elements of the process?		
RQ7. Which factors influence the completion of OL?	Considering the extent to which the completion of OL was present.	Case A has shown different PM practice at different managerial and structural levels of the Force. A strategic disconnect was identified and was proposed as detracting from the overall achievement of OL. The difference between Organisational Learning and Organisational Training was derived and the how this was influenced by pressure from external bodies was proposed. The alignment of different process was also seen to influence OL outcomes.
RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?		

Table 7-6 - Addressing the Research Questions - Case A

Earlier it was proposed that the practice of performance management involves both feedback and feed-forward interaction between the environment and the organisation. This provisional OL model of PM was used to categorise the data gathered during the field work. As the analysis progressed the overall fit of the model was found to be sufficiently flexible to accept the majority of data. The data has been used to help refine the overall structure of the model and provide new definitions of the elements.

The findings of this case cannot be generalised to other Forces or organisations based on this data alone. However, the provisional model of PM, projected from the OL and PM literature has withstood examination against the data from this case, albeit with some refinement.

Additional case studies are necessary in order to broaden the validity and applicability of the findings. The advancement of the OL model of PM through this Case Study will enable more refined analysis of such future cases. Additional case studies would also allow results to be compared across different areas of the UK where different influences may be expected.

Once a firm theoretical basis has been established for organisational learning from police performance management, more detailed quantitative approaches to examine the extent of variation between Forces and the more precise relative influence of factors would become possible.

The following Chapters go on to review the findings from two more Case Studies and to consider the implications of all the Cases together.

7-9 REFLECTION

It should be pointed out at this stage that the choice of six element labels beginning with the letter A is largely for aesthetic purposes. Whilst alternative labels for the elements have been considered, the choice of 'six As' provides some cohesion to the model and was found useful in explaining it to others.

Additional case studies would be useful in identifying how Forces have mitigated against the negative impact of factors and influences on their performance management practice.

Broadening the application of the model to other public sector areas would also be of value. The ultimate aim of further research would be to identify how organisational learning can be maximised whilst retaining the necessary connection between public services and their stakeholders. In other words, *how can accountability and learning operate effectively together?*

Looking back with the benefit of having completed Case Studies B and C, the analysis in this case was not as detailed or sophisticated. The skills and methods of analysis developed as the research progressed, and indeed, still continue to develop. Different ways of using the data and different ways of asking questions become apparent as experience develops. However, it should be noted that although not written up here, further analysis of the Case A data has been undertaken to provide a compatible data set for the Cross-case analysis in Chapter 11.

The approach to writing up this Case Study has relied more on the summarised findings of the Case, rather than referring directly to the original sources. It would have been beneficial to the reader to be able to refer to some relevant source data. This would link the findings more clearly to the data and provide greater context. This was addressed in future Case Study write-ups, see Chapters 8 and 9.

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8-1 ORGANISATION OF THIS CHAPTER

The following table (Table 8-1) is provided to orient the reader to the content and structure of the chapter and to indicate its relationship to the Research Questions.

Content	Relevance to Research Questions	Comment
The Refined OL Model of PM	Establishes the basis on which this Case Study was analysed	Derived in Chapter 7
Case Study B - Description	Describes the attributes of the Case and Case Study.	Provides context to findings.
The Elements and Flow of PM	Directly Addresses RQ1to RQ4 RQ1. How is knowledge created within PM practice? RQ2. How is action created within PM practice? RQ3. Does performance knowledge influence organisational behaviour? RQ4. What is the nature of elements within each case?	Results in theory of OL process in Case B. Helps to address the research problem in relation to the impact of OL.
Description of Drivers, Factors, Relationships	Directly Addresses RQ5 & RQ6 RQ5. In practice, what factors influence the PM process? RQ6. What is the relationship between these factors and the individual elements of the process?	Results in theory of influences in Case B. Helps to address the research problem in relation to the impact of OL.
Completion of OL	Directly Addresses RQ7 and RQ8 RQ7. In practice, which factors influence the completion of OL? RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?	Results in theory of Completion of OL in Case B. Helps to address the research problem in relation to the prevalence of OL.

Table 8-1 – Organisation of Chapter

This chapter considers the case of a Police Force in England and addresses the research questions by a within-case analysis. The case is reviewed in terms of a description of the elements and flow of the process of PM, a description of drivers, factors and relationships within the Model, and the evidence of OL outcomes.

8-2 CHAPTER INTRODUCTION

Building on the Pilot Case Study described in Chapter 7, this Chapter goes on to consider a Case Study from a different area of the UK. To avoid an overemphasis on the idiosyncrasies of practice in Scotland and to provide a UK wide perspective, this Case and the Case described in Chapter 9 were chosen from England and Northern Ireland. This selection of cases from three differing contexts provides some support for generalising any findings.

As with the Pilot Case Study, the approach adopted here is to undertake a within-case analysis (Pettigrew, 1990). Within-case analysis typically involves detailed case study write-ups for each site and can help investigators cope with the deluge of data (Eisenhardt, 1989). However, as there is no standard format adopted, the key principle of the generation of insight has guided the content and format of these write ups (see Eisenhardt, 1989, Gersick, 1988, Pettigrew, 1990). The aim of this within-case analysis is to understand the Case as a whole in the context of the OL Model of PM and to address further the Research Questions.

A cross-case analysis of all three cases is included in Chapter 10.

This Case Study and the Case outlined in Chapter 9 were conducted using the same theoretical basis as the Pilot Case Study, but using a revised OL Model of PM based on the Pilot case Study. The background to development of PM practice varies across the UK (see Chapter 2).

A full explanation of the methods adopted to analyse data are contained in Appendix A.

8-3 THE REFINED OL MODEL OF PM

The Pilot Case Study (Case A) discussed in Chapter 7, resulted in a revised OL model of PM (see Figure 8-1).

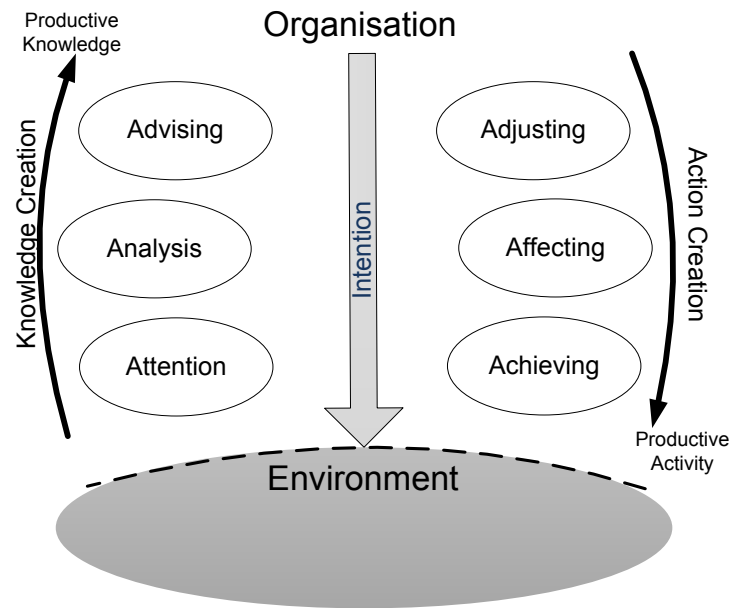


Figure 8-1 - OL As Interaction. Source: Chapter 7

The change in the model has emphasised the role of organisational intention, that is, the goals or purpose of the organisation in terms of its intended influence on its environment, its reason for existence.

The Research Questions (identified in Chapter 6, see Table 8-1 – Organisation of Chapter) are still appropriate to the revised model.

8-4 CASE B – A POLICE FORCE IN ENGLAND

The following section introduces the attributes of the Case before the Chapter goes on to review the findings from the analysis of data from a second Case Study (referred to here as Case B). Later, based on the evidence from the analysis of the data, conclusions are drawn regarding the Research Questions in the form of three theories regarding, a) the process of OL, b) the underlying influences on the process, and c) the completion of OL.

The data analysis method is discussed and described in Appendix A – Analytical Approach.

8-4.1 Case B – Description of Case

Geographical

Case B is one of 43 Police Forces in England. A medium sized Force, Case B covers an area of over 1351 square miles and a resident population of around 0.7 million. With just over 1400 police officers and around 1000 police staff, the Force operates in three geographical Command Units.

Its similarity in size to Case A influenced its choice as a Case Study.

Within Case B, policing priorities are influenced by a number of national and local priorities including the Home Secretary's Strategic Policing Priorities, Local Area Agreements, Community Safety Agreements as well as Strategic Assessments carried out with partners.

Background

One of the reasons this case was chosen was the background to the development of its performance culture. Around 2004, the Force had been involved in a high profile child murder case. The subsequent focus on the Force by the Home Office and the media identified a number of failings in the handling of the case and these were associated with poor performance. As a result the Force was engaged by the then Policing Support Unit (PSU) of the Home Office and a new Chief Constable was appointed. The PSU worked alongside the Force to put in place new performance practices in line with Home Office thinking.

At the time of the Case Study, in 2008, the practices in place could therefore be seen as representative of those seen as appropriate by the Home Office, albeit subject to development by the Force in the intervening years.

Performance Management Processes

Key management processes that were present were a formal Performance Management

process, the use of the Tasking and Coordinating process within the National Intelligence Model, and a process called Crossfire which was unique to this Case and was specifically improving ‘customer satisfaction’.

An individual performance monitoring process was also in place but was not specifically considered by this study.

8-4.2 Case B - Conduct of Case Study

This case study was undertaken with the consent of the Chief Constable of the Force concerned during September 2008.

Interviews

Interviews and Focus Groups were semi-structured in nature, covering key points suggested by *a priori* constructs (the OL Model of PM) developed from the literature (Eisenhardt, 1989) but varied according to the specific experience and views of the interviewees. Interviews involved 14 members of staff from key aspects of the PM process. Most interviews lasted around an hour. These interviews covered a range of actors in the PM process, from Executive level, to officers on the ‘front line’. This created a ‘diagonal slice’ through the PM process in the organisation.

Rank	Number of Interviewees
Executive level	1
Superintendent/ Chief Superintendent	2
Chief Inspector /Inspector	5
Sergeant and Constable	3
Support Staff	3

Table 8-2 –Number of Interviewees

This Case Study involved interviews with organisational members involved in a wide range of aspects of PM practice, for example, from officers on the street who were subject to PM practice, to decision makers and people involved in analysis of data. The interviews were

aimed at obtaining a description of aspects of practice within the knowledge of the interviewee.

Interviews were completed in accordance with the Case Study Protocol. All interviews were audio recorded and later transcribed.

Observation

In addition to the interviews, a number of critical meetings were attended as observer. These included:

- Monthly Performance Meeting
- Monthly Crossfire Meeting
- Level 1 Tasking and Coordinating Meeting
- Level 2 Tasking and Coordinating Meeting

Observation notes of these meetings were kept and recorded in NVivo.

Artefacts

Copies of documentation presented at meetings were obtained where appropriate and where agreed. A considerable amount of this material was Confidential or Restricted in terms of the Government Protective Marking Scheme. This meant that other than viewing and noting significant content, it was difficult to use this as the basis of a systematic review.

8-4.3 Case B - The Role of PM

As with the other Cases, the role of PM practice differed in terms of what was being managed. The three subjects of management, namely People, Resources and Processes, were all present in Case B (refer to Figure 8-2) but in different proportions to the other Cases. The difference between Cases is discussed in Chapter 10.

The low proportion of ‘Resources’ as the subject management is partly attributed to a bias in

the conduct of the Case Study. The NIM is the primary means of managing resource deployment in this (and other Cases); however, within each Force the culture dictated the Tasking and Coordinating process of NIM as separate from the perceived *performance management* practice. The Tasking and Coordinating process had its own set of rules and practices, which were administered by different departments. The Tasking and Coordinating process, although nationally coordinated, was played down in Case B and seen as a necessary but bureaucratic system.

The high presence of the management of processes is seen as reflective of the presence of the “Crossfire” management process, a process not seen in other cases. This also reflected a move in England towards greater consideration of process management expressed through Operation Quest (see Chapter 2).

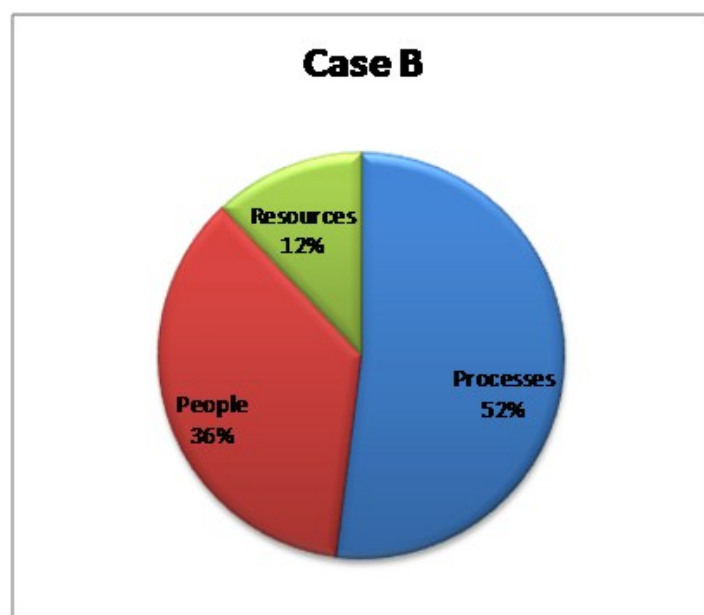


Figure 8-2 - Relative proportion of coding references. Source: derived from data.

The management of people can be seen as the default position for managers, their role being to manage the staff for whom they were “responsible” or “accountable”. No example of similar accountability was found for processes.

8-5 CASE B – THE ELEMENTS AND FLOW OF PM (RQ1-RQ4)

To explore the impact of Organisational Learning, the data are first considered in relation to the Research Questions relating to the process of PM as defined by the OL Model of PM namely:

RQ1. How is knowledge created within PM practice?

RQ2. How is action created within PM practice?

RQ3. Does performance knowledge influence organisational behaviour?

RQ4. What is the nature of elements within each case?

To address RQ1 and RQ2, we consider the aspects knowledge creation and action creation within the process of OL.

RQ3 is addressed by focussing on the point at which knowledge is used to support action, which is the decision-making element (Adjusting).

To address RQ4, the data is reviewed against the definitions of the process derived in Chapter 6 (OL Model of PM) but first a summary of the coding distribution is presented. As the outcome of RQ4 is a refinement to the definitions used, this is considered before the other Research Questions.

8-5.1 Case B - Coding Distribution

To provide some context to the following discussion, the content of the each interview (including focus groups) in terms of its distribution of coding against each of Elements is shown in Table 8-3– Summary of Coding Distribution. This table shows the number of words coded at each element by each transcript. Colour is used to emphasise the range of values between cells.

	401 Insp N	402 DCI N	403 Analyst N	404 HQ Analyst	405 QAT	406 Staff officer	407 PC's	408 CI S	409 Insp CIMU N	410 Ch Supt N	411 DS CIMU	412 Supt
Element 1	314	0	0	0	1251	87	1135	687	63	1495	0	73
Element 2	0	24	0	136	1243	297	1548	1153	510	723	0	863
Element 3	670	203	240	1856	1700	808	871	607	399	699	662	1098
Element 4	0	0	518	643	2723	0	0	73	100	1606	88	683
Element 5	532	927	0	857	919	235	935	510	271	338	235	664
Element 6	171	2223	0	352	1613	42	82	629	115	132	216	2180

Table 8-3 - Summary of Coding Distribution - Case B. Source: Derived from data

The same data is used to provide a pie chart indicating the distribution of content by Element in Figure 8-3

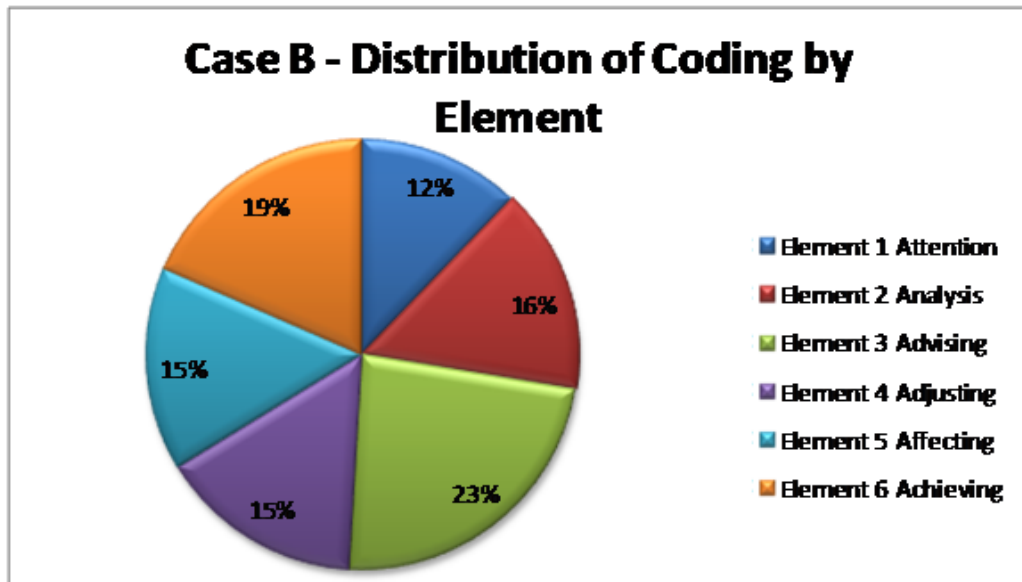


Figure 8-3 - Chart of Coding Distribution - Case B. Source: Derived from data

Taken together, it is apparent that each of the elements was covered adequately by the content of the transcripts. The largest proportion of content was provided by interview referenced as '405'. This was a focus group with two members of the Quality Assurance Team. They had been responsible for developing the PM process in the Force.

8-5.2 Case B - Process Elements

Here, the data from Case B relating to each of the Elements of the PM process is compared

against the definition derived in Case A. For each element, any amendment to the definition necessary to reflect this case is identified and the reasons for these amendments are then highlighted. Any unique aspects of practice, relating to each element, are also described. This is followed by exemplars from interviews that are provided to contextualise the discussion and to view the subject in the terms used by interviewees.

8-5.2.1 Attention

Definition

The definition for Attention was reviewed against the content of the Attention node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition whilst broadly compatible with the data could be refined in light of this. As a result, Attention is redefined as follows:

Attention is the focus on the environment (both internal and external) to inform decision making about people, resources and processes, through the use of feedback, primarily from indicators (either quantitative or qualitative).

Reasons for Amendment

Aspects justifying the changes to the definition include:

- From the data in Case B, it was seen that Attention could include other types of feedback, not just indicators.
- The latter part of the previous definition was found to relate more to the relationship to Dimensions and other elements and has been removed from definition

Attention - Aspects Unique to Case B

In relation to Attention, aspects identified as unique to this Case included:

- Prior poor Force performance reduced the flexibility to choose indicators/focus of attention. As performance improved, confidence to choose indicators other than those dictated by the Home Office improved.
- Attention, which had been largely focussed by Home Officer, was changing to consider Force priorities more.
- Problems with getting the right information with which to assess people were recognised
- At the time of the study, quality and process monitoring were included in Attention.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the element. The reference at the end, in brackets, reflects the transcript reference in the NVivo research database.

Absolutely. We also have a series of what we call Health Check measures as well for the unit and they are essentially agreed by myself and the Supervisors, and if you like we are tested and our performance is judged against certain areas, we have our own , or we use indicators of going in the right direction, and they may not always be performance orientated in a traditional sense, they might be workforce, they might be professional development related or workforce planning related, but they are all indicating that they are going in the right direction. (409)

We had [inaudible] reduction, which is comparative crime and were looking to reduce crime over three years, so it was very heavy on crime reduction, it was very heavy on detection, and it was you know, it was sanction detection rate for this, and burglaries, and it has been very much a culture change we're going through now, now of course there's the [inaudible], the foot hasn't come off the gas, but the number crunching is less important, we're more looking at how satisfied they are, so. (406)

8-5.2.2 Analysis

Definition

The definition for Analysis was reviewed against the content of the Analysis node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition matched closely and needed little change. Largely for reasons of clarity, it is redefined as follows:

Analysis is the process of adding value to raw data from performance indicators/sources by a person or system in order to support decision-making about the need to adjust organisational behaviour through interpreting and attributing meaning by analytical techniques and / or through the collation, structuring, and representation.

Reasons for Amendment

- The structure of the definition could be improved and simplified for reasons of clarity and consistency.
- The latter part of the previous definition was found to relate more to the relationship to Dimensions and other elements and has been removed from definition

Analysis –Aspects Unique to Case B

In relation to Analysis aspects identified as unique to this Case, included:

- Analysis had tended to fall to a person with that specific role and had been the subject of centralisation and professionalization over the past few years.

Exemplars

To me I would invest a phenomenal amount into it because yes we've put some money into support one Strategic Analyst. To my mind, I think there is a lot more that we can do on partnership analytical work than we actually do do. I think there is a lot of resources within the Local Authority that need to be better

focused. They don't understand the work analyst, they are starting to, and the people they have brought in are beginning to help them understand what true analysis is. There are more researchers and data and number crunchers within Local Authority than people who are actually providing an analytical product which comes out with the recommendation as to how you should move forward with it, and that's a new world to them entirely. (410)

...that's why the work of the Analyst, particularly in the CPD and the work in the quality assurance team has changed into more 'how does this feel', 'how does this look', 'if this was you would you be happy with this service', as opposed to 'if we did this we'd get another two percent', 'if we did this we'd get another four percent'. (405P)

And all of the data is just held in here and it's got all your stats tests on and that, it's the science that underpins what we do. (404)

8-5.2.3 Advising

Definition

The definition for Advising was reviewed against the content of the Advising node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition whilst broadly compatible with the data could be refined in light of this.

Advising is making available or communicating the results of analysis through the creation of a report or artefact, using verbal, written or electronic media by the person undertaking the analysis in order to meet a need for information to support decision-making (depends on role of user).

Reasons for Amendment

- To distinguish between the 'provision' (Advising) and the act of analysis (Analysis).
- The reference to a 'verbal artefact' was potentially confusing.

Advising - Aspects Unique to Case B

In relation to Advising aspects identified as unique to this Case, included:

- The use of external trainer to deliver training to analysts and managers on the content of performance reporting.

Exemplars

Yes I think it's fair to say Vicky did identify this as a potential problem and she arranged for all Senior Managers to have either a one or two day input by Malcolm Hibbard.

For the message about actual versus apparent performance to be understood. I think we're lucky, no I know we are lucky here in that we do have a very supportive Senior Management Team who do understand the relevance of what we say.

And it's getting that message down the line really and it's, I mean arguably, if you see numbers go up, it's a very brave decision to say well it's not statistically significant so we're not going to respond to it. (404)

So that, that then was an interesting link against the NIM and as much as the DMMs then had daily performance information, so they could see on a daily basis where things are going right, things going wrong against the priorities for the crime types, the crimes types. And again that was kind of revolutionary. I know it sounds it now, you know, it would be revolutionary, but crikey, we've got real time performance information. You can start making interventions within the sort of NIM environment if you like, at that. (412)

8-5.2.4 Adjusting

Definition

The definition for Adjusting was reviewed against the content of the Adjusting node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the evidence did not contradict the concept of adjusting. Some items have provided further clarification and, as a result, it has been redefined as follows:

Adjusting is triggering the process of changing organisational behaviour, through formal processes (such as PM, NIM, or others), or informal, decision taking, by the person or body with responsibility for that sphere of

business, through the consideration of knowledge created about performance in the context of existing personal and organisational knowledge and theory, in order to affect organisational behaviour through changes to or new, more appropriate action, meet a need for additional knowledge, or the need for greater monitoring.

Reasons for Amendment

- Latter part adds no value to definition
- It is proposed that new information will be interpreted in the context of existing knowledge, or existing theory about its meaning.
- Aspect is covered by alignment and therefore not needed in definition
- Latter aspects were covered by relationships and superfluous in definition.

Adjusting - Aspects Unique to Case B

In relation to Adjusting, aspects identified as unique to this Case included:

- There was a clear change in practice over time.
- There was a move towards performance meetings and away from NIM.
- Strong leadership was seen as creating alignment within Adjusting.

Exemplars

There weren't no structures understanding of performance management, was poor and we needed to change. So at the point I took over the job, the performance team as was, were part of the Strategic Development Department and their job was very strategic around producing monthly statistical returns for the Home Office, and your whatever they're called, annual statistical returns, blah, blah, so it was about running a process of producing and historical performance information, it wasn't about running any sort of performance management. (412)

... and crimes and that tells you all the suspects on our Division, what the hell we're doing with them. It gets featured there, and that relates back into driving that through. So I say, I want you to collar suspects, but we also want you to go out and do a one stop shop. So you've got your burglary, you take your statement, you do all the things you should do and then you've got someone

nicked, or more than likely an assault, that takes time. The accused is still banging away, radios going, another job, another job, and it is trying to get a balance. The balance to that is, let's face it, bums on seats, it's a resource issue. I can guarantee if you'd turned up Wednesday last week, to our resource meeting, it was ehm, robust. There's me fighting my corner, you've got Dan fighting his crime corner, Vicky wasn't there, she sent a rep who decided the best thing was to keep quiet. It can be quite robustious. (408)

8-5.2.5 Affecting

Influence can be created through culture, leadership, communication, competition, rewards and punishments, but also through resource allocation and process improvement.

Affecting contributes to Achievement only if the resulting behaviour is aligned to organisational aims and purpose (as opposed to short-term goals).

Definition

The definition for Affecting was reviewed against the content of the Affecting node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. Broadly, the role of Affecting previously defined fits the case. However, there was a lot of detail here that has not been captured in the first definition from Case A and this detail needed to be reflected in the definition. The concept of Affecting has not been changed, but the definition has become a more accurate representation of that concept.

Affecting is influencing organisational behaviour in line with the intention of responsible body through management interventions in resources, people or processes and is based on managers assumptions about what can be influenced and how these may be influenced.

Reasons for Amendment

- Definition needs to reflect organisational behaviour. Behaviour may not be changed (as this would be Achieving) but involves influencing organisational members towards intention of responsible body.

- It is not always about influencing people, sometimes its resources and sometimes its processes.
- Tasks can be allocated to specific groups direct or to a manager to allocate. Repeated emphasis is important, rather than individual tasks. This therefore depends on managers understanding how behaviour can be changed. Theories held by managers about how to influence outcomes through people, processes and resources would strongly influence how this occurs.
- The aim of influencing is to “embed” new behaviour. This applies to people only, but organisational behaviour can be influenced through resource allocation and process improvement.
- Culture and leadership influence behaviour.
- Competition is also used to motivate.

Affecting - Aspects Unique to Case B

In relation to Affecting, aspects identified as unique to this Case included:

- The presence of Crossfire made Affecting Case B different from other Cases.
- In terms of PM, this had a focus on customer satisfaction (moving away from simply considering of crime) and had an emphasis on identifying and resolving process issues.
- The potential negative influence of managers had been recognised and attempts were being made to address this.

Exemplars

My shift Inspectors will turn up, if they're on, if they've got time and not tied up with stuff. It is a marathon type meeting, so Managers who already understand most of this stuff are getting there, this is what we're doing, the feeding and stuff. How this feeds down below is difficult. You've told the bobbies that satisfaction rates is coming up, that's brilliant, you've done really well at that, keep you informed, means something to them but what generally I think bites them or what makes them work, is process. And you can set a process to contact people, that's not an issue. I mean look at our RTC process in this Force, which is diabolical,

still is very rubbish. We will send some pro-formas to you when we get round to it and we'll sort of follow them up sometime down the line. That's all being reviewed now by our quality service team who are saying this is awful actually. (408)

And the other thing is, is to cut through the perversity of the performance incentives. So, I could fix my sanction detection rate tomorrow by asking people to go out and do formal warnings for Cannabis. I've got the beer festival coming up at the weekend. We can hang around there and stop check 100 people and my sanction detection rate will be solved, by formal warnings for Cannabis, not interested. One, because it distorts the crime figures that I'm trying to reduce, so all of a sudden I raise a load of crimes just to detect them and their low level Cannabis crimes. Two, it's a total waste of my resources 'cos actually on the face of it, they are not actually causing a great deal of harm, one of the safest events we run in the city, but actually I'm just going to cause friction with the local residents, so why am I doing it? And actually the crimes that I need to detect sit within my outstanding suspects which you will see us talk about this afternoon, where if I actually locked up the 200 odd people I've got outstanding, that would give me 60 per cent, that would give me a hundred detections. So it's about managing my business appropriately to deliver more for the people of Peterborough, and that I think is really important. (410)

8-5.2.6 Achieving

Definition

The definition for Achieving was reviewed against the content of the Achieving node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition whilst broadly compatible the data could be refined in light of this. As a result, Achieving is redefined as follows:

Achieving is the fulfilment of OL through the creation of organisational behaviour aligned with organisational purpose - In the use of resources, behaviour of individuals, or the operation of processes, and results in change within the internal or external environment, or in organisational culture. To achieve organisational purpose, change must be sustained. Individual or local change is not OL except where part of an ongoing organisational change, or is intended by the organisation as part of a wider programme.

Reasons for Amendment

- Needed clarification about the completion of OL, reworded to reflect ‘productive activity’
- Updated to reflect all three aspects of ‘behaviour’.
- Updated to reflect a definition rather than a statement.
- Updated to provide clarity (not based on evidence from this Case).
- Need to include sustainability.

Achieving - Aspects Unique to Case B

Cultural change is the clearest visible aspect of Achieving in Case B. Recognition of internal and external customers but a front line officer is the result of culture change over the past few years. Interviewees were happy to attribute change in “performance results” to changes in performance practice.

Exemplars

Two exemplars of the discussion on Achievement are provided below.

And do you know what they are though, there's only one thing that they're really actually interested in and it's the same comments I always get. They call the Police, they want them there. You know it's a level of service, it's that sort of not interested in we've got further figures it's the fact that they may have been burgled or had their car nicked and they're not interested in all of the rests of the facts and things about Robbery, if we've done well on that. They're angry because they've just been a victim of crime, they get even angrier if we turn up eight hours later or whether it might be to deal with that incident. So actually, I think the public's priorities, not those sort of facts and figures, their priorities we answer the phone fast, we respond to in a reasonable amount of time. That is the public's priority and I don't think they give two hoots about how many burglaries there is and everything else, that is their priority at that time. (407S)

Yeah, if we just talk strategics, it's not actually how it looks, it what it actually delivers at the front end and it's trying to convert this strategy into some tangible process, I suppose. (408)

8-5.2.7 Summary of Process Elements

When tested against the OL Model of PM and the associated definitions (developed in

Chapter 6 – OL Model of PM) it was found that whilst minor refinements could be proposed based on the additional data, there was generally a close fit between the data and that predicted by the model. On this basis, it is therefore concluded that, in this Case, PM practice did reflect the OL Model of PM.

Despite this, practice was clearly different from Case A (and, it will be shown, from Case C). This uniqueness was contributed by four key differences, namely:

- a) Tasking & Coordinating practice was seen as different from Case A in that its role was minimised, primarily due to the perception that it was a bureaucratic process. Tasking & Coordinating activity focussed around prioritising the allocation of resources rather than on the use of criminal intelligence.
- b) The Crossfire process used a wide range of information, including performance indicators, to manage the improvement of ‘customer satisfaction’ and was unique to Case B.
- c) The professionalization and centralisation of analytical skills was evident.
- d) A culture of performance was clearly expressed and applied throughout the Force.

This difference is expressed in terms of the relationships between Elements and Dimension and this is further explored further in Section 8-6 Drivers and Factors below.

8-5.3 Case B – Elements Conclusions

The basic behaviourist OL model of Knowledge leading to Action was identified from the literature (see Chapter 6- OL Model of PM). This was developed in the OL Model of PM to elaborate on the stages of the process that converts Knowledge into Action, that is, Attention, Analysis, Advising, Adjusting, Affecting and Achieving. It is seen as strength of the Model that it is able to reflect the different management processes founded on Knowledge Creation and Action Creation present in this Case.

RQ1 - How is knowledge created within PM practice?

RQ1 can be answered using the results of the analysis of data described above. Based on that, it can now be stated that, in Case B, knowledge was created through the stages of Attention, Analysis and Advising, each as defined earlier in this Chapter. This process is defined as follows:

Knowledge is created in the form of products such as a report or artefact. These use verbal, written or electronic media, and make available or communicate the results analytical techniques interpreting or attributing meaning. It involves the collation, structuring, and representation, of data through the use of feedback, primarily from indicators focussing on the organisation's environment (either internal or external).

From the data, which was outlined above, it is concluded that Knowledge Creation was evident in the practice of Performance Management within Case B. Performance data was created to provide inputs into a number of different meetings at different levels and across the Operational Command Units.

It was seen that performance indicators used varied, analysis was structured and coordinated centrally, and the results were compiled in formal reports, either written or in presentations, while some information was processed automatically. This knowledge was used to support decision-making meetings around the use of resources, the operation of processes and the conduct of staff.

The extent to which these knowledge products were “productive”, that is valid, reliable, relevant, and useful, is not answered here but it can be seen that an effort was made for this to be the case. Knowledge creation had been the focus of developing PM practice during the past few years. Processes for the collection of relevant data, the scientific interpretation of meaning, and the production of meaningful communication were in place. Performance management practice reflected recognition of the importance of Knowledge Creation and

that this was a key gap that needed to be addressed.

RQ2 - How is action created within PM practice?

RQ2 can be answered using the results of the analysis of data described above. Based on that, it can now be stated that, within Case B, “action” was created through the stages of Adjusting, Affecting and Achieving. This process is defined as follows:

Action, in the form of the use of resources, behaviour of individuals, or the operation of processes, and results in change within the internal or external environment, or in organisational culture, which is aligned with organisational purpose,

- is created through management interventions in resources, people or processes,*
- is based on managers assumptions about what can be influenced and how these may be influenced,*
- and is triggered by formal processes (such as PM, NIM, or others), or informal, decision taking, by the person or body with responsibility for that sphere of business.*

It must be noted that this is not exclusive, in that action can result through other processes also.

From the analysis of the data, which is outlined above, it is concluded that Action Creation was clearly evident within practice in Case B. However, whilst decision-making and management practice were widely practiced, the historical association of PM with producing performance information meant the Action Creation phase was often not apparent, or not recognised, in interviews as part of PM practice.

RQ3 - Does performance knowledge influence organisational behaviour?

RQ3 can be answered by determining whether the ‘product’ of Knowledge Creation is used to support decisions about action. The extent to which the knowledge product is used in the decision making process (Adjusting) will answer this question. If it were not used then it

would be safe to conclude that knowledge did not support action. If it is used, it can be concluded that knowledge influences action to some extent. The extent to which decisions are influenced by knowledge created, existing organisational knowledge, or other information will be difficult to ascertain but is very relevant.

In relation to RQ3, products of knowledge creation (produced at the Advising stage) were found to feed into decision making (at the Adjusting stage). These products then influence decisions about the need for action or the nature of action. Other factors may also influence decisions and the influence of existing Organisational Knowledge is considered at section 8-7.3 Discussion and Theory of Completion of OL below.

Based on the analysis of the data, it is concluded that within Case B, knowledge derived from performance data was submitted to influence decision-making (Advising) and that the nature of action (in the form of organisational behaviour) was influenced by this. The extent of influence is unclear from the data and the nature of this research will be unable to quantify this.

RQ4 - What is the nature of elements within each case?

In relation to RQ4, this question has already been addressed fully above. The model has been tested against the data from Case B and found to be a good fit. Minor modification was made to the definitions from those developed in Case A, largely for reasons of clarity.

It is therefore concluded that within Case B the process of PM was comprised of the elements identified in the OL Model of PM (Attention, Analysis, Advising, Adjusting, Affecting, and Achieving) and that the nature of these Elements is as defined earlier.

Theory of Flow of PM Process

Through answering these four questions (RQ1 through RQ4) it has been established that the OL Model of PM can be applied to PM practice and that it is therefore valid to view OL as a phenomena underlying PM practice in this Case. The data gathered from Case B has refined

the understanding of the core OL process and its Elements.

It has been established that in Case B:

- Knowledge Creation comprises Attention, Analysis and Advising.
- Action Creation comprises Adjusting, Affecting and Achieving.
- Knowledge has been shown to influence Action, although the extent to which this occurs varies and cannot be evaluated within this study.
- The elements operating within the process have been defined.

The discussion now moves on to consider the remaining Research Questions.

8-6 CASE B - DESCRIPTION OF DRIVERS AND FACTORS (RQ5 – RQ6)

To explore further the impact of Organisational Learning, the data from Case B is now considered in terms of the Research Questions relating to the drivers, factors and the relationships between the Elements of the PM process (namely RQ5, and RQ6).

RQ5. In practice, what factors influence the PM process?

RQ6. What is the relationship between these factors and the individual elements of the process?

8-6.1 Factors Influencing the PM process (RQ5)

It is assumed here that the impact of OL will be influenced by a range of factors. Dimensions of influence were derived from Case A by grouping similar concepts within the data. The list of Dimensions derived from Case A is shown in Table 8-4.

Within Case B, an analysis of the content revealed 220 references to factors influencing the process of OL (refer to Table 8-5). These were collated into the Dimensions identified and defined in Case A.

Figure 8-1 provides a graphical representation of the number of references for each Dimension. It should be noted that a references may be either positive or negative and, from the data shown, it cannot be inferred, for example, that a strong Culture was seen as

positively influencing the process, only that it was frequently referred in relation to influencing the process.

Dimensions of Influence

Alignment
Analytical Capability
Context
Culture
Decision Making
Information Value
Leadership
Management Ability
Organisational Knowledge
Organisational Purpose

Table 8-4 - Dimensions of Influence. Source: Derived from data, Chapter 8

It was surprising to note the low values for Information Value, Leadership and Analytical Capability. The content of the interviews showed that Analytical Capability was particularly strong in Case B. Either this may be explained by the absence of negative comments in relation to these Dimensions, which may be due to them not being recognised as issues or that these were adequately addressed within the Case.

The high values for Culture, Alignment and Management Ability reflect frequent reference to related factors. A “performance culture’ had been promoted since 2004 and efforts made to emphasise the role of performance management in contributing to good strategic management. In taking on what was seen as a failing Force, the Chief Constable had to implement and reinforce strategic change, which would be reflected through the Alignment Dimension. The potential for managers to create unintended consequences through the misapplication of management techniques was widely recognised and commented upon, and this was seen as coming from a growing understanding of the correct application of performance management.

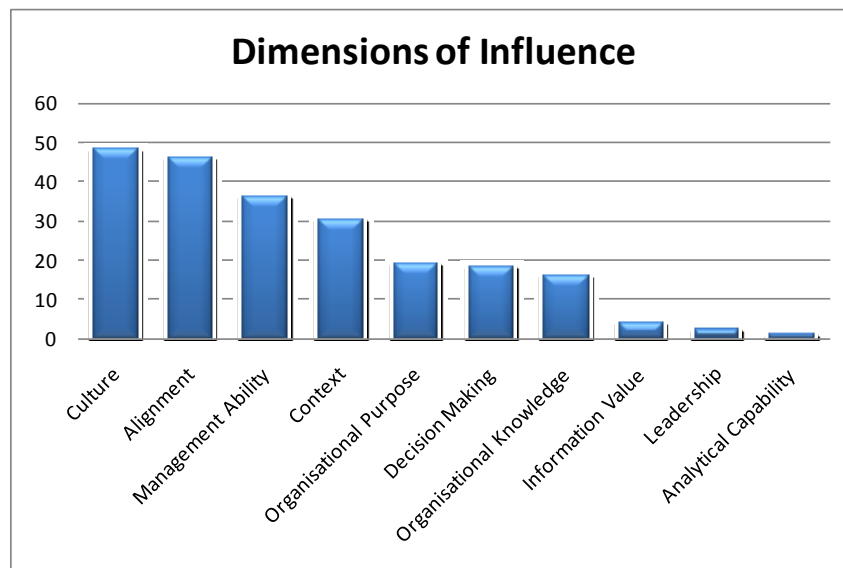


Figure 8-4 - Dimensions of Influence. Source: Derived from data

It would be repetitious and unproductive to redefine each of the Dimensions as derived in Case B, however, it is viewed that the set of Dimensions were adequate and appropriate to reflect the range of influences in the Case. It is therefore concluded that, in practice in Case B, the factors that influence the PM process were the same as Case A, although those influences were to different extents.

8-6.2 The Relationship between Dimensions and Elements (RQ6)

To address RQ6, three methods were used here to consider the relationships between elements of PM and dimensions of influence. Firstly, based on the data recorded in NVivo, a matrix of content coded at both an element and a dimension is created (see Section 6.2.1), secondly, the relationships are displayed diagrammatically (see Section 6.2.2), and thirdly, the nature of the relationship is reviewed in detail (see Section 6.2.3).

8-6.2.1 Dimensions and Elements Matrix

Based on the data coded in NVivo, a matrix of content coded at both an element and a dimension is created to demonstrate the degree of relationship between the Dimensions and Elements. The results of this are shown in Table 8-5 and are discussed below.

	Alignment	Analytical Capability	Context	Culture	Decision Making	Information Value	Leadership	Management Ability	Organisational Knowledge	Organisational Purpose	Total Per Element
4 Adjusting	16	0	8	8	10	0	1	7	12	6	68
1 Attention	4	0	8	10	0	2	0	14	0	8	46
5 Affecting	17	0	2	10	2	0	1	4	3	3	42
2 Analysis	4	1	7	11	0	1	0	2	0	0	26
3 Advising	2	0	5	5	1	1	0	5	1	2	22
6 Achieving	3	0	0	4	5	0	0	4	0	0	16
Total per Dimension	46	1	30	48	18	4	2	36	16	19	220

Table 8-5 - Overlapping References. Source: Derived from data

From the resulting matrix, it is apparent that evidence of overlaps between coding is greater between some dimensions and elements than others. The data ranges from 17 overlapping references for Alignment and Affecting, to a number of areas that have no overlapping references. There is a potential that the degree of influence found is a ‘random’ affect based on the topics interviewees chose to talk about, and indeed an influence other than ‘reality’ would be anticipated and difficult to isolate. Therefore, too much significance cannot be placed on the relative degree of overlap. However, the coding method involved identifying the subject of discussion and categorising this into what was later amalgamated into Dimensions and Elements. If the subject of discussion involved an Element and a Dimension then this is not influenced by randomness. This reflects, to some extent, the ‘reality’ as described by the interviewee. It is a matter of the amount of evidence rather than the strength of the relationship. It will be shown later that, when examined in detail, the content of these overlaps do provide evidence of relationships.

The total numbers of references by Element are most clearly seen when plotted in a graph (Figure 8-5) in order of greatest to least. From the graph, it is apparent that there is stronger evidence of Dimensions influencing the Adjusting, Attention and Affecting Elements. Less evidence was found of Dimensions influencing the Analysis, Advising, and Achieving.

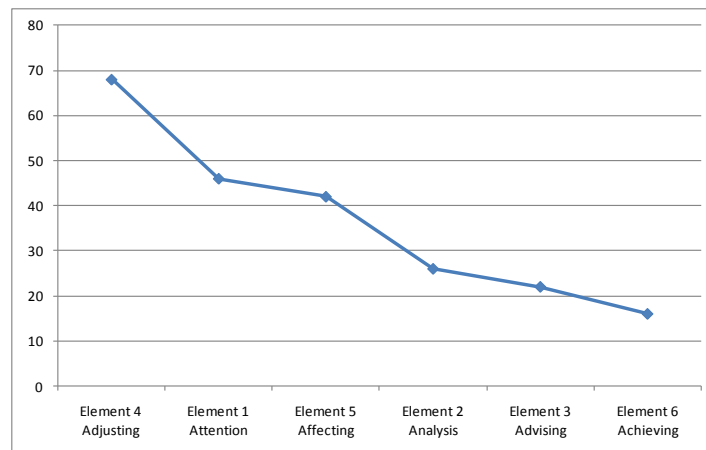


Figure 8-5 - Overlapping References by Element. Source: Derived from data

At this stage, we can conclude from this that, in Case B, each Dimension had an influence on the Elements of the PM process. It is also concluded that, in Case B, Dimensions influenced Elements in different ways, some having a focussed influence such as Management Ability with Attention, whilst some have a more general influence such as Culture with Attention, Affecting, and Analysis.

8-6.2.2 Dimensions and Elements -Relationship Diagrams

To address RQ6, the extent of ‘overlap’, that is commonality in coding, between Dimensions and Elements is considered. This was achieved by ranking the values from the matrix, establishing a ratio (in terms of a percentage per Element) and grouping these percentages into Very Strong, Strong, Weak, Very Weak or No relationship (see Table 8-6 for grouping criteria used).

Again, it is emphasised that the relationships reflect the content relating to both an Element and a Dimension. The strength of evidence is not necessarily synonymous with the strength of a relationship.

These relationships were modelled to represent the degree of coverage more readily (see Figure 8-6 through Figure 8-12).

Table 8-6 shows the criteria used to determine the relative “strength” of evidence. The use of \pm one standard deviation from the average to differentiate these groupings was based entirely on judgment. Whilst this would not be significant in a quantitative approach, when applied to the data it clearly distinguished those items that were just above or below average (i.e. higher or lower degree of overlap) from those that had a clearly greater degree of overlap. (In practice, it was found the application of minus one standard deviation always took the lowest range below zero and therefore never applied).

Group	Criteria
Very strong	Greater than average + 1 Standard Deviation
Strong	Between average and Average + 1 Standard Deviation
Weak	Between average and Average - 1 Standard Deviation
Very weak	Less than average - 1 Standard Deviation
No relationship	No overlap (0%)

Table 8-6 - Relationship Groups. Source: Author derived

A great deal of caution must be applied when considering qualitative data in what appears to be a precise quantitative manner as the underlying data is open to considerable number of influences. It must also be clear that strong evidence of a relationship is not the same as evidence of a strong relationship. However, as will be shown where there is strong evidence, a review of the data revealed a similar level of relationship. In this case, therefore, the meaning applied is consistent with the means of interpretation.

Relationship Diagrams

Below in Figure 8-7 through Figure 8-12, are a set of diagrammatic representations of the relationships between each Element and the Dimensions identified in from the matrix. Figure 8-6 provides a key to these diagrams.

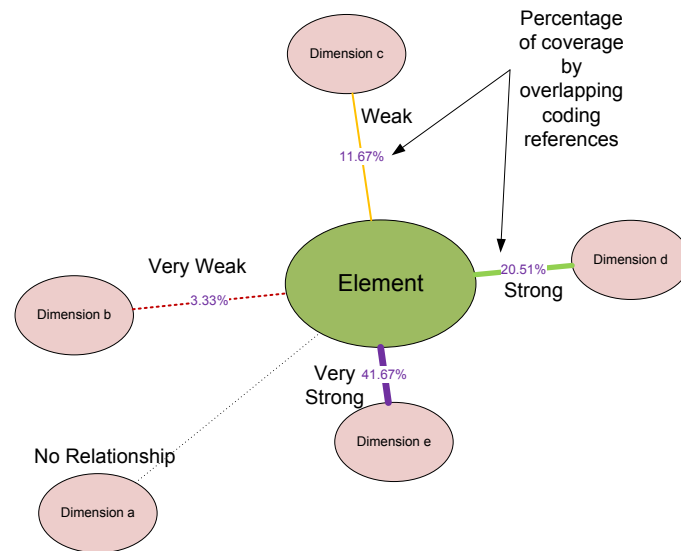


Figure 8-6 – Modelling of Relationships – Key. Source: Author derived

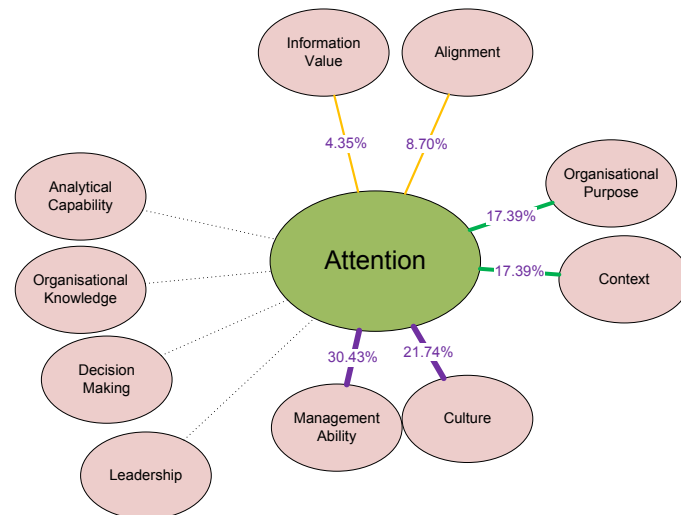


Figure 8-7 - Dimensions and Attention. Source: Derived from Data

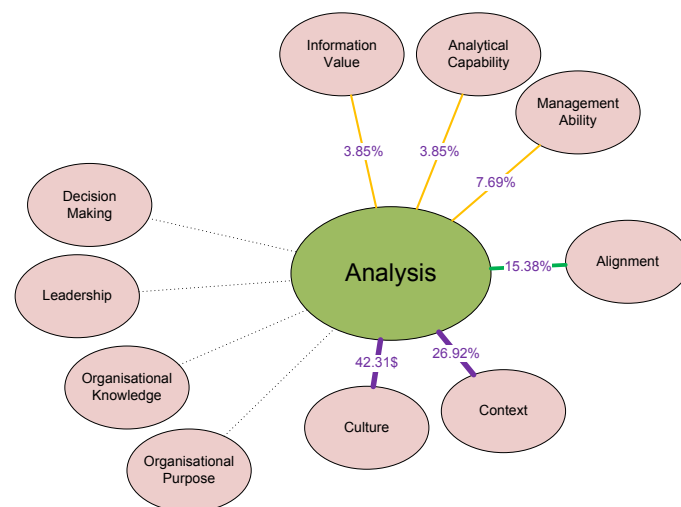


Figure 8-8 - Dimensions and Analysis. Source: Derived from data

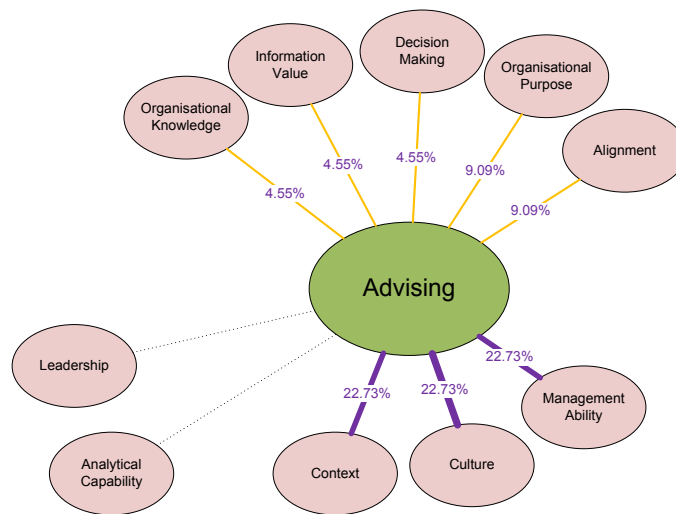


Figure 8-9 - Dimensions and Advising. Source: Derived from data

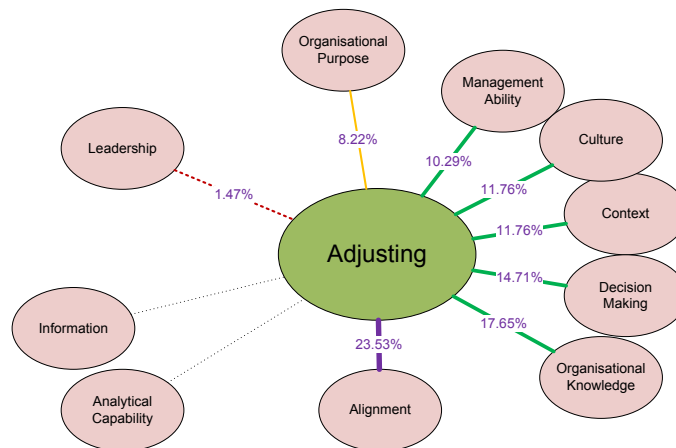


Figure 8-10 - Dimensions and Adjusting. Source: Derived from data

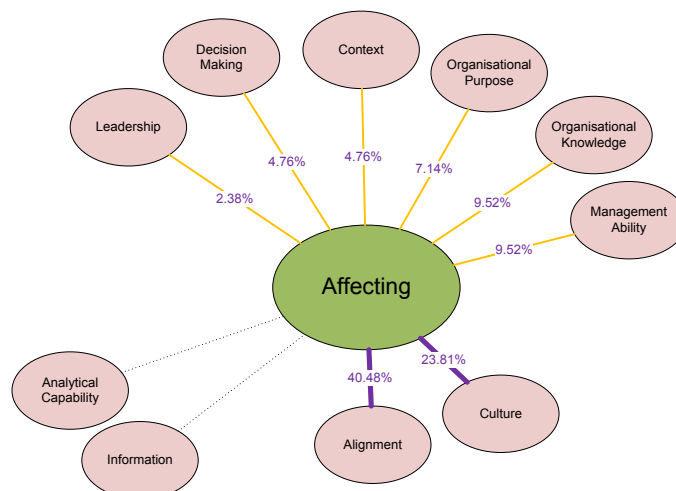


Figure 8-11 - Dimensions and Affecting. Source: Derived from data



Figure 8-12 - Dimensions and Achieving. Source: Derived from data

8-6.2.3 Dimensions and Elements - Relationship Descriptions

Having described which relationships are present, the nature of those relationships, as revealed by the data, is now explored for each Element. Where necessary, reference should be made to the relevant diagram. Below, the original source data is examined and summarised in relation to each Element for the “very strong” and “strong” relationships. Where directly applicable, quotes from the sources are used.

With rare exceptions, the majority of influences commented upon, were evidenced by only one or two individuals. However, when the nature of each is considered as part of a whole they provide a strong chain of coherent evidence for the characteristics described.

Attention

Relationships between Attention and the other Elements or Dimensions are revealed by the data. Within Case B, the Attention Element showed very strong evidence of overlap with Management Ability and Culture, strong evidence of overlap with Context and Organisational Purpose, and weak evidence of overlap with Alignment and Information Value (see Figure 8-7).

From a review of the content of the overlapping references, the following table provides

comments about the nature of the very strong and strong relationship:

Dimension Relationships	Comment
<p>Attention and Management Ability</p>	<p>A Unit was established to Proactively address issues in relation to customer satisfaction</p> <p>The use of measures by managers to monitor workforce effectiveness sometimes outwith formal PM practice</p> <p>The choice of indicators is often decided by the type of information managers see as contributing to managing</p> <p>Managers had a good idea of the data available to them and how to use it to support appropriate management activity</p> <p>Managers would sometimes augment centralised data with data they collected themselves.</p> <p>Managers had an awareness of the relevance of indicators and results.</p> <p>Process information was seen as allowing managers to improve results</p>
<p>Attention and Culture</p>	<p><i>“the Force is moving towards of a way of assessing people not on how much they do, how many arrests they do, how many incidents they attend, but on the quality of their work and how satisfied the members of the public are with it” (401)</i></p> <p>Local targets are agreed with the Crime Reduction Partnership.</p> <p><i>“There has been in the last twelve months a sea change in how they look at things, and it is about if you get the processes and the systems right then the effect on all of those other measures is seen....</i></p> <p><i>And that is a message that comes down from Mrs Spence and from our Managers, down to the ground level.” (404)</i></p> <p>The national Performance Framework influences the choice of indicators.</p> <p><i>“I think we're the only Force in the country, we definitely were the only Force in country that had managed to close the cycle” (405V)</i></p> <p>Attempts are made to manage culture in a positive way.</p> <p><i>“... so it was very heavy on crime reduction, it was very heavy on detection, and it was you know, it was sanction detection rate for this, and burglaries, and it has been very much a culture change we're going through now...” (406)</i></p>

	<p><i>“...is there a very clear performance management regime around quality, then I'd say not from where I sit.” (412)</i></p> <p>Attention is driven by Culture.</p>
Attention and Context	<p>Context was provided by the use of national performance frameworks</p> <p><i>“Now eventually we got to a stage where we were able to prioritise certain PPAF indicators over others.” (405V)</i></p> <p>A move from target oriented to continuous improvement was facilitated by improved overall performance.</p> <p><i>“For example today, the customer satisfaction data that we showed her ehm our peer comparisons are very poor so she said a little bit is not good enough”. (405V)</i></p> <p>Context was sometimes provided by comparison within the different areas of the Force</p>
Attention and Organisational Purpose	<p>The imposition of national performance frameworks influenced choices away from organisational priorities.</p> <p>As performance improved, planning, priorities and targets were more closely linked.</p> <p>Organisational Purpose is expressed through priorities defined by the Chief Constable.</p> <p>The Control Strategy and Environmental Scanning have a strong influence on what the Force will measure.</p> <p>Performance measures should reflect priorities and not set them.</p> <p>Stakeholders, such as Government, have a strong influence on what is measured.</p>

Table 8-7 - Attention Relationships. Source: Derived from data

It is concluded from the content summarised in Table 8-7 that, in Case B, the choice of where the organisation focuses its attention through the use of performance indicators is strongly influenced by the ability of managers to choose and use performance information. It is also strongly influenced by organisational culture, which was undergoing managed change. It is therefore likely to be relatively consistent across the organisation as a consistent cultural pressure is exerted. Context was used to provide comparison inside the organisation, outside the organisation and over time. Organisational purpose influenced the

choice of indicators through priority setting processes.

It was not anticipated that only a weak relationship to Information Value would be expressed. This may be a factor of rigorous data collection methods used by the Force resulting in reliable data, but there is insufficient data to provide an explanation at this at present.

Analysis

Relationships between Analysis and the Dimensions are revealed by the data. Within Case B, the Analysis Element showed very strong overlaps with Culture and Context, strong relationships to Alignment, and weak relationships to Management Ability, Analytical Capability and Information Value (see Figure 8-8).

From a review of the content of the overlapping references, comments can be provided about the nature of the very strong and strong relationships for Analysis (see Table 8-9).

Dimension Relationship	Comment
Analysis and Context	<p>The nature of analysis is dependent not just on numbers but on context (of problem/issue).</p> <p>The nature of analysis is dependent not on numbers but on context (of problem/issue)</p> <p>Adding value depends on the context of the data and the organisation.</p> <p>The use of historical information to put data into context of, for example, past performance</p> <p>The use of control limits to provide statistical context to data</p> <p>The use of dashboards and frameworks provides organisational context</p>
Analysis and Culture	<p>The change in practice regarding the professionalization of analysis was driven by a change in culture rather than a change in organisational purpose.</p> <p>A culture had developed where all analysts (crime and performance), and to some extent managers, were expected to have an understanding of performance data and statistical tools.</p>

	<p>The Chief Constable had driven a culture from looking to improve from being a failing Force, to now looking to improve on crime reduction and protection. This in turn had driven the nature and content of analysis.</p> <p><i>“it's the science that underpins what we do” (404)</i></p> <p>Evidence of change at BCU level from management information to performance analysis</p> <p><i>“the work in the quality assurance team has changed into more 'how does this feel', 'how does this look', 'if this was you would you be happy with this service', as opposed to 'if we did this we'd get another two per cent' ” (405P)</i></p>
Analysis and Alignment	<p>The formal structure of Tasking and Coordinating helped to align methods of analysis to strategic and tactical priorities.</p> <p>Processes and procedures in relation to analysis varied in different parts of the organisation, although efforts were in place to reduce or minimise this.</p> <p>Qualitative analysis of where they are doing well and where they are not adds to feedback on alignment.</p>

Table 8-8 - Analysis Relationships. Source: Derived from data

It is concluded from the content summarised in Table 8-8, that in Case B, Analysis was influenced by the performance culture of the organisation, which had promoted a professionalization of practice, and by the need to provide context for decision-making.

Advising

Relationships between Advising and the Dimensions are revealed by the data (see Figure 8-9).

Within Case B, the Advising Element showed very strong relationships to Context, Culture and Management Ability, and weak relationships to Alignment, Organisational Purpose, Decision making, information Value, and Organisational Knowledge.

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 8-9.

Relationship	Comment
Advising and Context	<p>The Performance Framework and assessment frameworks contribute to Advising by contextualising information into specific sets. PPAF, then APACS were frequently discussed in these terms.</p> <p>The introduction of Quality focus changed the context of reports</p>
Advising and Culture	<p>Particularly in relation to reporting individual performance, but also in more general performance management the culture had made a significant shift towards the measurement of service quality.</p> <p><i>“...the quality assurance team has changed into more 'how does this feel', 'how does this look', 'if this was you would you be happy with this service', as opposed to 'if we did this we'd get another two percent', 'if we did this we'd get another four percent'” (405P)</i></p> <p><i>“I think it's got to the stage now where the Chief's been very clear that she wants continuous improvement, she's, she's, she's built, we've built an assessment framework on her direction around this ethos of continuous improvement, which means that people having to be smarter, there because of that, because you can't keep on getting better and better without doing things differently.” (405V)</i></p> <p>The priorities strongly influence the content of reports to regular management meetings.</p>
Advising and Management Ability	<p>Advising relies on communication with managers to determine appropriate content and style.</p> <p>Quality assurance of centrally prepared content is provided at a local level by local managers.</p> <p>Senior officers provide feedback on the nature of information/content they find useful.</p> <p><i>“I've started keeping a spreadsheet on Officers who have provided a good service and Officers who are being highlighted as providing a more negative service and we're going to be using that to help with training and things like that” (411)</i></p> <p>Advising is sometimes undertaken by managers.</p>

Table 8-9 - Advising Relationships. Source: Derived from data

It is concluded from the content summarised in Table 8-9, that in Case B, Performance Frameworks, through having a wide presence, have a significant impact on the nature of Advising. This is through providing Context to the information. The culture shift from quantity to quality had changed the nature of Advising. Management had an influence on the nature and content of advising, but this was limited by the ability of management to

understand the data and the content.

Adjusting

Relationships between Analysis and the other Elements or Dimensions are revealed by the data. Within Case B, the Adjusting Element showed very strong relationships to Alignment, strong relationships to Organisational Knowledge, Decision Making, Context, Culture, and Management Ability, and a weak relationship to Organisational Purpose (see Figure 8-10).

From the content of these overlapping references, the points shown in Table 8-10 became apparent:

Relationship	Comment
Adjusting and Alignment	<p>Frameworks create alignment by making an explicit link to priorities and goals</p> <p>NIM helps to create alignment by ensuring action is directly linked to strategy</p> <p>When focused on contemporary tactical issues, NIM can lose this alignment effect.</p> <p>NIM used in Force primarily as Operational Tasking tool, not for organisational management</p> <p>This difference is exaggerated by the NIM focus on crime which caused an over reliance on crime priorities without organisational priorities to back them up.</p> <p><i>“We’re trying to bring what I call the three Ps together, Performance, Planning and Policy and if we can bring those three things together and then have it sitting alongside that, the strategic partnership team which deals with the external LAA arrangements, to inform and assist with that process, then that can only be to the good as opposed to having them in different bits of the business”. (405P)</i></p> <p>Daily Management meetings helped to align the tactical focus on strategic issues.</p> <p>The Crossfire process is an expression of the need to focus on Citizen Focus as a strategic issue.</p> <p>Alignment is the expression of Organisational Purpose in the management and structure of the Force.</p>
Adjusting and	Performance data is not subtle enough to contain expressions of

<p>Organisational Knowledge</p>	<p>actual levels of crime (for example).</p> <p><i>“You detect the crime then normally the customers are happy, not always because sometimes people don't want to make complaint because they don't want some crimes detected against their will but eh and also if you detect a crime against somebody off the streets that makes people happy and eh so the idea is that if you do a good job you detect the crime.” (401)</i></p> <p>Users know that performance reports lack key types of information, for example, what causes dissatisfaction in dealing with road traffic accidents.</p> <p>To help understand performance data, staff may look to other organisations to try to answer this, thus increasing organisational knowledge to apply to the performance data.</p> <p><i>“...we got the detection rate but how did we get it. It's not just the getting it, it's how you get it I suppose,...”(405P)</i></p> <p>The turnover of staff means skills are constantly being lost.</p> <p><i>“I think, a good example would be, a good example would be if we look at the hate crime stuff that was widely debated today really, when we took control of that we very much identified and looked closely at not only how we satisfied people but also how we investigated the crime and we've made some changes, that then informed how the wider division looked at it,...” (409)</i></p> <p>Performance reporting often did not contribute to understanding. Cause and effect explanation was missing from analysis reports and often had to be based on the view of decision takers.</p> <p><i>“...we're still relying on very high level outcome data, to measure our success whereas if we actually understood the processes that contribute to customer satisfaction, we could set proxy measures, lead and lagging, that we could then put into a performance regime that's tactical and daily and monthly and then that's done so actually we can see things are going wrong here, we know then in the next six month survey, we can predict the outcome's going to be poor unless we change this upstream here.” (412)</i></p>
<p>Adjusting and Decision Making Structures</p>	<p>The use of NIM (T&CG) provided a structure within which decision making about action could be taken.</p> <p>The NIM process did not work well at meetings that included (non-police) partners.</p> <p>T&CG was seen as very bureaucratic.</p> <p>Key decision-making structures are established by the Chief Constable and closely controlled.</p> <p>Daily Management Meetings focus on prioritising allocation of resources</p>

	<i>"We used the rules of engagement that were set in the PSU guide about what the meeting sought to achieve, the relationship between the ACPO Team and the BCU Commanders, you know this mature, supporting debate, but essentially it was more of a COMPSTAT sort of process." (412)</i>
Adjusting and Context	<p>Performance Management frameworks supported structured decision taking</p> <p>Context supports appropriate decisions</p> <p>Improvement is of little value without understanding why, as this supports future decisions</p>
Adjusting and Culture	<p>The Chief Constable applied firm control in order to influence the culture operating within the Force.</p> <p>The culture encouraged learning by decision takers and this was seen to affect Adjusting positively.</p> <p>The culture valued decision taking based on understanding of cause and effect.</p> <p>The culture had moved from the rigidity of crime oriented NIM to a more flexible organisationally oriented continuous improvement.</p> <p>The performance culture is seen as mature.</p> <p>Unlike COMPSTAT, the performance culture did not result in an <i>"uncomfortable challenging experience"</i>.</p>
Adjusting and Management Ability	<p>Turnover of staff reduces experience and skill levels, making it more difficult to take appropriate decisions.</p> <p>Some meetings are aimed a pooling skills and improving management abilities to address Force wide issues.</p> <p>Management Ability to source feedback influences how the decisions they make.</p> <p>As more performance management processes have developed, managers have been more able to influence overall performance, monitoring has moved to managing.</p>

Table 8-10 - Adjusting Relationships. Source: Derived from data

It is concluded from the content summarised in Table 8-10, that in Case B, the nature of Adjusting is influenced primarily through Alignment as an expression Organisational Purpose. This can be seen as acting through its influence on the nature of the Decision Making structures. A change of culture, towards organisational performance management and away from crime oriented NIM processes is well underway. The development of

specific performance management meetings to consider performance issues in a wider context than just NIM demonstrates how this has developed over time. Context was important in assisting decision makers and the ability of management to make appropriate decisions was seen as a skill that resulted from experience.

Affecting

Relationships between Affecting and the other Elements or Dimensions are revealed by the data. Within Case B, the Affecting Element showed very strong relationships to Alignment and Culture, and a weak relationship to Management Ability, Organisational Knowledge, Organisational Purpose, Context, Decision Making, and Leadership (see Figure 8-11).

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 8-11:

Relationship	Comment
<u>Affecting and Alignment</u>	<p>Affecting through processes was present; its use has been driven centrally (via Home Office) and was becoming more widely used.</p> <p>“So again, it's bringing people in to us at corporate meetings and then us going back out there and we have to feed back the results of those as to what we find, what we don't find and how does that fit back into a system and processes, how do our people feel in terms of that.” (405P)</p> <p>An ‘ethical’ approach to improvement was encouraged by the Chief Constable and steps were taken to quality assure activity and results. “...the Chief very, very early on was very, very robust around quality...” (405)</p> <p>The NIM process helped to ensure that activity was aligned to the control strategy.</p> <p>Operation Quest (from the Home Office) was aimed at refocusing improvement activity towards processes.</p> <p>Pay related to priority tasks had been trialled and was aimed at encouraging staff to take on key roles.</p> <p>“That's what it is, just trying to get the shifts and bobbies to understand at a low level what it actually means. Not some nebulous sort of, what we talk about it at strategic level.” (408)</p>

	<p>“You've told the bobbies that satisfaction rates is coming up, that's brilliant, you've done really well at that, keep you informed, means something to them but what generally I think bites them or what makes them work, is process” (408) Communication was often used to reinforce appropriate behaviour.</p> <p>Suspect management practice had been formalised and made more consistent through regular management meetings.</p> <p>“I must meet my Inspectors, I have individual one to ones on a monthly basis with PDR, and I'll hold them to account. What's your shift doing, I get stats back. Oh you're doing quite well here,..” Influencing managers' behaviour to achieve priorities. (408)</p> <p>Two key meetings chaired by the Force Executive drive change within the Force.</p> <p>Holding managers to account was a key theme in ensuring activity was in line with purpose and priorities.</p> <p>“Cause we're kind of got an interactive process of incremental change if you like.” (412)</p>
<p><u>Affecting and Culture</u></p>	<p>The robust approach of the Chief Constable to putting accurate data over high detection rates had an influence on culture in the Force.</p> <p>The change to a performance culture led to a change in key positions, subtly influenced others to adjust their position.</p> <p>“But changing cultures takes a while.” (405P)</p> <p>Affecting managers is part of affecting “I would say out of all the Chief Constables we've had, okay she's pushing people into doing things and making the bosses, are making people do it and I can see that happening and... She's made people more accountable”(407S)</p> <p>“This section here, is a learning organisation. Sometimes more so than others, I suppose. Do something really stupid you get in the crap, but once you do the mistake, you move on.” (408)</p> <p>The culture around dealing with mistakes was changing and becoming supportive.</p> <p>“He said the challenge, the conversation it drives performance, it makes a change, but it does it in a supportive and learning environment, so he was very pleased with that rather than a dictatorial stance, 'you will do this' regardless of any conversation around why, how, what the impact that might be in relation to that” (408)</p> <p>The culture around influencing staff was reported positively by those outwith the organisation.</p> <p>Simple messages were used to communicate the desired culture in</p>

	<p>order to encourage front line staff to comply.</p> <p>“It's more like culture change, and having the confidence that if you can identify things you need to input into increasing satisfaction then perhaps you can have”. (412)</p>
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Table 8-11 - Affecting Relationships. Source: Derived from data

It is concluded from the content summarised in Table 8-11, that in Case B, the nature of Affecting is influenced primarily through Alignment and Culture.

Alignment and Culture can be difficult to discriminate between, but here, Alignment was expressed as effort applied to ensure activity and methods were compatible with strategy and purpose. In this case, changing culture is spoken about in the same terms as changing organisational behaviour. A change in culture implied a change in organisational behaviour. The term ‘embedding’ is often used in relation to changing organisational behaviour and reflects the close relationship between Affecting and Culture.

Affecting relates primarily to the ways in which management influence the behaviour of their staff. The ways in which managers manage is seen as a product of the organisational culture relating to appropriate ways in which people can be managed and will be influenced by management theory, for example, from management training or their assumptions about the nature of people and organisations. The ways in which pressure is exerted to keep people acting in line with policy and strategy (i.e. Alignment) will also be influenced through the same factors.

Achieving

Relationships between Achieving and the other Elements or Dimensions are revealed by the data (see Figure 8-12). Within Case B, the Achieving Element showed very strong relationships to Decision Making, Culture and Management Ability, as well as a strong relationship to Alignment.

Relationship	Comment
Achieving and Decision Making	<p>Accuracy of data and an ethical approach to action was seen as contributing to productive outcomes.</p> <p>There was recognition that statistics involve people and detecting minor crimes meant criminalising the public they were supposed to be supporting.</p> <p>“So it's about managing my business appropriately to deliver more for the people of Peterborough, and that I think is really important.” (410)</p>
Achieving and Culture	<p>“In order to put that into context we have to understand where we're from as the Mad Hatter said to Alice. So, back four, five years ago, the Force was a failing Force. And at that time in terms of performance management, the Force was going nowhere. We'd no real clear direction or methodology if you like for monitoring and reporting performance. Not just day to day crime figures but in performance in the broader sense in terms of sickness, PDRs and some of the business issues that's around the Force. We were also pretty poor at financial management at that particular time.” (405)</p> <p>“...so it was very heavy on crime reduction, it was very heavy on detection, and it was you know, it was sanction detection rate for this, and burglaries, and it has been very much a culture change we're going through now,...” (405V)</p> <p>“...And it's going to take some time to get processes in place and they're already in place in a lot of places. But it's just, I think police officers are sometimes I think the worst of change. Nobody likes change but sometimes perhaps Police Officers can become so entrenched...” (407)</p> <p>Quantitative performance management is still seen as underpinning overall performance.</p>
Achieving and Alignment	<p>“So the core values of the organisation, the integrity, respect and sensitivity are interwoven into the performance management framework and you know, it's worked for us and it's worked against us.” (405P)</p> <p>Enabled perverse incentives to be more easily identified.</p> <p>Talking about performance results -“...if it's not going in the right direction, we'll be held to the flame.”</p>
Achieving and Management Ability	<p>Poor performance is described in relation to poor management.</p> <p>“But it quickly became apparent that no matter what fixes were being put in place, we weren't in a position to actually monitor and discuss at a corporate and BCU and then as a departmental team level performance in the, in the round And by that I don't just mean day to day crime figures.” (405P)</p> <p>See Note *</p>

Table 8-12 - Achieving and Dimensions. Source: Derived from data

** When investigated in detail, Management Ability was found to have less influence than predicted by the overlapping references. From reviewing the evidence against Management Ability, this should be changed to a weak relationship.*

It is concluded from the content summarised in Table 8-12, that in Case B, the nature of Achieving is influenced primarily through the nature of Decision Making structures and Culture. Achieving, by definition, requires productive behaviour, that is, behaviour that delivers against organisational purpose. This is influenced is most readily seen in the choices managers make about action (i.e. decision-making). The influence of changing culture is also readily seen in this Force with a clear distinction being made between the culture present when it was considered as ‘failing’ and as it is now.

8-6.3 Discussion and Theory of Influences – Case B

Having discussed in detail the Dimensions influencing each element, the answers to the research questions are now summarised and some overall conclusions are now drawn regarding an overall theory of influences in this case.

This section has addressed two research questions, namely:

RQ5. In practice, what factors influence the PM process?

RQ6. What is the relationship between these factors and the individual elements of the process?

It has been shown that the Dimensions identified in Case A (refer to Table 8-4), were still relevant to this Case. This addresses RQ5 by identifying a set of Dimensions influencing the PM process.

	Dimensions with very strong relationship	Dimensions with strong relationship
Attention	Management Ability Culture	Context Organisational Purpose
Analysis	Culture Context	Alignment
Advising	Context Culture Management Ability	None
Adjusting	Alignment	Organisational Knowledge Decision Making Context Culture Management Ability
Affecting	Alignment Culture	None
Achieving	Culture Decision Making	Alignment

Table 8-13 - Case B - Stronger Relationships. Source: Derived from data

It was concluded earlier that these Dimensions influence the process of OL to different extents and influence Elements to different extents. From the data for Case B, key Dimensions relating to each Element were identified (see summary in Table 8-13) and the nature of relationships in Case B has been revealed. This addresses RQ6.

In addition to addressing RQ6, continuing this reasoning further, indications of the overall nature of these influences can be derived from the data in Table 8-13, namely:

- Culture exhibited a strong or very strong relationship with each of the Elements. A general influence across the whole of the process is indicated.
- Context also exhibited a strong or very strong relationship to four of the six Elements. Context has a clear link to the nature of the process and ways of understanding the relevance of information. A more focussed influence on elements of the process is indicated.
- Alignment also exhibited a strong or very strong relationship to four of the

six Elements. Alignment reflects the organisations efforts to maintain strategy or policy. A general influence across the whole of the process is indicated.

- Management Ability exhibited a strong or very strong relationship to three of the six Elements. Management Ability relates to determining how to use information and how to influence people. A more focussed influence on elements of the process is indicated.
- Decision Making structures exhibited strong or very strong relationships to two Elements. By their nature, Decision Making structures most clearly influence the Adjusting Element, but their output was also shown to be a factor in the extent of productive action contributing to Achievement. A focussed influence on elements of the process is indicated.
- Organisational Purpose exhibited only had a strong relationship to Attention. Given its fundamental nature, a greater relationship would be expected. This may be explained if Organisational Purpose is manifested through the other dimensions (such as Alignment) rather than having a direct influence on the PM process. As a result, a general but indirect influence on the process is proposed.

Based on the above, it is proposed from this that some Dimensions may have an overall effect on the process, while other Dimensions may have a focussed influence on specific Elements. From these, two dimension of influence may therefore be derived, that is, focussed to general, direct to indirect. This cannot however be determined from one case alone and is explored further in Chapter 10.

8-7 CASE B – THE COMPLETION OF OL (RQ7 & RQ8)

To explore the issue of the prevalence of Organisational Learning, the data from Case B is here considered in relation to the Research Questions relating to the ‘completion’ of OL,

namely:

RQ7 – In practice, which factors influence the completion of OL?

RQ8 - In practice, do knowledge creation and action creation processes operate and interact to create OL?

As identified in Chapter 6, the presence of PM practice does not in itself mean the presence of OL. There it was established, for PM to fulfil the criteria for the completion of OL, three conditions are necessary. Firstly, Organisational Action must be based on Knowledge derived from performance. Secondly, that Organisational Action must contribute to Organisational Purpose. Thirdly, that the required organisational behaviour must be sustained.

These conditions exclude changes in behaviour based on other existing Organisational Knowledge, or for any reason other than based on knowledge created from performance data (i.e. not Attention to Advising). It also excludes change in organisational behaviour, which does not contribute to organisational purpose (i.e. Adjusting not leading to Achieving). Lastly, it excludes short-lived behaviour change prior to reverting to the previous behaviour.

Action Based on Performance Knowledge

The first condition, that Organisational Action must be based on knowledge derived from performance data, is determined by the extent to which decisions are based on the knowledge created from performance information (i.e. the products of Advising), rather than other sources of influence such as pre-existing ideas or personal knowledge. In defining Adjusting, it was shown that ‘interpretation contexts’ were an aspect (see Adjusting above) “...through the consideration of knowledge created about performance in the context of existing personal and organisational knowledge and theory...”.

Within Case B, examples were found of the need for supplementary knowledge, where both personal and organisational knowledge were insufficient to be able to understand what was

happening and why. Furthermore, formal procedures of NIM created boundaries and, to an extent, could dictate the nature of meetings, limiting the flexibility to deal with issues.

The following is an example of an expression of boundaries to personal and organisational knowledge:

“But the truth is that that some of the stuff that comes up here, we still can't get a handle on. We still can't find out why, why is that happening”. 405P

From such data, it was concluded that there is likely to be limits to organisational or personal knowledge about any current situation or the state of the environment. In such circumstances, it is proposed that new performance information will be interpreted in the context of existing knowledge, or existing theory about its meaning.

Organisational Purpose / Sustained

The definition of the Achieving Element (see Section 8-5.2.6 Achieving above) already reflects the second and third conditions, that is, Organisational Action must contribute to Organisational Purpose; and, the required organisational behaviour must be sustained (for reference, extracts from definition are provided below).

...through the creation of organisational behaviour aligned with organisational purpose, ...

To achieve organisational purpose, change must be sustained.

Having now established the nature of the ‘completion’ of OL in this Case, Research Questions RQ7 and RQ8 can now be addressed.

8-7.1 Factors influencing the completion of OL (RQ7)

As just discussed above, the Achieving element is most closely associated with the ‘completion’ of OL in relation to behaviour aligned to Organisational Purpose and which is sustained. Therefore, RQ7 can best be addressed by considering which Dimensions influence this Element.

When considering the relationships between the Dimensions and Achieving earlier (see Figure 8-12 for summary), it was demonstrated that few Dimensions had an influence but those that did influenced it strongly or very strongly (see Achievement in Table 8-13). The Dimensions of Culture and Alignment have been identified as having a general effect on the OL process of PM, that is, there was evidence of them being related to four or more of the Elements. Decision Making however, was only found to be strongly related to Adjusting but very strongly related to Achieving and is therefore seen as having a more focussed influence.

From this, it is proposed that, in Case B, a) the Dimensions of Culture, and Alignment influence the completion of OL through the whole process of PM; and b) the Dimension of Decision Making had a more direct influence on the completion of OL.

The nature of these general and focussed influences is now considered in light of the data from the Case.

8-7.1.1 General Influence – Culture and Alignment

The Dimensions of Culture and Alignment have been identified as having a general effect on the OL process of PM, that is, there was evidence of them being related to four or more of the Elements. Below, the evidence for each dimension is summarised against each element and presented in the form of a table.

Alignment

Element	Nature of Alignment Influence
Attention	Attention is influenced by the drive for Alignment
Analysis	No relevant data found
Advising	The use of performance assessment frameworks help to organise and summarise information. Case B had gone through a change of national framework from PPAF to APACS. These provide a direct link to Alignment.
Adjusting	At the organisational level, a drive for 'corporacy' reflects recognition

	<p>that effort is required to maintain alignment. Performance meetings were established within the Force and Alignment was created through a consistent approach to the subjects and methods of Adjusting. This was driven by the Chief Constable.</p> <p>Indication that the nature of PDR is to align behaviour to organisational goals.</p> <p>There has been a change in practice with a move towards performance meetings and away from NIM. Strong leadership created Alignment within Adjusting.</p>
Affecting	To achieve productive action, planning and Alignment needed to work.
Achieving	<p>Lately, the organisational aims had started to take precedence over further improvement in national league tables. Ethics and values became more important than achieving a high score for detection rates.</p> <p><i>“...’I don’t mind foregoing some detections but I want integrity, to be the watchword’...” (405P)</i></p> <p>The Force had been able to move from a focus on the figures to considering the processes that influenced those figures.</p>

Table 8-14 - Overarching Influence of Alignment. Source: Derived from data

The influence of Alignment can be seen as general in that there was evidence of its influence across the whole of the process except Analysis. It was evidenced largely by efforts led through the leadership of the Chief Constable to refocus the efforts of the organisation. Over time this effort had moved to improving performance results and then to improving ‘actual’ performance. The absence of influence in Analysis is not seen as significant.

Culture

Element	Nature of Culture Influence
Attention	The change in culture, driven by the Home Office intervention, was clearly identifiable and was seen as having an influence on the choice of indicators. Attention can therefore be seen as driven by Culture (which in this case was imposed).
Analysis	The change in practice regarding the professionalization of analysis was driven by a change in culture rather than a change in organisational purpose.
Advising	Advising is influenced by Culture, Leadership, Alignment, Analytical Capability, Management Capability, as well as the media used.

Adjusting	The development of specific performance management meetings to consider performance issues in a wider context than just NIM demonstrates how this has developed over time as culture has changed.
Affecting	In this case, changing culture is spoken about in the same terms as changing organisational behaviour. A change in culture implies some change in organisational behaviour. The term 'embedding' is often used in relation to changing organisational behaviour and reflects the close relationship between Affecting and Culture.
Achieving	Descriptions of change in practice across the organisation closely relate to culture. Much of the discussion captured under this heading relates to Culture or in particular the embedding of new culture. It is difficult to separate embedded working practice from culture. While culture has an influence on behaviour, Achieving is the outcome in terms of behaviour and is an expression of culture.

Table 8-15 - Overarching Influence of Culture. Source: Derived from data

Culture was widely discussed in relation to each of the Elements. Its influence can be seen as general in that there is evidence of its influence in each element. Its influence related to ways of behaviour and embedded practice.

8-7.1.2 Focussed Influence - Decision Making Structures

As the influence of Decision Making structures is more focussed than Alignment and Culture, it is expressed here as a summary rather than in a table.

Within Case B, the data shows the influence of the Decision Making structures Dimension on the Achieving Element to be related to integrity of data and ethics.

The accuracy of data shows a positive relationship to Achievement and this is mediated through Decision Making structures. Whilst not exposed in detail by the data, it is proposed that due to rigorous and methodical decision-making processes, the more reliable data supports the potential for more appropriate behaviour.

Likewise, ethics related around decision-making are seen as determining either a perverse

outcome or a productive outcome (which provides the relationship to Achievement). It is easier to deliver numbers in terms of performance measures, than it is to deliver productive outcomes that deliver local or organisational goals. The issue of ethics contributes to deciding which will be delivered.

Two extracts from transcripts, which illustrate this, are provided below.

So the core values of the organisation, the integrity, respect and sensitivity are interwoven into the performance management framework and you know, it's worked for us and it's worked against us. It's worked for us in so much as that when HMIC and others come along and do audits on our crime system and say, you know you've only got a twenty four percent detection rate, the proof of the matter is we can actually say that is a true figure. (405P)

...but urination in the street is an offence you can actually ticket for that offence, doesn't show as a sanctioned detection, or you can do a Section Five, which does, we get a lot of Section Fives. You've got to turn around and say the veracity, the morality there and the ethics there are somewhat questionable, and they were rightly questioned. (408)

In Case B, ethics and integrity are associated with Decision Making structures rather than Adjusting through the Force's established methods and decision making processes developed to deliver PM.

8-7.1.3 Summary of Influences on Achievement

In considering which factors influence the completion of OL, it has been identified that Alignment and Culture have a general influence, whilst Decision Making structures have a focused influence. This is discussed further at Section 8-7.3 Discussion and Theory of Completion of OL – Case B.

8-7.2 The Interaction of Knowledge Creation and Action Creation (RQ8)

The OL Model of PM proposed at the beginning of this Chapter implies a simple relationship where Knowledge feeds into Action. RQ8 asks whether this is confirmed or modified by the data.

The feedback / feed-forward nature of the process exists to supply information to decision makers, and to use this to trigger new behaviour. However, from practice it was clear that decision-making was not just determined by the data presented to decision makers, but also by things like the organisational context, existing personal knowledge or organisational knowledge. It is conceivable that organisational context could include other drivers, for example, finance, where a decision may be taken on the grounds of the resources available rather than what the data would otherwise dictate, or, again for example, the relative performance of the organisation, that is, how likely is the Force to be criticised. This ability to consider the wider influences and consequences is an important aspect of decision-making, that is, it is not just about reacting to the performance data. If this were the case, the decision making process would be susceptible to automation.

To answer RQ8 then, it was necessary to consider where it would be best evidenced. Two approaches were adopted. The first considered the nature of the Adjusting element, which includes the decision making process, and the extent to which the Advising element provided the data for decision-making. The second took a more general approach and reviewed the content coded within NVivo at both the Action Creation set (incorporating Attention, Analysis and Advising) as well as at the Knowledge Creation set (incorporating Adjusting, Affecting and Achieving). These two approaches are now described in more detail.

8-7.2.1 The Nature of Adjusting in Case B

Whilst considering the nature of the Adjusting element, data was collated and reviewed according to the constituents of the definition. The definition of Adjusting identified from Case B contains an element relating to the sources of data and the contexts used to interpret data. For reference, excerpts are repeated below:

Information Source - *Through the consideration of performance knowledge*

created from the acquisition of data from performance feedback

Interpretation Contexts - In the context of existing personal and organisational knowledge and theory

The conclusions for each of these is now summarised based on the relevant interview data, as well as the experience from observations of meetings.

Information Source

The nature of knowledge used to support decision-making was revealed by several interviews. For example, the data confirmed the source of decision making about Customer Focus was the performance data reported in the standard reports.

From an analyst's perspective, the key to decision making was giving the right information. However, problems were sometimes identified in getting the right information to meetings. In addition, sometimes there was still doubt about the meaning of some data when it reached the decision-making meeting. This suggests that without the information, it was difficult to make appropriate decisions and therefore this supports the idea that the information underpins decision-making.

Other sources of information, other than performance information, were present. For example, knowledge may be created from observation of practice in other organisations. Whilst creates a different data source, this still fits with the knowledge creation process.

Meetings with particular perspectives were dependent on appropriate data and the types of data sets appropriate for meetings varied according to the nature of those meetings. The extent of this varied according to different meeting types.

In summary, there was a wide variation in the range and nature of data sources used at decision-making meetings, however, when these meetings (or a part of those meetings) were focused on performance issues, performance information was the primary source referred to.

Interpretation Contexts

The data provided an example of the need for additional knowledge where both personal and organisational knowledge are insufficient to be able to understand what is happening and why. Limits or boundaries to personal and organisational knowledge were also identified. It is viewed that there will always be a limit to organisational knowledge or personal knowledge about the current situation or the state of the environment. It is proposed that new information will be interpreted in the context of existing knowledge, or existing theory about its meaning.

8-7.2.2 Knowledge Action Overlap

To examine the overlap between the Knowledge Creation process and the Action creation process, a query was developed in NVivo. This query captured items that had been coded both with the Knowledge Creation set (containing all data from Case B coded at Attention, Analysis and Advising elements) and the Action Creation set (containing all data from Case B coded at Adjusting, Affecting and Achieving elements). The result is shown in Table 8-16. These were summarised according to the elements involved and this revealed the following relationships:

- Advising and Adjusting showed the strongest overlap
- Attention was more evenly linked to all stages of Adjusting, Affecting and Achieving
- Analysis more evenly linked to all stages of Adjusting, Affecting and Achieving
- Adjusting was most closely linked to Advising, but also showed links to Attention and Analysis
- Affecting linked more equally to all three elements of Knowledge Creation.
- Achieving was most closely linked to Attention

		Knowledge		
		Attention	Analysis	Advising
Action	Adjusting	4	2	9
	Affecting	3	2	2
	Achieving	2	1	0

Table 8-16 - Knowledge Action overlap. Source: Derived from data

It is conceivable that these relationships may be partially attributed to a product of the coding method and the criteria used to support the coding, however, there is a sufficient range of data sources and coding pairings to provide evidence that aspects of Knowledge Creation influenced aspects of Action Creation.

Whilst the pairing between Advising and Adjusting is anticipated by the model, the other relationships were not anticipated. The relationship between Attention and Achieving may be explained through the influence of Organisational Purpose, in that, what the organisation aimed for was what was measured. The relationship between Analysis and Affecting may be explained through Management Ability, where the extent of analysis was dependent on the ability of managers to understand the techniques used and to apply these to influencing staff.

This suggests Decision Making structures, Management Ability and Organisational Purpose may provide a mediating influence between Knowledge and Action. A provisional model of OL is outlined in Section 8-7.3.2. However, at this stage, given the nature and scope of the Case Study, there was insufficient detail to support detailed conclusions.

8-7.3 Discussion and Theory of Completion of OL – Case B

Section 8-7 has addressed the two remaining research questions:

RQ7. In practice, which factors influence the completion of OL?

RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?

These were addressed by considering the influences on the Achieving Element and by considering the impact of Knowledge on Action. Below, the conclusions regarding each are summarised.

8-7.3.1 *Influences on Completion*

By considering the nature of Achieving, we can conclude from the data and the discussion at section 8-7.1 above that some Dimensions influence the completion of OL, but they do so to different extents and in different ways. This influence may be either through a focussed influence on specific elements or a general influence on the process overall. This helps to identify which Dimensions are element related and which are process related. Table 8-17 summarises which dimension influence Achieving and the type of influence.

Type	Dimensions Influencing Achieving
General Influences	Culture, Alignment
Focused Influences	Decision Making structure

Table 8-17 - Influence Types for Completion of OL. Source: Derived from data

8-7.3.2 *The Interaction of Knowledge and Action*

The nature of Adjusting and the Knowledge / Action overlap was considered at section 8-7.2. Taken together for this case, the data indicates that the Knowledge Creation and Action Creation processes do interact through Decision Making Structures, Management Ability and Organisational Purpose. This interaction leads to action in line with overall objectives (through Achieving). However, Adjusting is also influenced by other sources of knowledge, for example, prior Organisational Knowledge. This prior Organisational Knowledge is likely to mediate the uptake of performance related knowledge. These relationships are modelled in Figure 8-13.

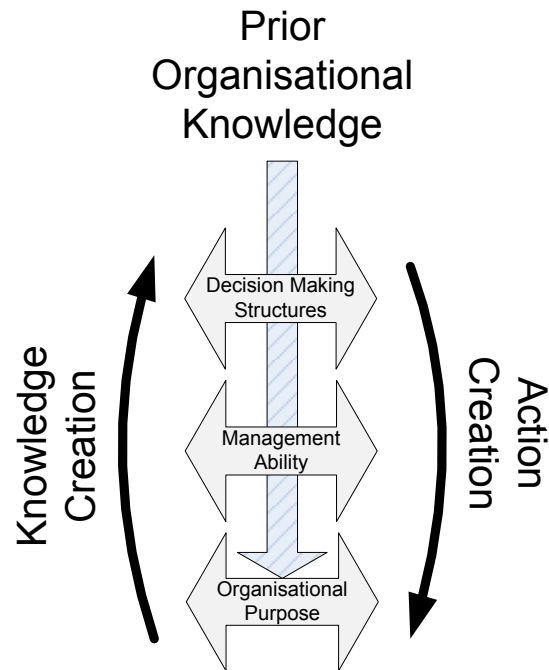


Figure 8-13 - Mediating Influence of Organisational Knowledge. Source: derived from data.

8-7.3.3 Considering Impact and Prevalence

Taking all the evidence from section 8-7, it can be seen that there are occurrences where OL is complete. However, many influences act as inhibitors through negatively influencing the process of OL. By deliberately identifying and addressing such issues, it may be possible to influence the completion of OL.

To quantify the extent of completion properly, a more rigorous methodological approach would be necessary.

8-8 SUMMARY OF CASE B FINDINGS

Based on the data from Case B, the research questions, how they have been addressed and a summary of the findings in Case B are listed in Table 8-18.

Research Questions	Addressed Through	Case B Conclusion
RQ1. How is knowledge created within PM practice?	Considering the nature of the Elements, confirming their presence and refining their meaning.	Knowledge Creation was evident with the practice of Performance Management. Performance data was used to provide inputs into a number of different meetings at different levels and across the operational Command Units.
RQ2. How is action created within PM practice?		Action Creation was evident within practice. However, whilst decision-making and management practice were obviously widely practiced, the historical association of PM with producing performance information meant the Action Creation phase was often not apparent, or not recognised, as part of PM practice.
RQ3. Does performance knowledge influence organisational behaviour?		Products of Knowledge Creation were found to feed into decision-making. These products then influence decisions about the need for action or the nature of action. Other factors may also influence decisions, including existing Organisational Knowledge.
RQ4. What is the nature of elements within each case?		The process of PM was comprised of the elements identified in the OL Model of PM and the nature of these Elements has been refined.
RQ5. In practice, what factors influence the PM process?	Considering the Dimensions that influence the process of OL and exploring the extent to which each Element is influenced by the Dimensions.	It was shown that the Dimensions identified in Case A were relevant. The extent of presence of various Dimensions has been identified.
RQ6. What is the relationship between these factors and the individual elements of the process?		These Dimensions influence the process of OL to different extents, and influence the Elements to different extents. Key Dimensions relating to each Element were identified and the nature of those relationships was revealed.
RQ7. In practice, which factors influence the completion of OL?	Considering the extent to which the completion of OL was present.	The completion of OL was influenced most clearly by Culture, Alignment, and Decision Making structures.
RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?		Knowledge Creation influenced Action Creation mostly through the Advising - Adjusting link, but other routes of influence between Knowledge and Action, namely Decision Making structures, Management Ability, and Organisational Purpose became apparent.

Table 8-18 - Addressing the Research Questions - Case B

Case B has allowed the development and application of the Dimensions concept derived from Case A.

It has been proposed that a multi-level model is necessary to capture the many different aspects identified. This is explored further in Chapter 10, which undertakes a Cross Case Analysis and derives a model that can be applied to all of the cases.

Within Case B, it has been shown that the OL process was present in that organisational action was being created based on performance data. This was occurring not just in recognised Performance Management practice, but also within the Crossfire process and the Tasking & coordinating process of NIM. To a degree, these resulted in Achievement in terms of Organisational Purpose, and the changes implemented were sustained. One of the clearest indicators of the impact of this was the change in the assessment of the Forces performance, as seen by both themselves and scrutinising bodies, although to avoid including another aspect to the analysis this is not detailed here.

It is possible therefore to confirm that OL was present, but it is not possible to quantify this at this stage. In relation to the prevalence of OL, we can say that there were examples of OL within Case B.

Chapter 9 goes on to consider the data and findings from another case study, this time in Northern Ireland, Case C.

8-9 REFLECTION

Critical Realism proposes reflection as an important source of understanding. In this spirit, a brief reflection on Case B is provided. This includes reflection on the conduct of the Case, its analysis and findings.

In writing up this Case, a different approach is adopted as to that in Case A. The write-up of Case A focussed on establishing the Elements and Dimensions. Here, the write-up of Case

B has focussed on expanding the understanding of the relationships between these Elements and Dimensions, and developing understanding of the relationships between Knowledge and Action. Whilst this may present a less consistent view for the reader, this drawback is outweighed by providing greater a more detailed understanding of the OL concept. The Critical realist approach has enabled successive unfolding of the nature of the phenomena.

The idiosyncrasies of the case were explainable in terms of the individual elements of the model, or by the differing influences of the Dimensions. This provided some satisfaction that the model was developing in a way that was sensitive to these differences and, to some extent, enabled explanation.

The qualitative approach introduces a significant delay from data gathering to completion of the analysis of the data collected. During this delay, ideas develop which are only supported by perception, and these influence the form of subsequent data collection. Many of these ideas were captured in memos and notes and it there is merit in explaining this process, however the focus on the research questions is paramount to this thesis, and the limitations of space dictate a focus on the outcomes rather than the process.

By choosing to undertake the data gathering for the Case Studies in similar ways the opportunity to develop the models through more explicit questions was missed. However, it was felt at the outset that the validity of any model developed depended on confirmation of its fit across the three Case Studies rather than the depth of its development.

What became apparent during the analysis of Case B was the difference in strength of influences amongst the Dimensions identified in Case A. The method for revealing these relationships moved forward in steps, first by identifying that overlaps between coding would provide a useful overview, then by identifying that these overlaps could be quantified to an extent, and lastly by confirming the strength of relationship by referring back to the individual selections of the transcripts. This validated the coding process and provided greater insight into the nature of the relationships than had been anticipated.

Some limitations on the use of NVivo were found in this process. This highlighted that NVivo is designed as a tool for managing the data, rather than an analytical method.

The value of the data collected has not yet been exhausted. Obviously now it would be good to continue that investigation and develop a greater understanding of the finer relationships present. However, the extent of progress should not be underestimated. At the outset, there was insufficient detail in the literature on which to develop a detailed model. Now the detail of the model allows those finer relationships to be proposed and test through techniques more appropriate to theory testing, rather than theory development.

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9-1 ORGANISATION OF THE CHAPTER

The following table (Table 9-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Questions.

Content	Relevance to Research Questions	Comment
The Refined OL Model of PM	Establishes the basis on which this Case Study was analysed	Derived in Chapter 7
Case Study C	Describes Case Study B in terms of the Research Questions	Provides conclusions regarding Case C
Description of Case	Describes the attributes of the Case and Case Study.	Provides context to findings.
The Elements and Flow of PM - Definitions	Directly Addresses RQ1to RQ4 RQ1. How is knowledge created within PM practice? RQ2. How is action created within PM practice? RQ3. Does performance knowledge influence organisational behaviour? RQ4. What is the nature of elements within each case?	Results in theory of OL process in Case C. Helps to address the research problem in relation to the impact of OL.
Description of Drivers, Factors, and Relationships	Directly Addresses RQ5 & RQ6 RQ5. In practice, what factors influence the PM process? RQ6. What is the relationship between these factors and the individual elements of the process?	Results in theory of influences in Case C Helps to address the research problem in relation to the impact of OL.
Completion of OL	Directly Addresses RQ7 and RQ8 RQ7. Which factors influence the completion of OL? RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?	Results in theory of Completion of OL in Case C. Helps to address the research problem in relation to the prevalence of OL.

Table 9-1 – Organisation of the Chapter

This Chapter considers a Case Study of a Police Force in Northern Ireland and addresses the research questions from the perspective of this individual case. The case is reviewed in terms of a description of the elements and flow of the process of PM, a description of drivers, factors and relationships within the Model, and the evidence of OL outcomes.

9-2 CHAPTER INTRODUCTION

Building on the Pilot Case Study described in Chapter 7, and the subsequent Case Study conducted in England, this Chapter goes on to consider a Case Study from Northern Ireland. This selection of cases from three differing context provides some support for generalisation of findings.

As with the Case Study A and Case Study B , the approach adopted here is to undertake a Within-Case Analysis (Pettigrew, 1990). Within-Case analysis typically involves detailed case study write-ups for each site and can help investigators cope with the deluge of data (Eisenhardt, 1989). Within the literature there is no standard format adopted, the key principle of the generation of insight has guided the content and format of these write ups (see Eisenhardt, 1989, Gersick, 1988, Pettigrew, 1990). The aim of this within-case analysis is to help understand the Case as a whole in the context of the OL Model of PM and to further address the Research Questions

A cross-case analysis of all three cases is included in Chapter 10. This Case Study and the one outlined in Chapter 8 were conducted using the same theoretical basis as the Pilot Case Study, but using a revised OL Model of PM based on the Pilot case Study. The background to development of PM practice varies across the UK (see Chapter 2).

A full explanation of the methods adopted to analyse data are contained in Chapter 7.

9-3 THE REFINED OL MODEL OF PM

The Pilot Case Study (Case A) discussed in Chapter 7, resulted in a revised OL model of PM (see Figure 9-1).

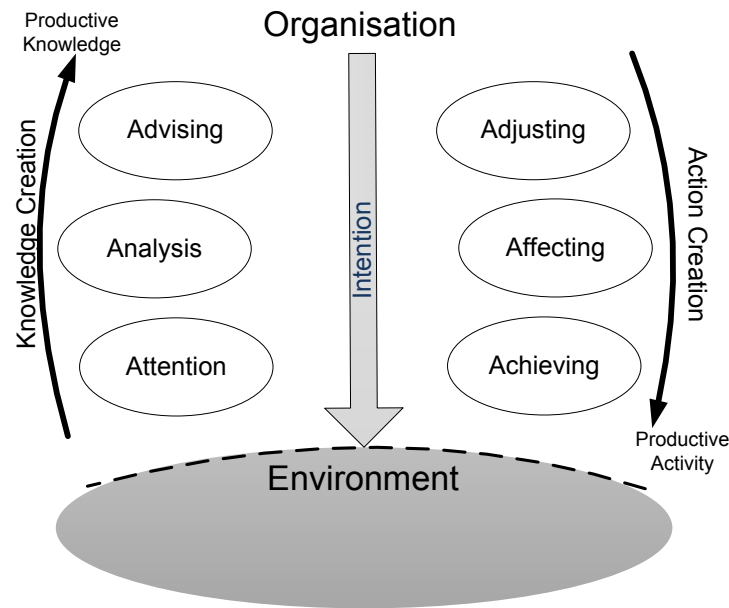


Figure 9-1 - OL as Interaction. Source: Chapter 7

The Research Questions (identified in Chapter 5, see Table 9-1) are still appropriate to the revised model.

9-4 CASE C – A POLICE FORCE IN NORTHERN IRELAND

The following section reviews the findings from the analysis of data from a third Case Study (referred to here as Case C) and draws conclusions regarding the Research Questions in the form of three theories regarding a) the process of OL, b) the underlying influences on the process, and c) the completion of OL.

9-4.1 Case C – Description of Case

Geographical

Case C is the PSNI, the only Police Force in Northern Ireland. The Force serves a population of around 1.7 million people and cover around 5400 square miles. As such it is considerably bigger than the other two Cases. At the time of the study, the Police Service of Northern Ireland had over 7000 regular police officers and over 2300 police staff. It

operates in 8 policing areas.

A reason for its selection as a Case was the different political situation in Northern Ireland.

Within this Case, policing priorities were set with close consultation and involvement of District Policing Partnership Boards.

Background

The relatively recent creation of the PSNI to replace the Royal Ulster Constabulary in 2001 meant that the role of policing had changed and it was now expressed in terms of a service.

The Patten Commission, in providing the basis for the establishment of PSNI aimed to create a police service that would be effective, operate in partnership with the community, and be accountable both to the law and the community which it was to serve (Independent Commission on Policing for Northern Ireland, 1999). The accountability of the Force to the public was paramount in order to build trust in the service. Procedures for ensuring accountability largely involved the reporting of Force performance and were laid down in the Patten report.

Performance Management Processes

Key management processes that were present were the formal accountability process.

9-4.2 Case C - Conduct of Case Study

This case study was undertaken in September 2008. The Assistant Chief Constable of the PSNI granted consent for the study.

Interviews

Interviews and Focus Groups were semi-structured in nature, covering key points suggested by *a priori* constructs (the OL Model of PM) developed from the literature (Eisenhardt,

1989) but varied according to the specific experience and views of the interviewees. Thirteen members of staff were interviewed either individually or in groups of two. Most interviews lasted around an hour. Interviews covered a range of actors in the PM process, from members of the Force Executive, to officers on the 'front line'. This created a 'diagonal slice' through the organisation (see Table 9-2).

Rank		Number of Interviewees
Executive level		1
Superintendent/	Chief	3
Superintendent		
Chief	Inspector	4
/Inspector		
Sergeant and Constable		3
Support Staff		2

Table 9-2 - Interviewees by Rank/Role. Source: Derived from data

This Case Study involved interviews with organisational members involved in a wide range of aspects of PM practice, for example, from officer on the street who were subject to PM practice, to decision makers and people involved in analysis of data. The interviews were aimed at obtaining a description of aspects of practice within the knowledge of the interviewee.

Interviews were completed in accordance with the Case Study Protocol. All the interviews were digitally audio recorded, imported into NVivo and later transcribed.

Observation

In addition to the interviews a number of critical meetings were attended as observer. These included:

- District 6-monthly Accountability Meeting
- Operational Commanders Monthly Performance Meeting
- Police Board Meeting

Observation notes of these meetings were kept and, where relevant, recorded in NVivo.

Artefacts

Copies of documentation presented at meetings were obtained where appropriate and where agreed. Some of this material was Confidential or Restricted in terms of the Government Protective Marking Scheme.

9-4.3 Case C - The Role of PM

As with the other Cases, the role of PM practice varied in terms of what was being managed. The three subjects of management, namely People, Resources and Processes, were all present in Case C but in different proportions to the other Cases (refer to Figure 9-2).

The high proportion of People oriented content reflects the focus on accountability. This was firmly embedded in the culture of the organisation and resulted in much of the performance related discussion being oriented towards improving how people performed.

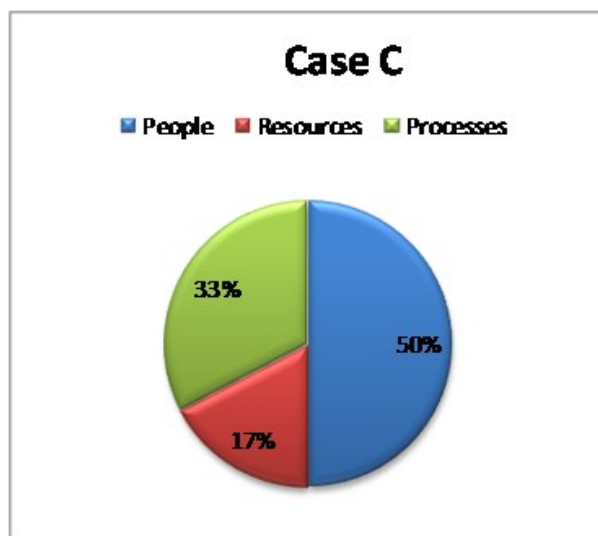


Figure 9-2 - Relative proportion of coding references. Source: Derived from data.

The relatively low proportion of Resource focussed discussion reflects a Force where performance was not dominated by the NIM Tasking and Coordinating process.

9-5 CASE C – THE ELEMENTS AND FLOW OF PM (RQ1-RQ4)

To explore the impact of Organisational Learning, the data is first considered in relation to the Research Questions relating to the process of PM as defined by the OL Model of PM namely:

RQ1. How is knowledge created within PM practice?

RQ2. How is action created within PM practice?

RQ3. Does performance knowledge influence organisational behaviour?

RQ4. What is the nature of elements within each case?

To address RQ1 and RQ2, we consider the aspects knowledge creation and action creation within the process of OL.

RQ3 is addressed by focussing on the point at which knowledge is used to support action, which is the decision making element (Adjusting).

To address RQ4, the data is reviewed against the definitions of the process derived in Chapter 6 (OL Model of PM) but first a summary of the coding distribution is presented. As the outcome of RQ4 is a refinement to the definitions used, this is considered before the other Research Questions.

9-5.1 Case C - Coding Distribution

To provide some context to the following discussion, the content of the each interview (including focus groups) in terms of its distribution of coding against each of Elements is shown in Table 9-3. This table shows the number of words coded at each element by each transcript. Colour is used to emphasise the range of values between cells.

	A : 501 Int Head of Analysis	B : 502 Int Supt F District	C : 503 FG SMT E District	D : 504 Int ACC Rural	E : 505 FG PCs E District	F : 506 FG PQA Unit B District	G : 507 Int PC B District	H : 508 Int Perf Insp F District	I : 509 Int CI PPP HQ	J : 510 Int CI B District
1 Attention	757	2142	1969	1379	954	3772	434	4546	1215	1571
2 Analysis	3120	733	724	305	656	465	0	501	1233	779
3 Advising	2081	721	1298	374	0	1045	0	401	471	239
4 Adjusting	1674	3167	402	228	860	764	310	1521	1075	912
5 Affecting	33	1389	2222	1609	1659	5447	740	3969	800	2167
6 Achieving	0	512	523	118	1268	756	0	573	410	537

Table 9-3 - Summary of Coding Distribution. Source: Derived from data

The same data is used to provide a pie chart indicating the distribution of content by Element

Figure 9-3.

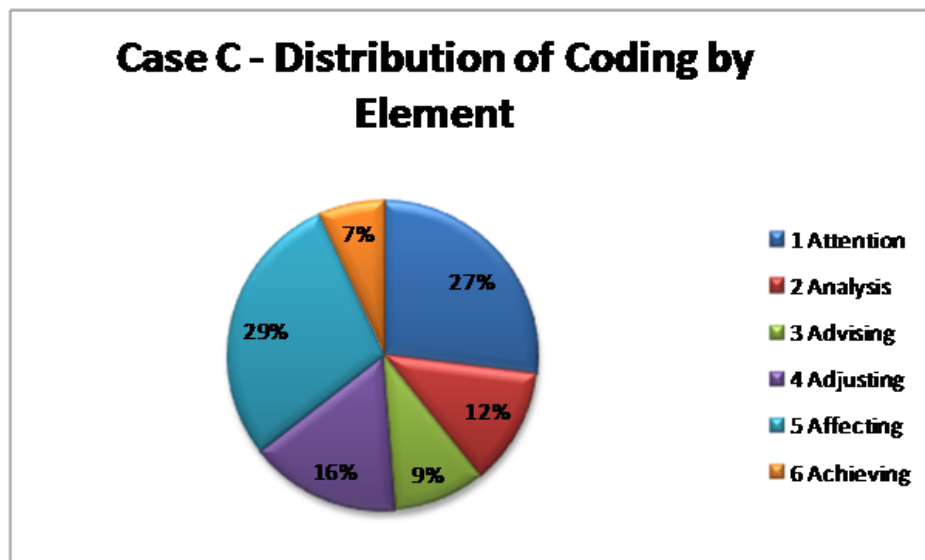


Figure 9-3 - Chart of Coding Distribution. Source: Derived from data

Although Achieving and Advising were relatively less well covered this reflects the reality of the accountability focus and the almost complete absence of performance analysis capability. Accountability also explains the relatively high proportions of Attention and

Affecting in that this resulted in a strong focus on measurement and influencing people. It is apparent however that each of the elements was covered adequately by the content of the transcripts.

9-5.2 Case C- Process Elements

Here, the data from Case C relating to each of the Elements of the PM process is compared against the definition derived in Case A. For each element, any amendment to the definition necessary to reflect this case is identified and the reasons for these amendments are then highlighted. Any unique aspects of practice, relating to each element, are also described. This is followed by exemplars from interviews which are provided to contextualise the discussion and to view the subject in the terms used by interviewees.

9-5.2.1 Attention

Definition

The definition for Attention was reviewed against the content of the Attention node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition whilst broadly fitting the data could be refined in light of this. As a result Attention is defined as follows:

Attention is the focus on the environment (both internal and external) that triggers the creation of performance knowledge by the organisation, through the use of feedback primarily from internal and external performance indicators (both quantitative or qualitative), in order to inform the relative position in relation to the achievement of goals or objectives inform the efficiency of processes or to monitor action intended to deliver these goals or objectives.

Reasons for changes

Aspects justifying the changes to the definition include:

- Both internal and external sources for data were present
- Some uses for data relate to the yearly planning cycle rather than active performance management and this distinction needs to be made in the definition.
- Evidence of use of data to inform efficiency of process.
- Remove from definition – include in relationships between elements.

Unique Aspects of Case C - Attention

In relation to Attention, aspects identified as unique included:

- Differences in practice between Divisions were quite distinct and indicate a lack of consistent culture or alignment. This was evident in approach to individual level performance, and to considering process performance.
- Attention on processes was well evidenced and described in one Division in particular. This stemmed from delegation by Chief Inspector.
- A focus on quality is a relatively new aspect of performance in this Case.
- A lot of the discussion assumed performance was something about individuals. This was expressed as a tension between the Human Resources department driving the Annual Performance Review process and organisational PM.
- Accountability was endemic, and this stemmed from the values that the Force is built on.
- Stakeholder Influence was more evident in this Case.
- The Policing Plans are well established and provide a focus for much of the work. This clearly drives Attention in this Case.
- Data problems were quite commonly referred to.
- The use of outside statistical assistance was unique within the Cases.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the element.

And with our Policing Plan targets, some of them are quite broad to reduce violent crime, so our overall violent crime numbers are down. I think they're down by eight percent on violent crime but we still have pockets of problems within violent crime. But it's diffic..., sometimes it's trying to get the attention on the actual problems within those broad targets. (501)

I suppose that's not surprising, because it's a top down approach, because the policing board set the targets for the Police service in consultation with the Chief Constable after they have conducted their survey which is informed thinking around what from the citizen point of view are the areas of particular concern that the Police need to focus upon. (502)

Well as much as it can be and the reason I say that is we sat down at the outset whenever we were devising the framework for the district and gave very careful consideration to making sure that what we were asking people to do was realistic, valid and added value to our bottom line. (503)

The accuracy of it, our stats people would say it's very accurate. I don't know if you're aware of how we. I think we're all like most other Police Forces now. We actually second people in from the Statistical Research Agency. So there's an element of, while right they work for us, there's an element of independence there. Ehm. Certainly they're very quick to put their hands up when they think they're getting figures wrong or the data is faulty or whatever. At the moment we've had an ongoing thing about ehm hate crime statistics. Now their checks of the inputs really sort of highlighted ehm an inaccuracy level that wasn't tolerable, within the system so they've basically put a hold on reporting the figures for a couple of months until they got it sorted out. (508)

Saturn isn't up to date, sometimes it's done and we can't get, and sometimes just information isn't put on in quick time, so I mean, in an ideal world you would have good and real KPI's to work towards and a simple way of actually collecting them. (510)

The reference in brackets at the end of each selection reflects the transcript reference in the NVivo research database.

9-5.2.2 Analysis

Definition

The definition for Analysis was reviewed against the content of the Analysis node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition matched closely and needed little change. Largely for reasons of clarity it has adjusted as follows:

Analysis is the process of adding value to the raw data from performance metrics. Through judgement of meaning based on collation, compilation, or interpretation appropriate to the process and level. By individuals or teams, or through routinised procedures in automated systems In order to identify issues and support decision making regarding performance and the need to adjust organisational behaviour. Appropriate to the process and level. Resulting in an interpretation which can be communicated to inform decision makers.

Reasons for change

Aspects justifying the changes to the definition include:

- Other sources were referred to. Metrics would be a more inclusive term and discriminate performance analysis from other information processes.
- Minor changes needed to reflect the limit of analysis, can be simply be collation.
- A need to included teams or units but otherwise no change
- Different methods are applied in different organisational levels and information processes.
- The output is communication of information in a manner more suitable for making decisions.
- Remove relationships to other Elements or Dimensions

Unique Aspects of Case C - Analysis

In relation to Analysis some aspects identified were seen as unique to this Case:

- Analysis was provided by staff centrally trained and organised (over 90 Crime Analysts).
- But, no formal performance analysis role. This was reflected in little appreciation of the value or need for analysis of performance information. Simple comparison being the predominant method of interpretation.
- Absence of performance analysis skills and it was assumed any analyst could interpret performance data.
- The need for analysis of performance data was being recognised but at an early stage.
- Other information processes recognised the need for analysis.
- Techniques applied were simple, such as comparison and structuring in a spreadsheet.
- Case C had good data availability (to metrics)
- External support was available to ensure data validity.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the element.

I think our biggest issue is people actually giving them the time to do a good piece of work really. You know, a lot of the time we reacting to very quick turnaround requests and I think the main thing is to continue, to demonstrate what can be done, to try and educate our customers, to use a corny phrase, so that they're asking sort of more general questions. (501)

We call our analysts, Police Analysts because we've always believed their doing more than crime, we're not sure that Police Analysts is quite the right

title, but we would prefer they do analysis and intelligence analysis, strategic analysis and, to a limited degree, performance analysis. (501)

And it's only by having a clear understanding about what's been happening and is that better or worse than it was last year? Is it better or worse than it was last month? I think we've an awful tendency to simply to focus in this period in comparison to the same period last year. (502)

Well, Saturn would give us the broad brush figures, you know at any time theoretically I should be able to go on Saturn and see the performance of the district against the major crime categories. Having said all of that, in order to effectively target those crime categories in a way it will just meaningful and adds value, that's where the role of the, and we have four Analysts in the district, and that's the role of the Analysts. (503)

Yeah, our criminal damage is falling, our anti social behaviour is falling, now I couldn't explain some of it because we've got hard, very acute times of year such as Halloween, which we know is our biggest peaks.

You've had quite an impact this year?

Yes and we've got St Patrick's Day, we've got other times where we know it gets really very high, so we have looked at those, but it has fallen at other times of the year when not a lot has been done so. (501)

The performance matrix unfortunately is something that does not take top priority. But it comes to the monthly meeting and your Sergeant and your Chief Inspector and your Inspector, sitting down to review, so you do have to do it. (505)

The reference in brackets at the end of each selection reflects the transcript reference in the NVivo research database.

9-5.2.3 Advising

The definition for Advising was reviewed against the content of the Advising node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition whilst broadly fitting the data could be refined in light of this.

Advising is the provision and communication of the results of analysis through the creation of a performance artefact using verbal, written or electronic media by an individual, unit or system, to inform decision making, to identify areas of concern, to inform day to day monitoring, to control access to information, or to enable accountability processes, about resource allocation, processes, development of people.

Reasons for change

Aspects justifying the changes to the definition include:

- The Analysis Unit is particularly strong in this case. Automated data is frequently mentioned.
- Change to factors influencing Advising
- Change the focus on content and structure rather than ‘influence’.
- Include the influence of frameworks.
- Remove relationships to other Elements or Dimensions

Unique aspects of Case C - Advising

In relation to Advising some aspects identified were seen as unique to this Case:

- Advising in Case C was largely dominated by the presence of the centralised analysis. This resulted in formalised procedures being adopted for presenting information which were strongly influenced by NIM practice.
- The absence of performance analysis skills led to the use of Executive Support staff. As the most direct users of performance information this meant the Executive were able to influence the development and content of performance reports.
- The absence of a formal performance analysis role was reflected in little appreciation of the value or need for analysis of performance information.
- Techniques applied were simple, such as comparison and structuring in a spreadsheet.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the

element.

...and this is where I think we're not mature enough about performance yet, is the performance material is all just graphs and graphs and graphs, and tables. (501)

Yeah, and to support that process, em, we would do, the Chief reports quarterly against those that the Policing Board and we provide them with a briefing, so. Which we would use some of our stats information and some of our, we would try and add a bit of meaning and put explanation to it. (501)

All that information, some of our presentations are set from Saturn, which is the organisation's performance. You can go in there, supposedly at any stage throughout in the year and access various categories and whether it's crime, road traffic statistics, also breath tests. But there is issues about sometimes the validity of the stats but then that's back to CRF inputting them, inputting, we had problems with our system. (503-2)

Yes, so I think our ACCs are getting much smarter around that and the Chief is getting much smarter around that. The difficulty then is also managing Policing Board's expectations and helping them understand what the numbers mean. And then also what that means for the wider public, ehm I won't. I'm held to account publicly through my district policing partnership. And I don't give them either the answers to their written questions or the performance figures before the meeting. Because I discovered the Press weren't coming. If you give them out, they don't come. So they just have the raw data without any context and they make up their own story. (502)

There's evidence, certainly from a Police perspective, that the Senior Management Team, people like myself who work within the planning environment for the Police service, that we're trying to move towards, or move away from number crunching and more towards qualitative measurements of people's satisfaction and confidence in the Police, to coin a phrase. (509)

The reference in brackets at the end of each selection reflects the transcript reference in the NVivo research database.

9-5.2.4 Adjusting

The definition for Adjusting was reviewed against the content of the Adjusting node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. It was found that the definition fits but needed some minor adjustment and clarification to be more accurate. Some items have provided further clarification and the definition has been refined as follows:

To manage performance, the knowledge created from performance information must be used to create new or changed organisational action. Adjusting is the stage of creating action where performance knowledge is considered and necessary changes to action identified. This occurs through both formal and informal methods of decision making taken by the person or body with responsibility for that sphere of business, and based on the performance information resulting from the Knowledge Creation process. Decisions are made in the context of existing personal and organisational knowledge, or applied management theory about cause and effect, as well as goals, or objectives relevant to that organisational level. Adjusting results in affecting organisational behaviour.

Reasons for change

Aspects justifying the changes to the definition include:

- Need to place context of Action to better reflect that Adjusting is key to managing and it is a stage not process.
- Takes into account the information resulting from the Knowledge Creation process.
- The crucial role of understanding cause and effect when identifying appropriate action needs to be included.
- The difference between short term actions and long term objectives need to be accounted for in definition
- Remove relationships to other Elements or Dimensions

Case C Idiosyncrasies - Adjusting

In relation to Adjusting some aspects identified were seen as unique to this Case:

- Within this Case delivery of information by the analyst was actively encouraged.
- Accountability, resource deployment and improvement were all evidenced although

improvement was very scarce.

- T&CG and Accountability were strongly formalised.
- There was a clear focus on personal performance and this was described as particularly strong in some Divisions, but there was recognition that this was likely to lead to perverse outcomes and this was mitigated or the focus was reduced.
- Adjusting was clearly evident although some doubted the extent to which organisational behaviour was affected as a result. It can be seen that a great deal of effort went into formal meetings to discuss data but it may be that an absence of understanding of cause and effect resulted in limited effective action being taken.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the element.

Yeah. Yeah, at the starting point of the planning process, I presented a strategic assessment or a version of the strategic assessment and there was also presentations around the results from all the DDPs surveys, so you are getting the two perspectives and then it's up to the top team and the Policing Board to try and come up with something. (501)

...which leads you to believe very, very quickly that actually there's very little performance management going on at all. We are doing a huge amount of Performance monitoring. But we haven't really taken that leap, that next big jump to comprehensively managing our performance, and in some ways, em, the nature of our activity doesn't lend its self well, to Performance Management because what we're managing very often is outputs, we've got better we've stopped counting inputs I think which was a big wrench for Police because it was very easy for Police to do this. You know we ask, you walk into any CID Office you know they're very quick to tell you how many burglaries they went to today, if indeed your CID even goes to burglaries em, how many do you solve? You know and that silence is very interesting. (502)

What I think historically there's been a disconnect between how we use them, what we're doing with our tasking and co-ordinating process. It's a business process and missing in some cases is a direct connection between that and our performance management. (502)

For example, yesterday one of our figures that we're particularly focussed

on would be single Officer patrolling, one of the Superintendents is particularly interested in. He has identified or we have identified that there have not been so many in certain sections so then we would ask the Sergeants and the Inspectors to explain is there a reason for this, and quite rightly they would explain you know it's resource issues, we don't have the drivers or we don't have the right mix of experience with the probations. So there's a legitimate reason for it, which is people, you know the procedures that we do have work, because if the problem is identified we manage a number of, we look for an explanation and if necessary we take action to correct it by possibly getting a remix of the sections. (506)

The reference in brackets at the end of each selection reflects the transcript reference in the NVivo research database.

9-5.2.5 Affecting

The definition for Affecting was reviewed against the content of the Affecting node for this Case. This provides a test of the definition used within the OL Model of PM and the Case. Broadly the role of Affecting previously defined fits the case. The definition fits but there is some detail here that has not been captured in the first definition from Case A. The concept of Affecting is not being changed, but the definition is becoming more accurate representation of that concept.

Affecting is the stage at which organisational behaviour is influenced, in line with the intention of the decision making body, through management interventions applied to people, processes and/or resources based on managers understanding or assumptions about what can be influenced and how it can be influenced

Reasons for change

Aspects justifying the changes to the definition include:

- Wording could be clearer
- Some content is too specific to be included, e.g. management techniques covers a range of behaviours
- Some content applies to Achievement rather than Affecting

- Remove relationships to other Elements or Dimensions

Case C Idiosyncrasies - Affecting

In relation to Affecting some aspects identified were seen as unique to this Case:

- The different role of APR and how this could be used to deliver high level objectives was highlighted.
- A tension between HR driven APR approach and other performance approaches was more evident.
- The importance of communication in influencing staff behaviour was apparent, especially in E District.
- An example of the success of a continuous improvement approach was found
- All three subjects of management were evident, but extremely biased toward people management which implies people are seen as the problem. This is reinforced by the HR attitude to APR.
- Again, T&CG not seen as performance management but in fact is but this was possibly just a definition problem.
- Management theory was again evident as source of management action, but it is unclear how this theory develops. It appears cultural.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the element.

If you can work out what it was you did to make it happen in the first and you know, you know, a lot of policing is just down to good luck. A good part of it's down to our antisocial behaviour figures have dropped through the floor this year. It was a crap summer. It rained; it rained relentlessly, so

people didn't go outside. So things that previously that were getting reported weren't. Also we got a lot better. We tidied up our housekeeping and we stopped recording cattle on the road as something that was antisocial. (502)

So that's my take around today. From our point of view I think it went reasonably well, the feedback was broadly positive in particular areas of business which we need to, you know, continue to have an enhanced to focus upon. Having said all of that, it was probably quite a constructive engagement, and it's meant to be that type of, that engagement for. (503)

Because the monthly meeting gives us at the very least an informed, like an aerial document which provides an analytical breakdown of all of the crime categories, it gives us some issues around emerging trends, it identifies emerging risks and all of that then is considered within the context of the National Intelligence Model TCG meeting and then we can look at the allocation of our resources against our demand, so the role of the Analyst is an absolutely pivotal role in understanding the context and seeking the resource to meet the demand. (504)

Yeah, maybe I can give you an example. An easy example being Omagh, weekends, the town centre economy. Bridge Street there being a lot of pubs and clubs, you see a lot of people milling about. How can you raise the Police profile, either you help deal with violent crime in Bridge Street. If people think there are more of us about, if you've raised the profile, you've automatically failing. So a very low level example would be we return to the Station on weekend nights, weekend lates, drive via Bridge Street. People who know us, know the same car, see it's the Police. Or, you know, antisocial behaviour, for a Neighbourhood Officer, it might be to get the alternative activities in place for young people, it might be for a Response Officer to seize alcohol and do alcohol reports to Council or Youth Diversion Officer, because alcohol is a link to antisocial behaviour. It could be to feed into the Residents Group, it's all the practical measures, so when the Policing Plan is a fairly high level document, everybody has a role to play, whether it's a Police Officer or a member of the Support Staff or even an Officer who is not on frontline duties, like the Station Sergeant, would feed into by making sure certain things were available for use, to make sure the Station is useable, the firearms are serviceable, etc, etc, etc. So everybody feeds in directly to frontline policing or indirectly through their own activities. It's a round the houses approach but it does, while we're not focusing on some Districts have the 'you will do ten arrests', 'you'll do ten of these', 'you'll do five of those', we haven't gone that way. (508)

The reference in brackets at the end of each selection reflects the transcript reference in the NVivo research database.

9-5.2.6 Achieving

The definition for Achieving was reviewed against the content of the Achieving node for this Case. This provides a test of the definition used within the OL Model of PM and the Case.

It was found that the definition whilst broadly fitting the data could be refined in light of

this. As a result Achieving is defined as follows:

Achievement of Organisational Learning from Performance Management is the greater alignment of organisational behaviour with the overall aims or purpose of the organisation enacted through the members, or embedded in routines, resulting in an impact on the external or internal organisational environment and occurring at an organisational level.

Reasons for change

Aspects justifying the changes to the definition include:

- To improve clarity and provide better boundary (not dictated by evidence)
- There was no evidence for change to organisational routines, but nothing to contradict its relevance
- Remove term which is also part of definition

Case C Idiosyncrasies - Achieving

In relation to Achieving some aspects identified were seen as unique to this Case:

- The interviewees described a variety of ongoing improvements in outcomes and outputs. The extent to which PM underpinned these was viewed as limited.
- It was difficult to identify particular practice that lead to achieving the management of performance. The dominant process influencing improved outcomes was locally based planning. There was a move to align PM practice with supporting this but there was some way to go to achieve it.

These idiosyncrasies highlight the specific nature of this element of the process within the Case.

Exemplars

The following are a selection from transcripts that most clearly indicate the nature of the

element.

If you can work out what it was you did to make it happen in the first and you know, you know, a lot of policing is just down to good luck. A good part of it's down to our antisocial behaviour figures have dropped through the floor this year. It was a crap summer. It rained; it rained relentlessly, so people didn't go outside. So things that previously that were getting reported weren't. Also we got a lot better. We tidied up our housekeeping and we stopped recording cattle on the road as something that was antisocial. (502)

Yes, and that's why we're never going to get past performance monitoring, because the system doesn't allow for the time necessary to allow management to take effect. We've not time in our day to think about why it was a good day or why it went bad, because we're driven, we're relentlessly being driven by events and ehm, and the centre often is not providing support, it's just adding to the bureaucratic administry of it all. (502)

Another example would be, one of our major issues, priority issues within the District is antisocial behaviour. Now, obviously there are lot of views involved in antisocial behaviour, so again I looked at some performance indicators, which would assist in dealing with antisocial behaviour, and one of them was referrals to Youth Diversion Officers, okay, and secondly number of alcohol seizures from you know from juveniles, minors. So again we added those into the performance indicators and figures in those areas have increased drastically as well, and obviously that contributes to the antisocial behaviour in the area, we are well, well down, we are really way below target in that. (510)

9-5.2.7 Summary of Process Elements

When tested against the OL Model of PM and the associated definitions (developed in Chapter 6 – OL Model of PM) it has been shown that whilst minor refinements could be proposed based on the additional data, there was generally a close fit between the data and that predicted by the model. On this basis, it is therefore concluded that, in Case C, PM practice did reflect the OL Model of PM.

Despite this, practice was clearly different from Case A and Case B. This uniqueness was contributed by four key differences, namely:

- a) The dominance of Accountability as the role of PM
- b) The relative weakness of NIM T&CG processes which were played down as bureaucratic and cumbersome

- c) The absence of a performance analysis capability and the dominance of crime analysis techniques
- d) The immaturity of PM practice

This difference is expressed in terms of the relationships between Elements and Dimension and this is further explored further in Section 9-6 Drivers and Factors below.

9-5.3 Case C – Elements Conclusions

The basic behaviourist OL model of Knowledge leading to Action was identified from the literature (see Chapter 6 - OL Model of PM). This was developed in the OL Model of PM to elaborate on the stages of the process that convert Knowledge into Action, that is, Attention, Analysis, Advising, Adjusting, Affecting and Achieving. It is seen as strength of the Model that it is able to reflect the different management processes founded on Knowledge Creation and Action Creation present in this Case.

RQ1 - How is knowledge created within PM practice?

As in Chapter 8, using the results of the analysis of Case C data described above, it can now be stated that, in Case C, knowledge was created through the stages of Attention, Analysis and Advising, each as defined earlier in this Chapter. The definition of Knowledge Creation is described in Chapter 8, Section 8-5.3.

Based on the data outlined above, it is concluded that Knowledge Creation was clearly evident within the practice of Performance Management within Case C. Performance data was used to provide inputs into a number of different meetings at different levels and across the operational Districts.

It was seen that performance indicators used varied, analysis was structured and coordinated centrally, and the results were compiled in formal reports, either written or in presentations, while some information was processed automatically. This knowledge was used to support decision making meetings around the use of resources, the operation of processes and the conduct of staff.

The extent to which these knowledge products were “productive”, that is valid, reliable, relevant, and useful, was partially evidenced by the support of external statistical support. However, this was largely aimed at auditing data sources rather than the quality of conclusions drawn from the data. Case C had particularly well trained analysis unit, although its main purpose was crime analysis, and the extent to which these skills transferred to quantitative analysis was in some doubt. This gap in provision was just being recognised as the demand for reliable and meaningful analysis to support a more performance oriented culture increased.

RQ2 - How is action created within PM practice?

As in Chapter 8, RQ2 can be answered using the results of the analysis of data described above. Based on that, it can now be stated that, within Case C, “action” was created through the stages of Adjusting, Affecting and Achieving. This process was defined in Chapter 8, Section 8-5.3, and the same definition is appropriate to Case C.

From the analysis of the data outlined above, it is concluded that Action Creation was clearly evident within practice in Case C. With a background embedded in accountability, the Action Creation aspect of the performance process was less easily recognisable.

RQ3 - Does performance knowledge influence organisational behaviour?

In relation to RQ3, as in Chapter 8, products of knowledge creation (produced at the Advising stage) were found to feed into decision making (at the Adjusting stage). These products then influence decisions about the need for action or the nature of action. Other factors may also influence decisions and the influence of existing Organisational Knowledge is considered at section 9-7.3 Discussion and Theory of Completion of OL below.

Based on the analysis of the data, it is concluded that within Case C, knowledge derived from performance data was submitted to influence decision making (Advising) and that the nature of action (in the form of organisational behaviour) was influenced by this. The extent of influence is unclear from the data and the nature of this research will be unable to quantify this. Accountability processes tended not to produce new action but instead prompted action prior to the meeting.

RQ4 - What is the nature of elements within each case?

In relation to RQ4, this question has already been addressed fully above. The model has been tested against the data from Case C and was found a good fit. Minor modification was made to the definitions from those developed in Case A, largely for reasons of clarity.

It is therefore concluded that within Case C the process of PM was comprised of the elements identified in the OL Model of PM (Attention, Analysis, Advising, Adjusting, Affecting, and Achieving) and that the nature of these Elements is as defined earlier.

Theory of Flow of PM Process

Through answering these four questions (RQ1 through RQ4) it has been established that the OL Model of PM can be applied to PM practice and that it is therefore valid to view OL as a phenomena underlying PM practice in this Case. The data gathered from Case C has refined the understanding of the core OL process and its Elements.

It has been established that in Case C:

- Knowledge Creation comprises Attention, Analysis and Advising.
- Action Creation comprises Adjusting, Affecting and Achieving.
- Knowledge has been shown to influence Action, although the extent to which this occurs varies and cannot be evaluated within this study.
- The elements operating within the process have been defined.

The discussion now moves on to consider the remaining Research Questions.

9-6 CASE C - DESCRIPTION OF DRIVERS AND FACTORS (RQ5 – RQ6)

To further explore the impact of Organisational Learning, the data is considered in relation to the Research Questions relating to drivers, factors and relationships. Those Research Questions are:

RQ5. In practice, what factors influence the PM process?

RQ6. What is the relationship between these factors and the individual elements of the process?

9-6.1 What Factors Influence the PM process (RQ5)

Dimensions of influence were derived from the Pilot Case Study (Case A) by grouping similar concepts identified within the data. A list of Dimension resulted (see Table 9-4).

Within Case C, an analysis of the content revealed 585 references to factors influencing the process of OL (see Table 9-5). These were collated into the Dimensions identified and defined in Case A.

The number of references in this Case (585) is considerably higher than in Case B (220) despite the slightly smaller number of interviews. There is no clear explanation for this but it is viewed that this is contributed to by experience in soliciting focused information during the interviews and in greater familiarity with the content during the coding process.

A graphical representation of the number of references for each Dimension is provided in

Table 9-4. It should be noted that a references may be either positive or negative. From the data shown it cannot be inferred, for example, that strong Alignment was seen as positively influencing the process, only that it was frequently referred in relation to influencing the process.

Dimensions of Influence

Alignment
Analytical Capability
Context
Culture
Decision Making
Information Value
Leadership
Management Ability
Organisational Knowledge
Organisational Purpose

Table 9-4 - Dimensions of Influence. Source: Derived from data, Chapter 7

The strong presence of Alignment and Management Ability is consistent with Case B, as are the low values for Information Value, Leadership and Analytical Capability. The difference seen as significant here is the difference in value for Culture. This may be explained by the Culture influence having displaced by Alignment influence due to the nature of accountability. Accountability operates through enforcing behaviour aligned to organisational norms.

The similarities and differences between cases are discussed in detail in Chapter 10.

As with Case B, it would be unproductive at this stage to redefine each of the Dimensions as derived in this Case. It is viewed that the set of Dimensions developed were adequate and appropriate to reflect the range of influences in the Case. It is therefore concluded that, in practice in Case C, the factors that influence the PM process were the same as Case A and Case B, although they influenced in different ways and to different extents.

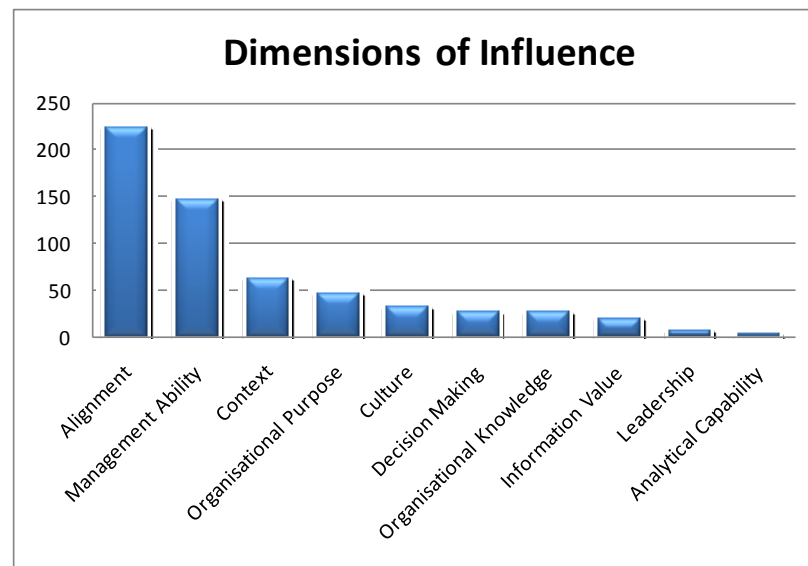


Figure 9-4 - Dimensions of Influence. Source: Derived from data

9-6.2 The Relationship between Dimensions and Elements (RQ6)

To address RQ6, three methods were used here to consider the relationships between elements of PM and dimensions of influence. Firstly, based on the data recorded in NVivo, a matrix of content coded at both an element and a dimension is created (see Section 9-6.2.1), secondly, the relationships are displayed diagrammatically (see Section 9-6.2.2), and thirdly, the nature of each relationship is reviewed in detail (see Section 9-6.2.3).

9-6.2.1 Dimensions and Elements Matrix

Based on the data coded in NVivo, a matrix of content coded at both an element and a dimension is created to demonstrate the degree of relationship between the Dimensions and Elements. The results of this are shown in Table 9-5 and are discussed below.

From the resulting matrix, it is apparent that evidence of overlaps between coding is greater between some dimensions and elements than others. The data ranges from 67 overlapping references for Alignment and Affecting, to a number of areas that have no overlapping references. The relevance of this approach was discussed in Chapter 8.

	Alignment	Analytical Capability	Context	Culture	Decision Making	Information Value	Leadership	Management Ability	Organisational Knowledge	Organisational Purpose	Total Per Element
5 Affecting	67	0	14	12	8	2	3	28	2	10	146
1 Attention	51	0	9	7	6	4	1	33	4	18	133
4 Adjusting	39	0	11	2	3	2	0	19	13	5	94
2 Analysis	21	1	12	2	0	3	0	36	4	4	83
3 Advising	26	0	7	5	0	5	1	25	1	8	78
6 Achieving	20	0	8	3	9	2	1	5	2	1	51
Total per Dimension	224	1	61	31	26	18	6	146	26	46	585

Table 9-5 - Overlapping References. Source: Derived from data

Again, as in Case B, it is possible that as well as actual differences between the influences of the Dimensions, a degree of this variation is influenced by random or unknown aspects. Therefore, too much significance cannot be placed on the relative degree of overlap. A more rigorous quantitative study would be required to examine these relative differences. However, these overlaps are based on actual descriptions, where discussion around an element also relates to an influence on that Dimension. It's simply that there is nothing to limit the frequency of discussion on a particular topic which may be prevalent in the minds of the interviewees, or the interviewer. These figures then, represent the degree of evidence for each overlap, rather than the strength of the relationship.

The total numbers of references by Element are most clearly seen when plotted in a graph in order of greatest to least (see Table 9-5). From the graph it is apparent that there is stronger evidence of Dimensions influencing the Affecting and Attention Elements. Less evidence was found of Dimensions influencing the Adjusting, Analysis, Advising, and Achieving.

From that graph it can be seen that most evidence for overlap in content lies with the Adjusting Element and least with the Achieving Element.

At this stage we can conclude from this that, in Case C, each Dimension had an influence on the Elements of the PM process. It is also concluded that, in Case C, Dimensions influenced

Elements in different ways, some having a focussed influence such as Management Ability with Attention, whilst some have a more general influence such as Culture with Attention Affecting, and Analysis.

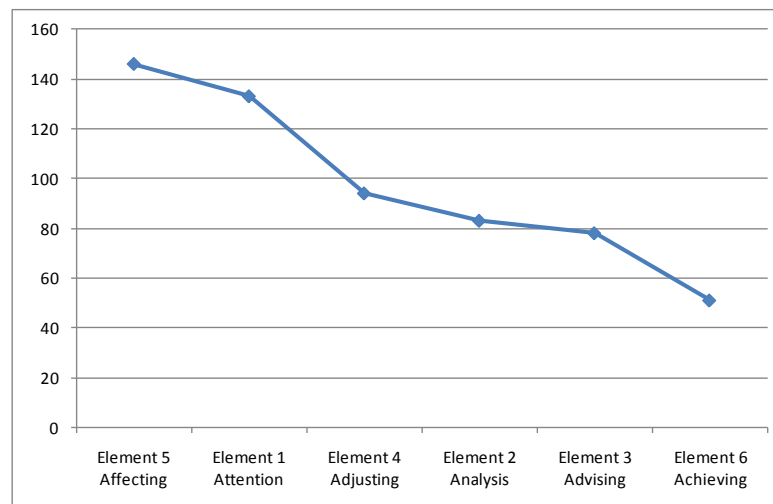


Figure 9-5 - Overlapping References by Element. Source: derived from data

9-6.2.2 Dimensions and Elements -Relationship Diagrams

To address RQ6, the extent of ‘overlap’, that is commonality in coding, between Dimensions and Elements is considered. This was achieved by ranking the values from the matrix, establishing a ratio (in terms of a percentage per Element) and grouping these percentages into Very Strong, Strong, Weak, Very Weak or No relationship (see Table 9-6 for grouping criteria used).

Again, it is emphasised that the relationships reflect the content relating to both an Element and a Dimension. The strength of evidence is not synonymous with the strength of a relationship. Evidence may relate to either a negative influence or a positive influence of a Dimension.

These relationships were modelled to more readily represent the degree of coverage (see Figure 9-7 through Figure 9-12).

Table 9-6 shows the criteria used to determine the relative “strength” of evidence. The use

of \pm one standard deviation from the average to differentiate these groupings was based entirely on judgment. Whilst this would not be significant in a quantitative approach, when applied to the data it clearly distinguished those items that were just above or below average (i.e. higher or lower degree of overlap) from those that had a clearly greater degree of overlap. (In practice it was found the application of minus one standard deviation always took the lowest range below zero and therefore never applied).

Group	Criteria
Very strong	Greater than average + 1 Standard Deviation
Strong	Between average and Average + 1 Standard Deviation
Weak	Between average and Average - 1 Standard Deviation
Very weak	Less than average - 1 Standard Deviation
No relationship	No overlap (0%)

Table 9-6 - Relationship Groups. Source: Author derived

A great deal of caution must be applied when considering qualitative data in what appears to be a precise quantitative manner as the underlying data is open to considerable number of influences. It must also be clear that strong evidence of a relationship is not the same as evidence of a strong relationship. However, as will be shown, where strong evidence was indicated, a review of the data revealed a similar level of relationship. In this case therefore, the meaning applied is consistent with the means of interpretation.

Relationship Diagrams

Below in Figure 9-7 through Figure 9-12, are a set of diagrammatic representations of the relationships between each Element and the Dimensions identified in from the matrix. Figure 9-6 provides a key to these diagrams.

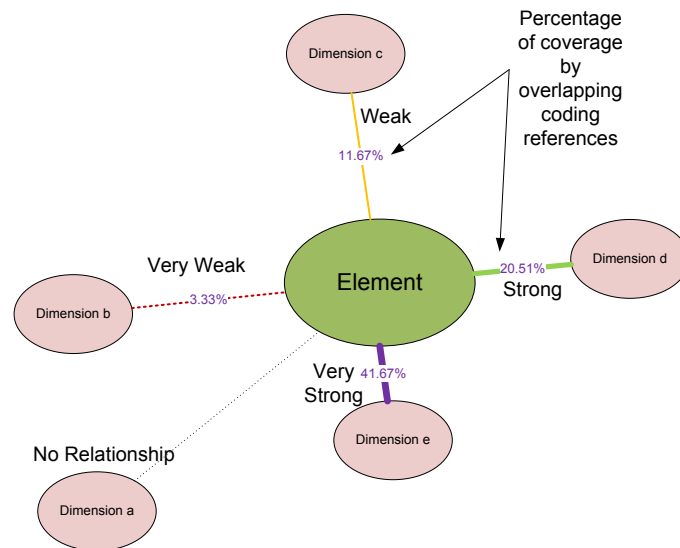


Figure 9-6 – Modelling of Relationships – Key. Source: Author derived

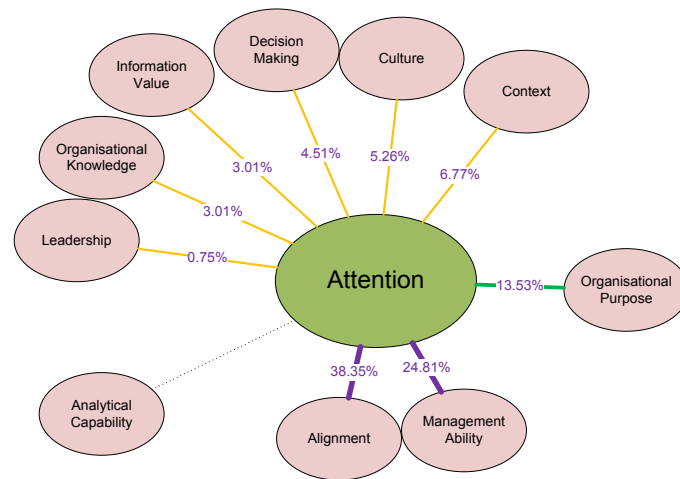


Figure 9-7 - Dimensions and Attention. Source: Derived from Data

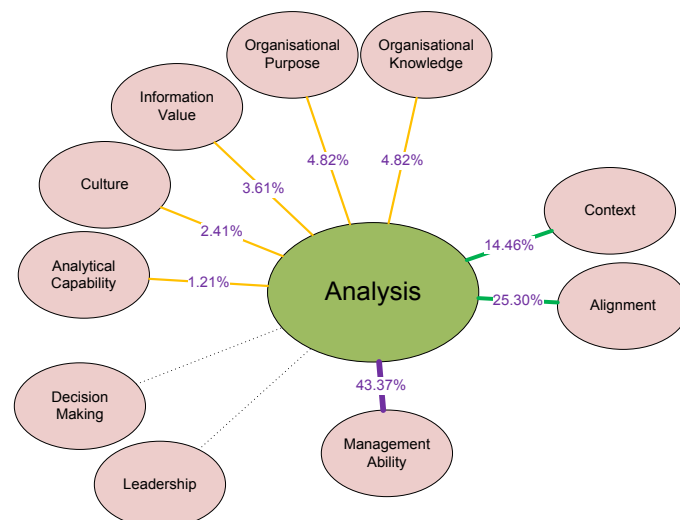


Figure 9-8 - Dimensions and Analysis. Source: Derived from data

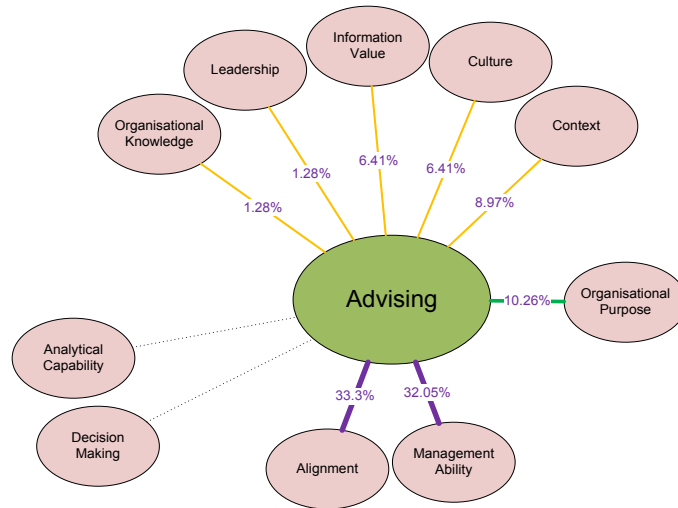


Figure 9-9 - Dimensions and Advising. Source: Derived from data

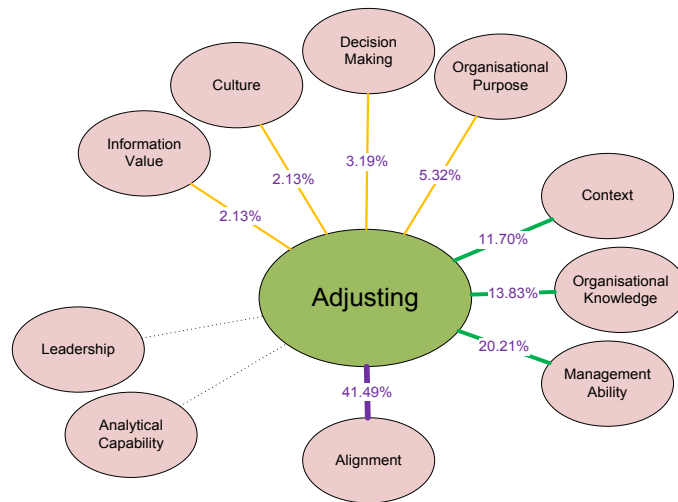


Figure 9-10 - Dimensions and Adjusting. Source: Derived from data

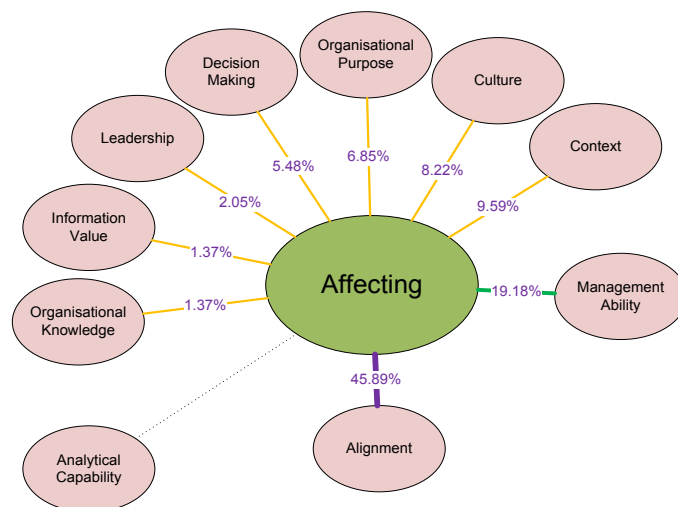


Figure 9-11 - Dimensions and Affecting. Source: Derived from data

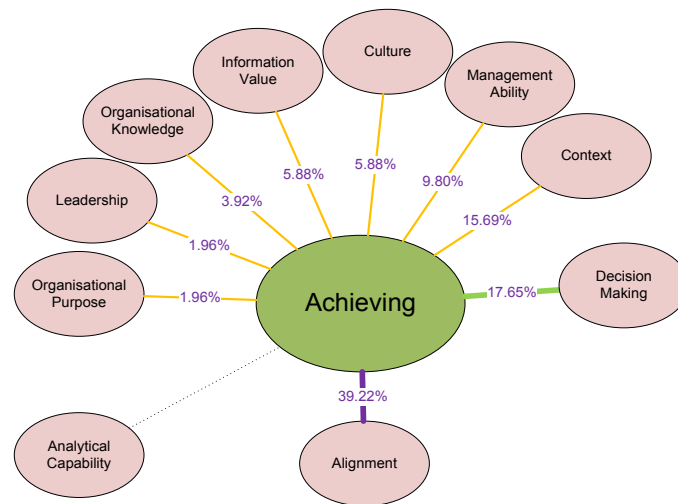


Figure 9-12 - Dimensions and Achieving. Source: Derived from data

9-6.2.3 Dimensions and Elements - Relationship Descriptions

Having described which relationships are present, the nature of those relationships, as revealed by the data, is now explored for each Element. Where necessary, reference should be made to the relevant diagram. Below, the original source data is examined and summarised in relation to each Element for the “very strong” and “strong” relationships. Where directly applicable, quotes from the sources are used.

With rare exceptions, the majority of influences commented upon were evidenced by only one or two individuals. However, when the nature of each is considered as part of a whole they provide a strong chain of coherent evidence for the characteristics described.

Attention

Relationships between Attention and the other Elements or Dimensions in Case C are revealed by the data. The Attention Element showed very strong evidence of overlap with Alignment and Management Ability, strong evidence of overlap with Organisational Purpose, and weak evidence of overlap with Context, Culture, Decision Making, Information Value, Organisational Knowledge and Leadership (see Figure 9-7).

From a review of the content of the overlapping references, the following comments (see Table 9-7) can be provided about the nature of the very strong and strong relationship:

Dimension Relationships	Comment
Attention and Alignment	In the ideal world, Organisational Purpose would influence Attention through Alignment. One interviewee expresses the absence of connection between the indicators in use and the aims or objectives. This is particularly relevant at the individual level where the focus tends to be on productivity of staff – regardless of what they’re producing. The ACC relates this to Attention, in particular to attention at the individual level and related indicators. A key element of individual performance is that it facilitates alignment by focussing attention on the policing plan.
Attention and Management Ability	From the evidence collated, the influence of management on the choice of performance indicators is very apparent, more so than in other cases. This appears to be due to the absence of a centrally dictated performance method, which results in the decisions about what to measure being based on management experience and skill. Hence almost all instances of Attention are related in some way to Management Ability. This influences through the choice of PM methods such as APR, individual monitoring, and accountability etc., each choice determines the nature of the indicators to be used.
Attention and Organisational Purpose	The impact of Organisational Purpose on Attention can be clearly seen in this Case. The Force has been founded on recommendation that it is accountable to the public and this influence was clearly seen both in practice and in the way that indicators were chosen. For information to be valid, and for it to add value to the organisation, Attention must be influence by organisational purpose.

Table 9-7 - Attention Relationships. Source: Derived from data

It is concluded from the content summarised in Table 9-7 that, in Case C, the choice of where the organisation focuses its attention through the use of performance indicators is strongly influenced by a need to align action to organisational purpose and by the ability of managers to choose and use performance information. This strong influence of management reflects the variety of practice across the Force. Each District had autonomy to develop its own performance practice based on the views and experience of District management.

Analysis

Relationships between Analysis and the Dimensions are revealed by the data. Within Case C, the Analysis Element showed very strong overlaps with Management Ability, strong relationships to Alignment and Context, and weak relationships to Organisational Knowledge, Organisational Purpose, Information Value, Culture, and Analytical Capability (see Figure 9-8).

From a review of the content of the overlapping references, comments can be provided about the nature of the very strong and strong relationships for Analysis (see Table 9-8).

Dimension Relationship	Comment
<p>Analysis and Management Ability</p>	<p>Four interviews provided detail on this subject.</p> <p><i>I think we're struggling with crime falling. I mean, in some areas we can, it seems to be as simple as the weather, it makes a huge difference. But that's, it's trends across the whole of Europe.</i></p> <p>...</p> <p><i>Yeah. The trend is following crime across Europe, organised as well. I think we could be doing more on that as well but it's getting a lack of, sometimes it's difficult to produce something, when nobody's as interested as they probably should be. (501)</i></p> <p>The senior analyst provides the view that what they are asked to analyse is dependent on the level of interest by managers in the subject.</p> <p><i>I think our biggest issue is people actually giving them the time to do a good piece of work really. You know, a lot of the time we reacting to very quick turnaround requests and I think the main thing is to continue, to demonstrate what can be done, to try and educate our customers, to use a corny phrase, so that they're asking sort of more general questions. Instead of being, I'm not expressing this very well; it's a balance between them knowing what they want and us knowing what we can give them. (501)</i></p> <p>Running their own training allows them to ensure analysts are able to communicate effectively with managers.</p> <p><i>It's really the most forward looking part, so we pulled it to the front. But we get the response but nobody wants it, but that's probably because it didn't look very good and it was at the back. If we can move it, we can improve it and make it useful, but it is., you've got to</i></p>

	<p><i>convince the Analysts and move the Analysts as well convince them to use it.(501)</i></p> <p>The focus on process, and the subsequent analysis of process related information, in this case by a non-specialist, was determined by the management approach within the District.</p> <p><i>Personally I'm just not sure what they are able to produce, I mean I know that our guys in PQA are basically just reproducing figures, and we don't have standards set down for them to meet, the District Commander is very anti that. (510)</i></p> <p>Again, locally determined practice in a District in relation to activity sampling, dictated the nature of the analysis required.</p>
<p>Analysis and Alignment</p>	<p>Seven interviews referred to this subject. Compliance with NIM practice for analysts was intended to improve alignment. Also training and common working practices ensures analysts are producing content in a structured and consistent manner across the Force.</p> <p><i>And it's only by having a clear understanding about what's been happening and is that better or worse than it was last year? Is it better or worse than it was last month? I think we've an awful tendency to simply to focus in this period in comparison to the same period last year. (502)</i></p> <p>Standard methods sometimes had unintended results.</p> <p><i>Well, Saturn would give us the broad brush figures, you know at any time theoretically I should be able to go on Saturn and see the performance of the district against the major crime categories. Having said all of that, in order to effectively target those crime categories in a way it will just meaningful and adds value, that's where the role of the, and we have four Analysts in the district, and that's the role of the Analysts. (503)</i></p> <p><i>It's only, it's analysis in context because the ACC rightly highlighted an increase in indecent assaults within [Town] looks like a massive increase but then when in contact with the Crime Manager its historic reporting. (503)</i></p> <p>Regular meetings ensure compliance with individual performance monitoring practice and the interpretation of related data.</p> <p><i>We also measure, our performance is measured with a look at trends along with the Analysts. (506)</i></p>

	<p><i>Eh, activity sampling there's a lot of good information there, I don't think we make as much use of it as an organisation as we could, but I'm not because not much people can get their head around Saturn, to sort of interrogate it and get the information out and it does have a lot of information. (508)</i></p> <p>Force wide systems ensure alignment of data and consistency of interpretation.</p> <p><i>But this idea of ehm comparative performance is attractive to some of them. They want to benchmark themselves against you know similar districts, similar sectors, in, in different cities. So that's the main drawback I think we see with our performance framework at the moment. (509)</i></p>
Analysis and Context	<p>Six interviews provided evidence of this relationship. All of these relate to examples of providing a context in which to interpret information, such as reference to previous years, previous months, trends, other Forces, etc.</p>

Table 9-8 - Analysis Relationships. Source: Derived from data

It is concluded from the content summarised in Table 9-8, that in Case C, Analysis was influenced by Management Ability and Alignment. These worked in different ways, in that, Management Ability influenced local decisions about practice and the needs of analysis, whilst Alignment tried to standardise practice. Context influenced analysis primarily through the methods adopted.

Advising

Relationships between Advising and the Dimensions are revealed by the data (see Figure 9-9).

Within Case C, the Advising Element showed very strong relationships to Alignment and Management Ability, a strong relationship to Organisational Purpose, and weak relationships to, Context, Culture, Information Value, Leadership, and Organisational Knowledge.

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 9-9.

Relationship	Comment
<p>Advising and Alignment</p>	<p>Seven interviews referred to Advising in relation to Alignment. Advising and Alignment were discussed in terms of changes to the presentation of the content intended to create a more coherent impact.</p> <p><i>Well as much as it can be and the reason I say that is we sat down at the outset whenever we were devising the framework for the district and gave very careful consideration to making sure that what we were asking people to do was realistic, valid and added value to our bottom line.</i></p> <p>...</p> <p><i>And we have come up now with suite, I don't know exactly how many, some of them eight and ten, indicators which are then used on a monthly basis for the Sergeants, and what I say to the Sergeants is well, this is actually support you, this should help actually you understand better how your section is performing, where the strengths are, the weaknesses are and should help you develop on a personal, professional basis. (503)</i></p> <p>Performance Frameworks create alignment by getting people, and reports to focus on a consistent set of issues.</p> <p><i>Well we have always tried as far as possible to mirror the performance structure in England and Wales, now we don't work with iQuanta, we don't have iQuanta here, ehm, but the domain structure has always been mirrored from England and Wales, but this year we're moving away from the domain structure for the first time, because I think there is a bit of rebellion going on within ACPO about Home Office imposed targets and well we're saying well if there's a rebellion going on in England and Wales, we're not even legislatively tied in to the Home Office targets, so hey, let's just do our own thing for a change, ehm, there is also a bit of rebellion on the part of the Board, especially the nationalist ehm, political representatives who think, you know, well why the heck should we be following England and Wales anyway, you know, so, so there's a lot politically going on there. (504)</i></p> <p>Explains some of the influences of Alignment on the structure and content of Advising, similar to influences on Attention.</p> <p><i>They provide us with figures too, but they have different matters which we assess them on and then we have crime structures which is the third group we examine, which is basically our CID which is broken down into different units, Offender Management Unit and the General Office and the Investigation Team. So that's the three different groups that we have.</i></p> <p><i>Those three groups, before we started this we agreed with them and their Area Commanders, their Managers on key performance indicators, so those key performance</i></p>

	<p><i>indicators are agreed at the start of the year and we then access them on how well they are performing with their key performance indicators.</i></p> <p><i>So there are different ones naturally for response and for CID and for Neighbourhood which are all agreed and that's really how it works, we effectively look at how they are performing with their key performance indicators, identify if there are any problems, ask them for an explanation and then take whatever action becomes necessary. So that's how the process is managed. (506E)</i></p> <p>The choice of key indicators promotes alignment and determines the content of performance reports.</p>
<p>Advising and Management Ability</p>	<p>Four interviews referred to this subject with most comment coming from the Head Analyst.</p> <p>The nature of reports or other formats of communicating performance information is influenced by both the sender (analyst) and the recipient (managers). The experience and skills of the managers will affect the content and format of the performance report.</p> <p><i>They have a quarterly report which all DPPs have which goes through where people are against the local Policing plans and it also has to cover initiatives to deal with local policing problems, so it's partly, it's more quantitative than qualitative. We wanted it to be more qualitative but they're happier with the numbers. (501)</i></p> <p><i>What we do download that information, we are continually providing information to individuals, Sergeants and Inspectors on performance for specific Officers. (508)</i></p> <p><i>Sanction clearances for example are taken off its either Saturn or Niche, I can't remember, but they are not always particularly relevant, some of the sections, we'd say look, we know we've had more than that because we've had 'X' number of arrests, but it could be just that they are still in the system with OC and T, the file management unit or whatever but, so some of them a snapshot of what you get on that day, and not always representative of what has actually happened, but you know we just have to live with the figures we've got, we can't 'tweak' them. (510)</i></p> <p>Targets, which influence the content of reports, are set by management.</p> <p><i>Traditionally, as you know yourself, it's been target, target, target, and constantly we're setting the figures, like five percent reduction, or a five percent increase in clearances, that's roughly the agenda we've been working to and it will take some time to get people to be convinced but we're concerned with just satisfaction levels as much as anything else. (506)</i></p>

<p>Advising and Organisational Purpose</p>	<p>Four interviews referred to this subject although the number of references is much less than the other two Dimensions above.</p> <p><i>I suppose that's not surprising, because it's a top down approach, because the policing board set the targets for the Police service in consultation with the Chief Constable after they have conducted their survey which is informed thinking around what from the citizen point of view are the areas of particular concern that the Police need to focus upon. (503)</i></p> <p><i>Hopefully everybody is working together and that's what we're trying to get to that if we can improve the quality of each individual's work just by a little. We're not looking for big changes and we can also increase the extent to which everybody is working together then people's performance improves. (502)</i></p> <p><i>Well we have always tried as far as possible to mirror the performance structure in England and Wales, now we don't work with iQuanta we don't have iQuanta here ehm, but the domain structure has always been mirrored from England and Wales, but this year we're moving away from the domain structure for the first time, because I think there is a bit of rebellion going on within ACPO about Home Office imposed targets and well we're saying well if there's a rebellion going on in England and Wales, we're not even legislatively tied in to the Home Office targets, so hey, let's just do our own thing for a change, ehm, there is also a bit of rebellion on the part of the Board, especially the nationalist ehm, political representatives who think, you know, well why the heck should we be following England and Wales anyway, you know, so, so there's a lot politically going on there. (504)</i></p> <p><i>The, the strategic assessment plays a major part in the devising of objectives and targets and so on. So forth for both the national plan as I've just said there about drugs, in one particular town local plans as well. Ehm, how it drives it afterwards I would have some concerns on how it's not as integrated as it should be. Ehm, I think we need sometimes. Well, I don't know how to actually sort of illustrate this. If we are setting planning objectives at the start of the year. The NIM process should in theory be aligned to that. But it's not. Because the NIM process throws up issues that fall outside the plan. It throws up issues that once thought not to be a major problem at the start of the year have become problems. Now. (509)</i></p> <p>In a similar way to Alignment, although not so clearly expressed, the nature of performance reports, etc., will be influenced by the Organisational Purpose. The stems from the role advising plays in supporting Organisational Purpose through making the relationship</p>
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	to organisational aims clear. The influence of Organisational Purpose would be more passive than Alignment which involves active steps.
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Table 9-9 - Advising Relationships. Source: Derived from data

It is concluded from the content summarised in Table 9-9, that in Case C, Analysis was influenced by Alignment, Management Ability and, to a lesser extent, Organisational Purpose. Alignment and Organisational Purpose influenced Advising in similar ways, that is, through the choice of content of reports (or other communication) although, by the nature of these Dimensions, Alignment would refer to active efforts to keep content focussed on priorities, whilst Organisational Purpose would provide a more passive influence. Management Ability influenced the content of reports through the choices made about the content and the format by 'end-users'.

Adjusting

Relationships between Adjusting and the Dimensions are revealed by the data (see Figure 9-10).

Within Case C, the Adjusting Element showed very strong relationships to Alignment, a strong relationship to Management Ability, Organisational Knowledge and Context, and weak relationships to, Organisational Purpose, Decision Making, Culture, and Information Value.

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 9-10.

Relationship	Comment
Adjusting and Alignment	<p>Nine interviews made 39 references to Adjusting in the context of Alignment.</p> <p>Key issues that are identified at strategic level drive the focus of decisions.</p> <p>Rather than being part of the definition of Adjusting, the link to strategy can be seen as a relationship between Alignment and</p>

	<p>Adjusting. However, it is a crucial segment of the definition as it creates a subset of all decision making, i.e. decision making aimed at achieving organisational objectives, so needs to be retained in definition. There was a relatively small amount of discussion on this segment and the extent to which Adjusting took into account organisational goals, etc. was not always obvious. However, examples include evidence that where crime is falling, it had become less of an issue to find out why suggesting problem areas were given more attention than non-problem areas. Known problem areas tended to be looked at. The overall strategy, identified from the strategic assessment was linked to routine decision making. The role of Alignment in decision taking was clearly expressed in one interview. Key issues that are identified at strategic level drive the focus of decision taking.</p> <p>The use of performance frameworks was rarely discussed but they dominate the structure of performance meetings and would most likely be the clearest evidence of this.</p>
<p>Adjusting and Management Ability</p>	<p>Three interviews made 17 references to Adjusting in the context of Management Ability. Management Ability influences adjusting primarily through the nature and conduct of meetings, but also through the experience they bring to viewing the data. Where meetings are less prescribed in nature, Management Ability will have a greater influence.</p> <p><i>Not sure how successful we are because I think we all view performance slightly differently. (501)</i></p> <p><i>We started off initially, as Warren knows, the whole way of performance within the various Districts, we've all been doing slightly different things. I think we all started off with various spreadsheets and matrices and, you know, right down to individual Officer level, so many arrests, so many cautions, prosecutions and so on. (508)</i></p> <p><i>Yeah. Yeah, at the starting point of the planning process, I presented a strategic assessment or a version of the strategic assessment and there were also presentations around the results from all the DDPs surveys, so you are getting the two perspectives and then it's up to the top team and the Policing Board to try and come up with something. (501)</i></p> <p><i>Yeah. This is a personal concern, for example, if you talk about anti-social behaviour, at the moment it's going down, so you can argue it's good Police initiatives, it works in the community, everything's working well, we've reduced it, but</i></p>

	<p><i>at the same time, if it goes up you can say it's an increase in public confidence. The Police are out there working in the neighbourhoods more effectively, so we've increased reporting and I have a slight doubt about the use of targets where you can put, if you choose to, you can find a, you can find ways to get a good argument either way or a good explanation, positive explanation either way. (501)</i></p> <p><i>For example, yesterday one of our figures that we're particularly focussed on would be single Officer patrolling, one of the Superintendents is particularly interested in.(506)</i></p> <p><i>The third Wednesday of the month is the Senior Management Team performance meeting, where basically amalgamation of those reports plus a report on how they are doing with regard to the Northern Ireland policing plan will be presented and that actually happened yesterday, will go before them and they will go through it and discuss it as to how we are doing, make recommendations and actions out of it. Obviously, before that, the Area Commanders will have answers from their Inspectors in their teams for it. (506)</i></p> <p><i>We looked at figures and matrices. We were producing spreadsheets in the early days and we were looking at those and thinking, well what advantage are they really having, this isn't making me or you or our Supervisor focus on what's going on and it also brings about the work that's counted, gets done, entirely it's about service delivery and that's where the APR comes into its own. (508)</i></p> <p><i>The organisation has set between four and six. Again, ultimately, you can set figures and count things till the cows come home but what will it really tell you. It's down to local, you know the Sergeants and local knowing where burglary hotspots are or knowing that Friday nights these last few weeks, had a spate of whatever and detailing their sections, so it's down to them feeding into the system as well by knowing what's going on. (508)</i></p>
<p>Adjusting and Organisational Knowledge</p>	<p>Five interviews made 13 references to Adjusting in the context of existing Organisational Knowledge. The influence of Organisational Knowledge on Adjusting relates to how decision makers interpret the meaning or relevance of data and also on existing information that exists within the organisation that is added to the performance information in order to support decisions.</p> <p><i>I think we're struggling with crime falling. I mean, in some areas we can, it seems to be as simple as the weather, it makes a huge difference. But that's, it's trends across the whole of Europe.</i></p> <p>...</p> <p><i>Yeah. The trend is following crime across Europe, organised as well.</i></p> <p><i>I think we could be doing more on that as well but it's getting a lack of, sometimes it's difficult to produce something, when nobody's as interested as they probably</i></p>

	<p><i>should be. (501)</i></p> <p><i>If you can work out what it was you did to make it happen in the first and you know, you know, a lot of policing is just down to good luck. A good part of it's down to our antisocial behaviour figures have dropped through the floor this year. It was a crap summer. It rained, it rained relentlessly, so people didn't go outside. So things that previously that were getting reported weren't. Also we got a lot better. We tidied up our housekeeping and we stopped recording cattle on the road as something that was antisocial. (501)</i></p> <p><i>Well it's become slightly more formalised now. I know actually next week in Bangor, there were six district presentations from rural region and six district presentations from rural region and the purpose of that is knowledge sharing. It's about identifying a problem and looking at common solutions to problems which are not just putting into this district but other districts so there is a development or involvement of some kind of a knowledge sharing forum. It probably needs to be significantly enhanced but having said all that there is progress being made and that can only be of value. (503)</i></p> <p><i>Certainly at different levels there will be a Crime Management Forum, which every Crime Management on every district meeting whether it be monthly or bimonthly and there's a regional Management meeting and surely the ACC at that stage would highlight best practice or direct you to perhaps liaise with a counterpart in a different district. (503)</i></p> <p><i>Now to give you just a live example of that, if we had measured people's optimism and confidence in law and order and policing and where it's going a month ago, it would have been a very, very low rating I would have said. I can't quantify it but I would have said just a general mood of the country, people would have said 'oh no policing that's in a mess, we're not quite sure where it's going'. However, the politicians got together and settled on bringing in a policing and justice ministry sometime within the next three or four years. People's confidence levels have already started to rise on the back of something that hasn't even happened yet. (509)</i></p>
<p>Adjusting and Context</p>	<p>Five interviews made 11 references to Adjusting in the relation to Context. Context influences Adjusting by providing additional dimensions to the raw figures. This may be by providing comparative quantitative information or through qualitative data around related issues.</p> <p><i>And I still think there's a bit of naivety around some of our targets because we have an undercount on crime and I think our undercount isn't too bad at the moment, but if you're looking, we've got a domestic burglary problem, somebody actually thinks they are achieving the target but once they, if they are only just achieving it, the undercount can mean they're not. (501)</i></p>

	<p><i>Absolutely, because the ACC will then use that information, look at some of those threats/risks to inform her thinking around were they areas of potential weakness or concern around for her or check it out at the end of the meeting. Some of the concerns that she had, you know for example burglary, still remains a concern, but the information that she would have picked up on the strategic assessment would obviously have been helping to formulate all that, provided her with another degree of subtext underneath the figures. (503)</i></p> <p><i>I think that had been an attempt to get a Performance meeting or type of meeting or regional meeting but I've not been directly involved day to day but there was certainly an attempt to get some wider information (503)</i></p> <p><i>Should we be monitored on our clearance rates well you could suggest we're there to prevent to and detect crime, but our vulnerability and I think when you look at where policing sits within the extended Criminal Justice family, we're the biggest player most often and we're at the front end but we're only one. (502)</i></p> <p><i>Yes, and that's why we're never going to get past performance monitoring, because the system doesn't allow for the time necessary to allow management to take effect. We've not time in our day to think about why it was a good day or why it went bad, because we're driven, we're relentlessly being driven by events and, ehm, and the centre often is not providing support, it's just adding to the bureaucratic administry of it all. (502)</i></p> <p><i>The performance matrix unfortunately is something that does not take top priority. But it comes to the monthly meeting and your Sergeant and your Chief Inspector and your Inspector, sitting down to review, so you do have to do it. (505)</i></p> <p><i>So basically matrices don't capture all that information and preventative work. The TTCG process obviously looks at how resources are targeted and what Ops are run and so on and that's at a higher level but Supervisors do have a key role to play, in terms of ensuring their personal know what's going on, where and when, through briefing them. Making sure they're aware, making sure they're doing what they're asked. (508)</i></p> <p><i>Another example would be, one of our major issues, priority issues within the District is antisocial behaviour. Now, obviously there are lot of views involved in antisocial behaviour, so again I looked at some performance indicators, which would assist in dealing with antisocial behaviour, and one of them was referrals to Youth Diversion Officers, okay, and secondly number of alcohol seizures from you know from juveniles, minors. So again we added those into the performance indicators and figures in those areas have increased drastically as well, and obviously that contributes to the antisocial behaviour in the area, we are well, well down, we are really way below target in that. (510)</i></p>
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Table 9-10 – Adjusting Relationships. Source: Derived from data

It is concluded from the content summarised in Table 9-10, that in Case C, the nature of

Adjusting is influenced primarily through Alignment; however Management Ability and Organisational Knowledge are fundamental to decision taking processes. The meaning of performance data will be interpreted in the context of existing organisational knowledge and the skills managers bring to decision making.

Affecting

Relationships between Affecting and the other Elements or Dimensions are revealed by the data. Within Case C, the Affecting Element showed very strong relationships to Alignment, a strong relationship to Management Ability, and a weak relationship to Context, Culture, Organisational Purpose, Decision Making, Leadership, Information Value and Organisational Knowledge (see Figure 9-11).

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 9-11

Relationship	Comment
<p>Affecting and Alignment</p>	<p>Eleven interviews made 39 references to Affecting in the context of Alignment. The relationship between Alignment and Affecting primarily related to downward communication of larger objectives. This was action intended to ensure that organisational behaviour was in line with priorities and objectives.</p> <p>The discussion implied both long term performance of the organisation and short term performance of getting staff to comply with require behaviour.</p> <p>Accountability was widely mentioned in terms of getting people to take responsibility and this was the most apparent method of affecting organisational behaviour. As accountability tends to be backward looking, it influences behaviour by the presence of the process, rather than through the decisions taken at the meetings.</p> <p><i>And getting them to start thinking and that's been a long process and getting them to understand that what they do on an hour by hour and day by day basis has an impact on the Commander's performance and accountability and that's about raising awareness. (502)</i></p> <p><i>You know, a piece of metal in a machine to fit a particular part of an aeroplane, must fit all the other bits, nothing we do has a hard connection to anything else, that is the same</i></p>

	<p><i>the day as it was yesterday and so, you know, the end, the end is where we need to start focusing and that can't stop at the ends of our own organisation and until we get that serious about continuous improvement, then we're just playing at it. (502)</i></p> <p><i>In years gone by, a PAC meeting could have been eight hours of Spanish Inquisition, depending on which ACC it was, they really did get down into bean counting. (503)</i></p> <p><i>Well the whole performance regime has to be top down and bottom up. So the top team need to define what the priorities are for the organisation and of course those will change, they might change within days, you know. (504)</i></p> <p><i>If you're talking about the performance matrix and you're looking at getting your numbers sort of satisfactory performance every month, you'd mostly likely choose a VCP because you can throw out your fifty-five eights, or your tickets or whatever, whereas if you went on an anti-burglary patrol the chances of having anything to show on your performance matrix is pretty slim you know. So you'd most likely, because of the performance matrix, you'd put more emphasis on the, on that sort of thing that's measured. VCP or whatever but you'll have something to show for it, you know at the end of the shift. (505)</i></p> <p><i>We've made maximum use as a Section, two, three, four in the morning and nightshift and make use of stop and search, search part as a Section we've decided off our own back, let's do this and so definitely how a Section works. (507)</i></p> <p><i>That then tends to be replicated right the way down through the whole structure, so even when we get to team level you have Sergeants replicating that process, where they are just looking at raw numbers, how many offences have you dealt with, how many clearances have you had and the direction even that they're... (509)</i></p>
<p>Affecting and Management Ability</p>	<p>Six interviews made 28 references to Affecting in the context of Management Ability. The definition of Affecting refers to the application of management techniques. This is well evidenced by the interview content and management ability has a direct bearing on this.</p> <p>Communication (similar to training but less formalised) was seen as important in ensuring people understood what was expected of them and in identifying issues that needed to be addressed through listening experiences of staff..</p> <p>Holding people to account had historically been favoured as a way of leveraging focus on particular issues. Accountability was enshrined in the ethos of the Force and it was evident this cascaded to down through all ranks.</p> <p>Targets had been explored as a means of ensuring focus on particular</p>

	<p>issues but there was an increasing awareness that these could result in an overemphasis on the result rather than the objective. The problems with targets were recognised and broadly there was a move away from target setting, but it was still present in the Force PM culture. The culture around targets varied across Divisions.</p> <p><i>You know, ehm, it's about ensuring that ehm, first of all making a connection when it's relevant that I am them, you know, this whole, the management, the bosses, you know, we're asking first line supervisors to intrusively manage. We're asking them to do things that in this organisation, that historically, were being done to them by others, and generally several layers of others ehm, and that's a challenge. It is particularly a challenge when we've promoted people to those roles and responsibilities, they didn't really understand what the job was in the first place because we've implemented a process that people can get themselves through, but the organisation is, I don't think, is taking responsibility to nurture and ensure that when we get an individual a set of stripes or we put a set of pips on their shoulder, that they are fit for purpose and the things that we need people to do are to demonstrate leadership and exercise command. (502)</i></p> <p><i>The main objective we have really as I see it in my role, is to start, to make every single person in this district aware that we do consider performance. Believe it or not a lot of Police Officers don't really focus on performance. (506)</i></p> <p><i>And between us, between our unit and consultation with our CID and different units in the station and with the technical side of it and the process and the paperwork, are there issues that are causing our clearances to deteriorate, so anything we can do to improve it. So we have to ask, is it something to do with staffing or is it something to do with training, or is it something to do with our procedures, is there a reason behind it, and effectively, the main thing we can see is that we are trying to do more with less resources. (506)</i></p>
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Table 9-11 – Affecting Relationships. Source: Derived from data

It is concluded from the content summarised in Table 9-11, that in Case C, the nature of Affecting is influenced primarily through Alignment and Management Ability.

The approach to creating organisational behaviour is influenced by the assumptions managers have about what they can affect and how people, resources and processes can be affected. Long and short term influences are both apparent within PM practice here. Alignment tends to affect the overall activities, whilst tasking from performance meetings is shorter term.

There was a very strong focus on APR in some Districts. This had not been seen in other cases and this research has tended to avoid considering personal performance. However, the strong emphasis on APR in one Division as a key means of managing performance meant that it had to be explored further. What the data set shows is that APR is objective oriented, rather than action oriented. This helps to provide a distinction between personnel performance management approaches and action performance management approaches

Although rarely evidenced, one Division provided a first class example of improving performance through addressing process issues. This Division did not appreciate how unique their approach was and just treated it as practical management. This highlighted the importance of management assumption about how to manage performance could be. A sensible approach by one Chief Inspector enabled their Division to address issues on multiple levels, instead of just focussing on people.

Achieving

Relationships between Affecting and the other Elements or Dimensions are revealed by the data. Within Case C, the Affecting Element showed very strong relationships to Alignment, a strong relationship to Decision Making, and a weak relationship to Context, Management Ability, Culture, Information Value, Organisational Knowledge, Leadership, and Organisational Purpose (refer to Table 9-12).

From the content of the overlapping references, the nature of those very strong and strong relationships can be derived as shown in Table 9-12.

Relationship	Comment
Achieving and Alignment	<p>Seven interviews made 20 references to Adjusting in the context of Alignment.</p> <p>The definition of Achieving defined earlier refers to <i>“the greater alignment of organisational behaviour with the overall aims or purpose of the organisation”</i></p> <p>Skewed behaviour is a good example of a change in organisational behaviour that is not aligned to organisational purpose and three interviewees discuss this. This is particularly associated with the use of targets but is not seen as a problem in some Divisions.</p> <p>The opportunity for response officers to choose their behaviour is limited as their activity is dictated by circumstances and how they are deployed. Identifying behaviour aligned with organisational purpose is not always easy, and what seems as appropriate behaviour may not always have the desired effect. Crime falling but not reassuring the public is a good example of this.</p> <p>What is important here is that this greater alignment is the result of Adjusting and Affecting. It is not PM for other action to lead to more aligned or productive behaviour.</p> <p><i>Response you're limited to what you can decide to go out and do. You know, you know we need to go and set up a checkpoint out on the Banbridge Road and have it set up five minutes and the next be told right seven three, seven four crew up and we have to go to maybe ten mile the other direction, you know to the opposite side of the town within our boundary so, in that respect,... (505)</i></p> <p><i>Even though we've taken a fifth of the actual burglaries out of the system. Car crime we've reduced by, God knows how much, thirty five/forty percent over the past eight to ten years, yet people still perceive car crime to be a big problem. It begs the question how far do you have to go before people actually notice or are, the alternative question is, are we approaching this the right way. Are pure reductions and figures the way to go. (509)</i></p> <p><i>Yeah. It draws people in one direction, and they miss other stuff. It focuses the Police Officer's attention on sometimes just one particular area of policing activity and by definition then, they're taking their eye off the ball elsewhere. (509)</i></p>
Achieving and Decision Making (structures)	<p>Three interviews made 9 references to Achieving in the context of Decision Making. Although these did relate to both Achieving and Decision Making structures, the data was too inconsistent to draw any conclusion.*</p>

Table 9-12 – Achieving Relationships. Source: Derived from data

* When investigated in detail, Decision Making was found to have less influence than predicted by the overlapping references. From reviewing the evidence against Decision Making, it is proposed that this should be changed to a weak relationship.

It is concluded from the content summarised in Table 9-12, that in Case C, the nature of Achieving is influenced primarily through Alignment.

This Alignment aspect describes the relationship between productive behaviour and Organisational Purpose. The nature of the relationship is that Alignment defines Achievement. This is the same relationship to productive behaviour, that is, behaviour aligned with organisational purpose. We could say that if placed in a Venn diagram, productive behaviour and Achievement have the same boundaries. Alignment is activity aimed at creating behaviour in line with Organisational Purpose.

The relationship to Decision Making (structures) was less clear from the data. It is likely that the presence of effective decision making structures is essential to Achievement; however, when looked at in detail there was little data to support this proposition.

9-6.3 Discussion and Theory of Influences – Case C

Having discussed in detail the Dimensions influencing each element, the answers to the research questions are now summarised and some overall conclusions are now drawn regarding an overall theory of influences in this case.

This section has addressed two research questions, namely:

RQ5. In practice, what factors influence the PM process?

RQ6. What is the relationship between these factors and the individual elements of the process?

It has been shown that the Dimensions identified in Case A (refer to Table 9-4), were

relevant to this Case also. This addresses RQ5 by identifying a set of Dimensions influencing the PM process.

It was seen in Case B that these Dimensions influence the process of OL to different extents, and also influence Elements to different extents. From the data from Case C, key Dimensions relating to each Element were identified (see summary in Table 9-13) and the nature of relationships in Case C has been revealed. This addresses RQ6.

	Dimensions with very strong relationship	Dimensions with strong relationship
Attention	Alignment Management Ability	Organisational Purpose
Analysis	Management Ability	Alignment Context
Advising	Alignment Management Ability	Organisational Purpose
Adjusting	Alignment	Organisational Knowledge Context Management Ability
Affecting	Alignment	Management Ability
Achieving	Alignment	Decision Making

Table 9-13 - Case C - Stronger Relationships. Source: Derived from data

In addition to addressing RQ6, continuing this reasoning further, indications of the overall nature of these influences can be derived from the data in Table 9-13, namely:

- Alignment was found to have a strong or very strong relationship with each of the Elements. Alignment reflects the organisations efforts to maintain strategy or policy. A general influence across the whole of the process is indicated.
- Management Ability exhibited a strong or very strong relationship to five of the six Elements. Management Ability relates to determining how to use

information and how to influence people. A general influence across the whole of the process is indicated.

- Organisational Purpose exhibited a strong relationship to Advising and Attention. As in Case B, given its fundamental nature, a greater relationship would be expected. This may be explained if Organisational Purpose is manifested through the other dimensions (such as Alignment) rather than having a direct influence on the PM process. A more focussed influence on elements of the process is indicated.
- Context also exhibited a strong or very strong relationship to two of the six Elements. Context has a clear link to the nature of the process and ways of understanding the relevance of information. A more focussed influence on elements of the process is indicated.
- Organisational Knowledge only exhibited a strong relationship to Adjusting. This is where it would be expected to influence most; although some background influence on the whole process would have been expected. In this case, a focussed influence on the process is proposed.

These supports the proposal made in Chapter 8 that some Dimensions may have an overall effect on the process, while other Dimensions may have a focussed influence on specific Elements. From these, two dimension of influence may therefore be derived, that is, focussed to general, direct to indirect.

9-7 CASE C – THE COMPLETION OF OL (RQ7 & RQ8)

To explore the issue of the prevalence of Organisational Learning, the data from Case C is now considered in relation to the Research Questions relating to the ‘completion’ of OL, namely:

RQ7 – In practice, which factors influence the completion of OL?

RQ8 - In practice, do knowledge creation and action creation processes operate and interact to create OL?

As identified in Chapter 6, and discussed in Chapter 7, the presence of PM practice does not in itself mean the presence of OL. There it was established that, for PM to fulfil the criteria for the completion of OL, three conditions are necessary. Firstly, Organisational Action must be based on Knowledge derived from performance. Secondly, that Organisational Action must contribute to Organisational Purpose. Thirdly, that the required organisational behaviour must be sustained.

These conditions exclude changes in behaviour based on other existing Organisational Knowledge, or for any reason other than based on knowledge created from performance data (i.e. not Attention to Advising). It also excludes change in organisational behaviour which does not contribute to organisational purpose (i.e. Adjusting not leading to Achieving). Lastly, it excludes short lived behaviour change before reverting to previous behaviour.

Action Based on Performance Knowledge

The first condition, that Organisational Action must be based on knowledge derived from performance data, is determined here by the extent to which decisions are based on the knowledge created from performance information (i.e. the products of Advising), rather than other sources of influence such as pre-existing ideas or personal knowledge. In defining Adjusting it was shown that ‘interpretation contexts’ were an aspect (see Adjusting above) “...through the consideration of knowledge created about performance in the context of existing personal and organisational knowledge and theory...”.

Within Case C, there was strong evidence that Adjusting was influenced by both Organisational Knowledge and Management Ability. These two Dimensions reflect the issues that are fundamental to decision taking processes. As discussed above, new performance data will be interpreted in the context of existing organisational knowledge and

subject to the skills managers bring to decision making.

As in Chapter 8, it is viewed that there are likely to be limits to organisational or personal knowledge about any current situation or the state of the environment. In such circumstances, it is proposed that new performance information will be interpreted in the context of existing knowledge, or existing theory about its meaning.

Organisational Purpose / Sustained

The definition of the Achieving Element (see Section 9-5.2.6 Achieving_above) already reflects the second and third conditions, that is, Organisational Action must contribute to Organisational Purpose; and, the required organisational behaviour must result in an organisational level change (i.e. a sustained rather than a superficial change). For reference, extracts from definition are provided below.

...the greater alignment of organisational behaviour with the overall aims or purpose of the organisation...

... and occurring at an organisational level.

Having now established the nature of the ‘completion’ of OL in this Case, Research Questions RQ7 and RQ8 can now be addressed.

9-7.1 Factors influencing the completion of OL (RQ7)

As just discussed above, the Achieving element is most closely associated with the ‘completion’ of OL in relation to behaviour aligned to Organisational Purpose and which is sustained. Therefore, RQ7 can best be addressed by considering which Dimensions influence this Element.

When considering the relationships between the Dimensions and Achieving earlier (see Figure 9-12 for summary), it was demonstrated that few Dimensions had an influence but

those that did influenced it strongly or very strongly (see Achievement in Table 9-13). In this Case, the Alignment Dimension was identified as having a general effect on the OL process of PM, that is, there was evidence of them being related to five or more of the Elements. Decision Making structures, although identified as potentially having a strong influence, when examined in detail it was not possible to identify a consistent theme. Although, as in Case B, it may have a more focussed influence, it is not considered at this stage.

From this it is proposed that, in Case C, the Dimension of Alignment influenced the completion of OL through the whole process of PM.

The nature of this general influences is now considered in light of the data from this Case.

9-7.1.1 General Influence –Alignment

The Alignment Dimension has been identified as having a general effect on the OL process of PM, that is, there was evidence of them being related to all six Elements. Below (see Table 9-14), the evidence for each dimension is summarised against each element and presented in the form of a table.

Alignment

Element	Nature of Alignment Influence
Attention	Alignment drives the focus of Attention towards organisational level goals.
Analysis	Alignment influenced Analysis primarily through the centralised nature of the Analysis Centre. This ensured practice was benchmarked and compliant with national standards.
Advising	Alignment drives the production of reports that are in line with organisational goals and also encourages content that supports decision making regarding these. Performance Frameworks created

	alignment by getting people, and reports to focus on a consistent set of issues.
Adjusting	Alignment influences Adjusting by defining the subjects that need to be addressed.
Affecting	Alignment influences Affecting through 'responsibility' and being held to account on delivery organisational goals. Communication of organisational goals to staff was also present.
Achieving	Alignment influences Achieving by definition (as well as in practice) due to the nature of productive activity.

Table 9-14 - Overarching Influence of Alignment. Source: Derived from data

The influence of Alignment can be seen as general in that there was evidence of its influence across the whole of the process. The evidence of Alignment in Case C was dominated by accountability. This practice was built into the Force ethos to ensure practice was aimed at ensuring public support, rather than simply delivering the ends of Justice.

9-7.1.2 Summary of Influences on Achievement

In considering which factors influence the completion of OL, it has been identified that Alignment has a general influence. This is discussed further at Section 9-7.3 below.

Unlike Case B, there was insufficient evidence of a *focussed* influence in relation to Achieving.

9-7.2 The Interaction of Knowledge Creation and Action Creation (RQ8)

The OL Model of PM, derived from Case A and outlined at the beginning of this Chapter, implies a simple relationship where Knowledge feeds into Action. RQ8 asks whether this is confirmed or modified by the data.

The feedback / feed-forward nature of the process exists to supply information to decision makers, and to use this to trigger new behaviour. However, from practice it was clear that

decision making was not just determined by the data presented to decision makers, but also things like the organisational context, existing personal knowledge or organisational knowledge.

To answer RQ8 then, it was necessary to consider where it would be best evidenced and this resulted in two approaches being adopted. The first considered the nature of the Adjusting element, which includes the decision making process, and the extent to which the Advising element provided the data for decision making. The second took a more general approach and reviewed the content coded within NVivo at both the Action Creation set (incorporating Attention, Analysis and Advising) and also at the Knowledge Creation set (incorporating Adjusting, Affecting and Achieving). These two approaches are now described in more detail.

9-7.2.1 *The Nature of Adjusting in Case C*

Whilst considering the nature of the Adjusting element, data was collated and reviewed according to the constituents of the definition. The definition of Adjusting identified from Case C contains an element relating to the sources of data and also the contexts used to interpret data. For reference, excerpts are repeated below:

Information Source - ...and based on the performance information resulting from the Knowledge Creation process.

Interpretation Contexts - Decisions are made in the context of existing personal and organisational knowledge, or applied management theory about cause and effect, as well as goals, or objectives relevant to that organisational level.

The conclusions for each of these is now summarised based on the relevant interview data, as well as the experience from observations of meetings.

Information Source

The nature of knowledge used to support decision making was revealed by several interviews as follows below.

Although the content of data considered varied across meetings, such as DPP and Accountability Meetings, these were consistently contained analysed data (whether produced centrally or locally, by a formal analysts or not).

The role of the performance information was described as to allow ‘the top team to come up with something’ (501).

Although not the subject of the research, descriptions of individual performance processes also met this criteria with performance matrices provided data for decision making.

The nature of Advising is central to the issue of data sources. The consideration of performance knowledge is facilitated through Advising where the information is communicated to the decision making body. Within this case delivery of information by the analyst was actively encouraged. The role of the analyst at decision making meetings was to make recommendations to decision takers. The role of the Analyst is described as pivotal, but what this means is the Advising element is pivotal as it refers to the output of creating understanding rather than just the analysis.

The data described information sources for process including ‘performance management’, accountability and individual performance management.

In summary, in this Case, a variety of data and information sources were used at decision making meetings, however, when these meetings (or a part of those meetings) were focused on performance issues, performance information was the primary source referred to. It is not possible to identify the extent or nature of influence from ‘pre-existing knowledge’ on decisions from this study alone.

Interpretation Contexts

While different sources of information are assessed and a judgement made by the members of the responsible body, the extent to which this is influenced by factors other than the 'data' is not often mentioned. From experience, this type of behaviour comes from the personal knowledge of the individuals at the meeting rather than the data but is more an issue of the success of Advising. Judgements are particularly affected by targets. Where there is a challenge to a particular member of the group for not achieving a target the tendency is to divert attention to the data source rather than the issue.

The data used to support decision taking was sometimes spurious and not well founded. This supports the view that decision taking is not always based on data but must use other sources such as management assumptions about meaning or about potential action. Poor data allows decision taking by the responsible body, or individuals within it, to be avoided by challenging or undermining the meaning or value of the data. On the other hand there was sometimes a tendency to avoid looking at detailed causes when the explanation, although unfounded, was good news. There was no evidence found of detailed understanding of cause and effect. Where there is insufficient data to support decision taking, additional data on a particular issue may be sought.

In summary, decisions were not purely taken on the basis of the performance information but these decisions were influenced by personal knowledge of decision takers, or by other drivers such as the need to meet targets.

9-7.2.2 Knowledge Action Overlap

To examine the overlap between the Knowledge Creation process and the Action creation process, a query was developed in NVivo. This query captured items that had been coded both with the Knowledge Creation set (containing all data from Case C coded at Attention, Analysis and Advising elements) and the Action Creation set (containing all data from Case

C coded at Adjusting, Affecting and Achieving elements). These were summarised according to the elements involved and the result is summarised in Table 9-15.

This data in this table demonstrates that the extent of evidence for the following relationships:

- Attention and Affecting were most commonly associated.
- Attention and Adjusting were associated.
- Analysis was most associated with Adjusting.
- Advising was most associated with Affecting.
- Adjusting fairly equally associated with for Attention, Analysis and Advising.
- Achieving was usually associated with Attention.

		Knowledge		
		Attention	Analysis	Advising
Action	Adjusting	18	10	8
	Affecting	31	5	14
	Achieving	8	1	0

Table 9-15 - Knowledge Action overlap. Source: Derived from data

As with Case B, it is conceivable that these relationships may be partially attributed to a product of the coding method and the criteria used to support the coding, however, there is a sufficient range of data sources and coding pairings to provide evidence that aspects of Knowledge Creation influenced aspects of Action Creation.

Notable from these relationships was the fairly consistent influence of Affecting on each of the Knowledge Elements. It is thought likely that this reflects the focus on accountability within this Case. Accountability was often demonstrated through references to responsibility. These references were coded as Affecting as they related to a means of influencing behaviour. Accountability was identified at the start of this Chapter as related to the principles upon which the service was created, and therefore related to Organisational

Purpose.

There was also most evidence for Attention being influenced by Action Elements. This is thought to reflect the choices about performance indicators being strongly related to the nature of the Decision Making structures.

The relationship between Attention and Affecting may be a result of Management Ability, where the nature of management influences the choice of indicators.

The relationship between Attention and Achieving may be explained through the influence of Organisational Purpose, in that, what the organisation aimed for was what was measured.

Like Case B, this suggests Decision Making structures, Management Ability and Organisational Purpose may provide a mediating influence between Knowledge and Action. This is discussed briefly in Section 9-7.3.2. However, at this stage, given the nature and scope of the Case Study, there was insufficient detail to support detailed conclusions.

9-7.3 Discussion and Theory of Completion of OL – Case C

Section 9-7 has addressed the two remaining research questions:

RQ7. In practice, which factors influence the completion of OL?

RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?

These were addressed by considering the influences on the Achieving Element and by considering the impact of Knowledge on Action. Below, the conclusions regarding each are summarised.

9-7.3.1 Influences on Completion

By considering the nature of Achieving, we can conclude from the data and the discussion at

Section 9-7.1 above that some Dimensions influence the completion of OL, but they do so to different extents and in different ways. The most evidence was the influence of Alignment and this was found to create a general influence and is therefore seen as process related rather than element related. For consistency Table 9-16 summarises the influences on Achieving identified in Case C.

Type	Dimensions Influencing Achieving
General Influences	Alignment
Focused Influences	None identified

Table 9-16 - Influence Types for Completion of OL. Source: Derived from data

9-7.3.2 The Interaction of Knowledge and Action

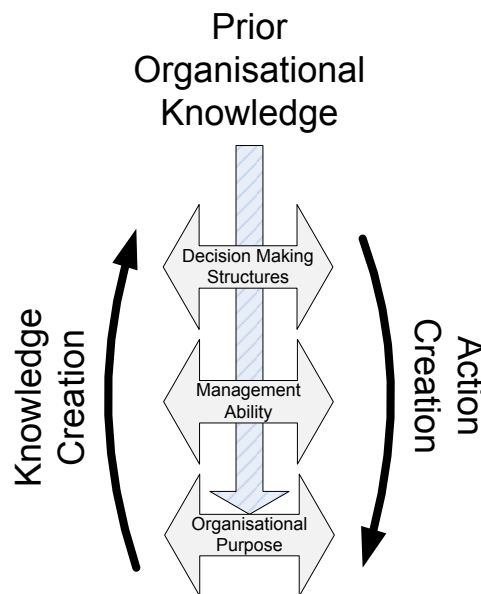


Figure 9-13 - Mediating Influence of Organisational Knowledge. Source: Derived from data.

The nature of Adjusting and the Knowledge / Action overlap was considered at section 9-7.2. Taken together, for Case C, the data provides some support for the proposal that the Knowledge Creation and Action Creation processes do interact through Decision Making Structures, Management Ability and Organisational Purpose. However, the nature of relationships is less clear than in Case B and the above cannot be considered sufficient to

provide evidence of the model proposed in the Chapter 8, Figure 8-13 – Mediating influence of Organisational Knowledge (repeated at Figure 9-13 above). It does however fit with the model and is worthy of closer examination in a separate study.

9-7.3.3 Considering Impact and Prevalence

Taking all the evidence from section 9-7, it can be seen that there are occurrences where OL is complete. However, there are many influences that act as inhibitors through negatively influencing the process of OL. By deliberately identifying and addressing such issues it may be possible to influence the completion of OL.

As mentioned in Chapter 8, to properly quantify the extent of completion a more rigorous methodological approach would be necessary.

9-8 SUMMARY OF CASE C FINDINGS

Based on the data from Case C, the research questions, how they have been addressed and a summary of the findings in Case C are listed in Table 9-17.

Research Questions	Addressed Through	Case C Conclusion
RQ1. How is knowledge created within PM practice?	Considering the nature of the Elements, confirming their presence and refining their meaning.	Knowledge was found to be created through the stages of Attention, Analysis and Advising. Knowledge Creation was clearly evident with the practice of Performance Management.
RQ2. How is action created within PM practice?		With a background embedded in Accountability, the Action Creation aspect of the performance process was less easily recognised. However, it was still evident within practice.
RQ3. Does performance knowledge		Knowledge derived from performance data was submitted to influence decision making and that the nature of action was seen to be

Research Questions	Addressed Through	Case C Conclusion
influence organisational behaviour?		influenced by this. The extent of influence is unclear from the data and the nature of this research will be unable to quantify this. Accountability processes tended not to produce new action but instead prompted action prior to the meeting.
RQ4. What is the nature of elements within each case?		The process of PM was comprised of the elements identified in the OL Model of PM and the nature of these Elements has been refined based on the data.
RQ5. In practice, what factors influence the PM process?	Considering the Dimensions that influence the process of OL and exploring the extent to which each Element is influenced by the Dimensions.	It was shown that the Dimensions identified in Case A were relevant. The extent of presence of various Dimensions has been identified.
RQ6. What is the relationship between these factors and the individual elements of the process?		The Dimensions were identified as having either a general or a focused influence the process of OL or the Elements. Key Dimensions relating to each Element were identified and the nature of those relationships was revealed.
RQ7. In practice, which factors influence the completion of OL?	Considering the extent to which the completion of OL was present.	The completion of OL was influenced most clearly by Alignment.
RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?		Knowledge Creation was found to influence Action Creation mostly through the Attention and Affecting relationship, but other routes of influence between Knowledge and Action, namely Decision Making structures, Management Ability, and Organisational Purpose were potentially present.

Table 9-17 - Addressing the Research Questions - Case C

Case C has allowed the further development and application of the Dimensions concept derived from Case A.

It has been proposed that a multi-level model is necessary to capture the many different aspects identified. This is explored further in Chapter 10, which undertakes a Cross Case Analysis and derives a model which can be applied to all of the cases.

Within Case C, it has been shown that the OL process was present in that organisational action was being created based on performance data. The influence of accountability changed the nature of Affecting in Case A. Rather than management being a response to data, managers were made to think in advance about their responsibilities. This changes the feedback / feed-forward process. Accountability therefore reduced the likelihood of PM producing OL in the same way as other PM practice. However, it is possible to confirm that OL was present, but it is not possible to quantify this at this stage. In relation to the prevalence of OL, we can say that there were examples of OL within Case C.

Chapter 10 now goes on to consider the similarities and differences in the cases through a cross-case analysis.

9-9 REFLECTION

From Case A to Case B included a complete transformation of the analysis technique. Being able to analyse this Case in exactly the same way as Case B made this analysis and write up process far more efficient. This will also aid the cross-case analysis.

This Case added valuable insight into the nature of accountability and its influence on PM practice. Although the Case included a smaller number of interviews than previous cases and was conducted over a shorter period, when coded it was found that a greater proportion of content was relevant. As well as being influenced by the degree of facilitation provided by the PSNI, this is also attributed to the experience gained from other cases.

When setting out to conduct the Case Studies, it was viewed that it would be possible to come to a definitive answer about the meaning of the data collected. The reality has been different. What is included in this Chapter, as with the other Case Study Chapters,

represents the findings at a point in time. With more time, more and more refinement to the subtleties of the conclusions would be possible. The limit here has not been the data, nor the method applied, but the timescale for producing a final version suitable for this Thesis. Rather than finding a single “truth” about a reality, the analysis process is instead a successive unfolding of the layers of that reality. This underpins the Critical Realist approach.

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10-1 ORGANISATION OF THE CHAPTER

The following table (Table 10-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Questions.

Content	Relevance to Research Questions	Comment
The Elements and Flow of PM – cross-case	Considers implications of similarities and differences across cases in RQ1 to RQ4	Results in theory of OL process.
Description of Drivers, Factors, Relationships – cross-case	Considers implications of similarities and differences across cases in RQ5 & RQ6	Results in theory of influences
Completion of OL – cross- case	Considers implications of similarities and differences across cases in RQ7 and RQ8	Results in theory of Completion of OL
Cross-case Analysis - Summary and Conclusion	Considers implications of similarities and differences to Research Problem	

Table 10-1 – Organisation of the Chapter

This Chapter reports and considers the findings of a cross-case analysis of Case Studies A, B and C, extending the validity of the constructs and providing greater insight into the nature of Performance Management (PM) practice.

10-2 CHAPTER INTRODUCTION

The aim of this Chapter is to provide the results of a cross-case analysis of the three Cases introduced and described in Chapters 7, 8 and 9. The cross-case analysis findings are presented according to the three areas of the Research Questions, namely:

- 1) The elements and flow of PM;
- 2) A description of drivers, factors, and relationships;

3) The completion of OL.

Each section considers the overall findings, the similarities and differences present across the Cases, why these may be present, and what they say about the nature of the OL Model of PM.

10-3 CROSS-CASE ANALYSIS

This study utilised a multiple case study design. The case selection was driven by replication logic, not sampling logic (Yin, 2003). Replication here is theoretical, not literal, that is, the cases are anticipated to provide contrasting results, but for predictable reasons. The within-case analysis treated each of the Cases as a series of experiments, each Case Study serving to confirm or disconfirm the conclusions from previous ones (Eisenhardt, 1989, Yin, 2003). The contrast in cases offers firmer grounding for propositions than constant elements observed in a homogeneous group (Harris and Sutton, 1986).

While a multiple case design is more demanding than a single case, it permits the development of more reliable models (Bourgeois and Eisenhardt, 1988). In addition to the findings from considering each case individually, multiple case design provides more compelling findings and greater reliability of results (Yin, 2003). Construct validity can be further improved by identifying and explaining the similarities and differences between and across cases (Eisenhardt, 1989). Ensuring high construct validity is a prerequisite for internal and, ultimately, external validity (Modell, 2009).

The aim of this cross-case analysis therefore is to identify the similarities and differences that exist across the three Cases and to consider why these similarities and differences exist and their implications for the OL Model of PM.

Cross-case analysis involves identifying patterns and themes across cases (Miles and Huberman, 1994, Pettigrew, 1990). Miles and Huberman (1994) describe a variety of

methods for undertaking cross-case analysis, the fundamental process of which involves a variety of tabular or graphical comparison of results which depend on the nature of the data being analysed. The within-case analysis has already identified that the cases are comparable, in that fundamentally, similar PM processes were in operation.

The analysis process here is retroductive (refer to Chapter 5), in that it ultimately posits mechanisms which, if they were to exist and act in the postulated manner would account for the phenomena singled out for investigation (Bhaskar, 1989). Furthermore, by extracting the common themes and patterns across the three Cases, further light can be shed on the nature of the underlying phenomena (Bhaskar, 1998, Modell, 2009).

As discussed in Chapter 5, common coding techniques were applied to the data and this has supported, to an extent, this cross-case analysis. However, the use of a pilot case study meant that the theory, and therefore the detail of the coding, developed during this period. This means that not all areas of analysis can be fully compared.

Based on the OL Model of PM, and using the data described in Chapter 7, 8 and 9, a detailed analysis of the whole phenomena is undertaken. This considers the similarities and differences in a) the Elements of the model, b) the Factors influencing the process, and c) in the completion of OL.

10-4 THE ELEMENTS AND FLOW OF PM

As proposed in Chapter 6 and successively revealed by Chapter 7, 8 and 9, the process of PM has been found to operate through the creation of knowledge with which to support the creation of new more appropriate action.

The basic feed-forward / feedback flow of PM was identified in Chapter 6 (refer to Figure 10-1). This basic flow has been found to valid in all three Case Studies except when strongly focussed on providing accountability. In the latter, the influence of accountability

focuses learning on specific tasks in order to achieve a reward. Chapter 7 identified and discussed the difference between Organisational Learning and Organisational Training. Antonacopoulou (2001) examines some of the basic differences between training and learning using the individual manager as the unit of analysis. The findings from the study suggest that the relationship between training and learning may appear strong on the surface; however in essence it may be superficial and mechanistic. This is certainly worthy of further investigation but is outwith the scope of the research questions and this thesis. Here, it is concluded that the basic feed-forward / feedback flow of PM underpins PM practice.

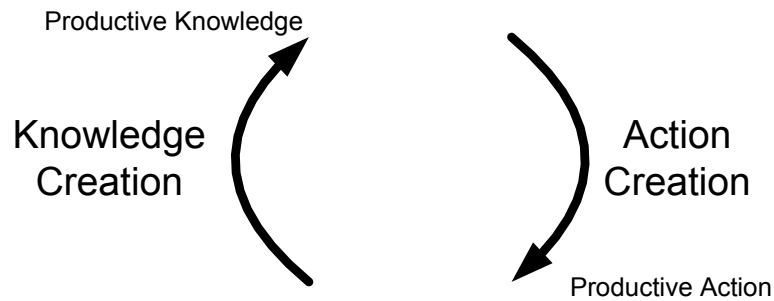


Figure 10-1 - The basis of OL. Source: Author derived in Chapter 6.

The constituent elements of this process have been identified and refined. In this section, the overall findings regarding the basic flow of the process and collective definitions for the constituent elements are presented. Based on these findings, a theory regarding the nature of OL in PM practice is proposed.

10-4.1 Overall Definitions of Elements

The Elements of the OL Model of PM, defined from a review of the literature contained in Chapter 6, have been found to be relevant and applicable to each of the Case Studies. This following section considers the data for the three Case Studies as a whole and provides an overall view of the Elements of OL based on this. This is followed by considering the similarities and differences across cases and the implications of these.

10-4.1.1 Definitions - Overall Assessment

NVivo was used as to collate the data within each individual case and where common coding techniques had been applied this supported the collation of data across cases. Each case was analysed individually (see Chapters 7 , 8 and 9) to provide a within-case analysis with a memo being developed to capture the concepts, ideas and to summarise discussion from the original interviews. The conclusion from each element in each Case was then brought together into a consolidated memo, and a final definition resolved. Table 10-2 shows the overall Element definitions which have been refined to include the findings from each case and to be applicable to them all.

Element	Definition
Attention	Attention is the focus by the organisation, or its constituent parts, on its environment (both internal and external), to inform an understanding of the relative position in terms of the achievement of goals or objectives, the efficiency of processes, or the effect of action, through the use of feedback primarily from internal and external performance metrics (both quantitative or qualitative).
Analysis	Analysis is the process of adding value to the raw data from performance metrics, by people or automated systems, in order to identify issues and support decision making regarding performance and the need to adjust organisational behaviour, through judgement of meaning based on analytical techniques, or through collation or compilation resulting in an interpretation which can be communicated in a manner appropriate to the process and level to inform decision makers.
Advising	Advising is the provision or communication of the results of analysis through the creation of a performance artefact, using verbal, written or electronic media, by the individual, unit or system undertaking the analysis, in order to: <ul style="list-style-type: none"> - communicate the meaning of data to decision makers; - identify areas of concern; - inform day to day monitoring; - control access to information; - or enable accountability processes.

Adjusting	To manage performance, the knowledge created from performance information must be used to create new or changed organisational action. Adjusting is the stage of creating action where performance knowledge is considered and necessary changes to action identified. This occurs through both formal methods (such as performance or tasking & coordinating meetings), and informal methods, of decision making. Decisions are taken by the person or body with responsibility for that sphere of business and are based on the performance information resulting from the Knowledge Creation process. Decisions are taken in the context of existing personal and organisational knowledge, as well as goals, aims, or objectives relevant to that organisational level. This contributes to affecting organisational behaviour.
Affecting	Affecting is the stage at which organisational behaviour is influenced, in line with the intention of the decision making body, through management interventions applied to people, processes or resources, based on managers understanding or assumptions about what can be influenced and how it can be influenced.
Achieving	Achievement of Organisational Learning from Performance Management is the greater alignment of organisational behaviour with the overall aims or purpose of the organisation enacted through the deployment of resources, the behaviour of members, or embedded in routines and processes resulting in an impact on the internal or external organisational environment and occurring at an organisational level.

Table 10-2 - Definitions of Elements. Source: Derived from data

10-4.1.2 Definitions - Similarities and Differences

The uniqueness of each Case allows the definitions of the Elements to be thoroughly tested. The Elements of the model, and their definitions evolved from each of the Case Studies but did not change significantly between them. Despite the analysis of each case study being undertaken independently over a period of several months, identical wording was often developed based on the Case data, and before being compared.

The Case Studies tended to identify subtle differences and changes across the cases which were limited to expanding or incorporating additional examples of practice. Where initial definitions included reference to influencing factors, these were removed and considered separately (see *10-5.1 Dimensions of Influence* below). Several minor changes were made in order to clarify the meaning of the definition and make it more comprehensible. Due to limitations of space and as it would not be productive nor add value at this to the research, these minor differences are not reviewed here in more detail.

10-4.2 Theory of OL Process

A retroductive process (refer to Chapter 5) has been followed in order to determine the underlying nature of OL within PM practice. This involves testing the proposed model against the data from Case Studies.

Three qualitative Case Studies (discussed in Chapters 7, 8 and 9) have shown the basic Elements of OL, as defined above, to be relevant, illustrative and revealing. These Elements were originally derived from an amalgamation of the literature (see Chapter 6) and, with minor modification, have withstood a test against real Cases.

Based on individual Cases alone, it would be difficult to generalise these findings to other Forces, other Public Services or to PM practice as a whole. However, the robustness of the Elements, together with their foundation in the wider OL and PM literature, indicates that their relevance should be more widespread than just these three Cases.

It is proposed that PM practice, in representing a type of OL, is causally related to knowledge creation and action creation. That is, it is structured upon the two processes of Knowledge Creation and Action Creation, which can usefully be viewed as comprised six Elements, namely Attention, Analysis, Advising, Adjusting, Affecting and Achieving, each as defined above. The Elements derived are considered sufficiently robust to cope with

variation in practice across different areas of the UK, and likely to be sensitive enough to reflect those differences.

10-5 DRIVERS, FACTORS, RELATIONSHIPS

Chapter 6 anticipated that a range of factors would influence the process of PM but, as the literature was not specific to PM practice, an initial model could not be proposed or attempted. Chapter 7 identified a set of Dimensions present in Case A. These were subsequently validated in the following Case Studies described in Chapter 8 and 9.

To broaden the conclusion from the within-case analysis and to help identify the nature of the relationship between the Dimensions and the OL Model of PM, the following sections considers these from the perspective of all the cases together, and then the similarities and differences across cases.

The range of Dimensions are discussed, followed by the type of influence from those Dimensions (general or focussed), and the strength of influence of the Dimensions (strong or weak).

10-5.1 The Dimensions of Influence

Case A identified a set of Dimensions influencing the PM process and these are shown in Table 10-3. Those Dimensions have been found more or less relevant in each of the cases.

10-5.1.1 Dimensions of Influence – Overall

Taking all the cases together, an overall proportion of influence apparent in the data can be derived (see Table 10-3). The data in the table has been rounded to the nearest whole per cent for clarity.

When considering all the data together, clearly evident is the varying proportions of evidence for each Dimension. This ranges from 26% for Alignment to only 2% for Leadership. Potentially, this may also to some extent be influenced by the conduct of the case study and the conduct of the analysis but this is not considered to be as significant as the differences in degree of influence. However, as in the individual cases, this is seen as expressive of both different degrees of influence and different types of relationships representing different causal networks in play.

These Dimensions are viewed as sufficiently well established to be relevant to the examination of PM practice in other UK Police Forces.

Dimension	All
Alignment	26%
Management Ability	17%
Context	11%
Organisational Knowledge	10%
Culture	10%
Decision Making	9%
Organisational Purpose	8%
Analytical Capability	4%
Information Value	4%
Leadership	2%

Table 10-3 - Overall Relative Influences. Source: Derived from data

The nature of the relationship between the Dimensions and the Elements (general or specific) and the different degrees of influence (strong or weak) are discussed further in Section 10-5.2.

10-5.1.2 Dimensions of Influence - Similarities and Differences

Having described the overall situation above, this section now considers the similarities and differences between cases. This both tests the flexibility of the model to fit a range of cases as well as providing the opportunity for these similarities and differences to add to the understanding of exceptions and rules.

The percentage (rounded to nearest whole number) of the total number of references in each Case against each Dimension is shown in Table 10-4. It is stressed that this is not necessarily representative of the Case. However, the table does represent the percentage of the number of references coded from interviews, against each dimension, in each Case. As the choice of interviewees is based on theoretical sampling rather than representative sampling, this then represents the content of each Case Study (and not necessarily the Case).

Adding any statistical analysis to the data would only help to give the impression of quantitative validity and is therefore avoided here. However, it should be remembered that an examination of the related data within each Case demonstrated that where evidence was strongly represented it generally revealed a clear relationship to the Dimension.

	Case A	Case B	Case C
Alignment ¹	20%	21%	38%
Management Ability	9%	16%	25% ⁶
Context	8%	14%	10%
Organisational Knowledge	17% ⁴	7%	4%
Culture	1%	22% ⁵	5%
Decision Making	14% ³	8%	4%
Organisational Purpose	7%	9%	8%
Analytical Capability	13% ²	0%	0%
Information Value ⁸	6%	2%	3%
Leadership ⁸	5%	1%	1%

Table 10-4 - Relative Content by Dimension. Source: Derived from data

From the table (see Table 10-4), some key variations stand out and warrant some explanation;

1. Alignment is consistently high and is especially so in Case C
2. Analytical Capability is strongly represented in Case A and absent in Case B and Case C
3. Decision Making is strongly represented in Case A
4. Organisational Knowledge is strongly represented in Case A
5. Culture varies from relatively high in Case B, to relatively low in the other Cases.
6. Management Ability stands out in Case C
7. Information Value and Leadership are consistently low.

The differences in results are explainable in terms of the fundamental differences across the Cases and the impact of the varying role of PM and the different dominance in each Case.

Case A was particularly strong on Analytical Capability, Decision Making, and Organisational Knowledge. This is seen as reflecting the focus on the IT system which had recently been introduced there. This system had provided analysts and decision makers with relatively easy access to Organisational Knowledge in the form of historical performance data.

The majority of Dimensions were apparent in each case apart from Analytical Capability which was only represented in Case A. This is thought to reflect the presence of clear analytical structure both Case B and Case C meeting the perceived needs of interviewees.

Case B had a strongly embedded Culture whereas Case A did not and Case C's culture was reflected though the focus Management Ability, i.e. accountability. This then reflects the perception of the influence of culture in each case, namely:

- Case A was relatively new to PM practice and did not have strong drivers for a consistent culture;

- Case B had adopted a strong performance culture to drive through change based on the Home Office template;
- Case C had a very strong culture of on accountability which was reflected in a strong focus on Management Ability.

It is concluded therefore that the content of interviews largely reflected the key themes within each case. This also indicates that any bias from the researcher, either within data collection or analysis, was minimised sufficiently to remove sensitivity of the method to such variation.

Other than those included in the Dimensions, no other strong influences were identified. The conclusion drawn from this is that the set of Dimensions identified in Table 10-4 is suitable for considering PM practice in the Police service in the UK. This does not eliminate the potential for other dimensions of influence to exist and, if considering PM practice in other situations, especially the private sector, it is anticipated that other Dimensions are likely.

Links or relationships between these causal mechanisms, such as Organisational Purpose, Alignment and Culture, were evident. There is assumed to be a relationship between sets of causal factors, i.e. causal networks; however, the analysis is not sufficiently developed at this stage to clearly derive these.

10-5.2 Types of Influence – General or Focussed, Strong or Weak

It was identified in Chapter 7, 8, and 9, that the Dimensions influenced the OL Model of PM in different ways and to different extents. It was identified that the Dimensions either affect the OL Model of PM generally or focused through specific Elements (or group of Elements), and that the degree of influence can be strong or weak.

The nature of the analysis that supported those conclusions relied first on identifying the extent of evidence and then on a close examination of the specific references (collated in

NVivo). This degree of examination is impractical when considering the three cases together and the resulting high number of references to be examined (in the order of 1000). The extent of data also undermines the ability to distinguish between a general influence and a strong influence. Therefore, the following briefly identifies some key points but does not provide the same detail as in the individual Case Studies.

10-5.2.1 Types of Influence - Overall

Table 10-5 summarises the extent of evidence of influence against each Element when all three cases are considered together. The table describes the extent of evidence in terms of most frequently evidenced to least frequently evidenced, i.e. 1st to 8th. Lower influences are not listed due to the lack of significance from very low values. From this perspective, it is not possible to determine whether a relationship has a positive or negative influence on the OL outcome.

Element		1st	2 nd	3rd	4th	5th	6th	7th	8th
1.	Attention	Alignment	Mgmt. Ability	Org. Purpose	Culture	Context	Information Value	Decision Making	Org. Knowledge
2.	Analysis	Alignment	Mgmt. Ability	Context	Analytical Cap.	Culture	Org. Knowledge	Information Value	Org. Purpose
3.	Advising	Alignment	Mgmt. Ability	Context	Culture	Org. Purpose	Information Value	Decision Making	Analytical Cap.
4.	Adjusting	Alignment	Org. Knowledge	Mgmt. Ability	Decision Making	Context	Org. Purpose	Culture	Analytical Cap.
5.	Affecting	Alignment	Mgmt. Ability	Culture	Decision Making	Org. Purpose	Context	Org. Knowledge	Leadership
6.	Achieving	Alignment	Decision Making	Mgmt. Ability	Culture	Org. Purpose	Context	Org. Knowledge	Information Value

Table 10-5 - Overall Influence on Elements. Source: Derived from data.

Taking the data for all the cases together, Dimensions which have a general or focused influence can be identified. Referring to Table 10-5, it can be seen that Alignment and Management Ability are both represented across all the elements as well as more strongly evidenced. Alignment's presence across all elements reinforces the idea that it is not unique

to any particular element but to the process as a whole. Context is seen as generally influencing the Knowledge Creation Elements.

For other Dimensions the variation between cases suggests a more specific action but this becomes hidden when averaged across the three cases. Two focussed influences are clearly seen, that is, Organisational Purpose influences the Attention Element, and Organisational Knowledge influences Adjusting Element.

From this, it is proposed that there is sufficient data to identify that Alignment, Management Ability, Context, were most strongly evidenced and that the nature of that evidence indicates they had a general influence on the PM process as a whole. These Dimensions showed a relatively consistent picture across all the Cases and it is viewed that there is sufficient data to propose these as likely to influence PM practice in other Forces. This starts to introduce a predictive aspect to the OL Model of PM in that, in viewing any other instance of PM practice in the UK police, these would be anticipated to be present and to have a general influence.

When the data for all three cases is considered together, it is difficult at this stage to separate the general influence from a strong influence. It is concluded therefore that, whilst Alignment and Management Ability are likely to have a stronger influence, the analysis of the evidence available does not clearly support this.

Also, when considering the weak relationships, the evidence for Leadership and Analytical Capability is very limited. The evidence contained in the within-case analysis suggested that these were occasionally present but were either not recognised or not explored sufficiently.

10-5.2.2 Types of Influence – Similarities and Differences

As seen in 10-5.2.1 above, the general influences were most clearly represented in the data across all the Cases, i.e. they were all similar in this respect. Differences between cases

tended to be found in the relationships that were identified (in Chapters 7, 8 and 9) as focused. This is to be expected as a more focused influence is likely to only be evidenced when considering that aspect of practice.

Some of these apparent differences in focused influences are outline and discussed below:

- Within Case A, a relationship between the Analysis element and the Analytical Capability was apparent from the data. A virtual absence of influence from the Culture Dimension is also noted. A simple causal relationship between Analysis and Analytical Capability is to be expected. The emphasis seen in this Case may reflect the IT system recently introduced to support PM practice and the resulting impact on the analysis aspect of the practice.
- Within Case B, Decision Making structures exhibited strong or very strong relationships to Adjusting and Achieving. Organisational Purpose exhibited only a strong relationship to Attention. A simple relationship between Adjusting and Decision Making structures is to be expected. The causal relationship to Achieving may be attributable to the effectiveness of the structures impacting on successful outcomes. The relationship between Organisational Purpose and Attention is attributed to a clearly defined mission being applied to indicator choice. The degree to which this occurs will determine how focussed the Force is on its overall purpose rather than imposed targets and indicators.
- Within Case C, Organisational Purpose exhibited a strong relationship to Advising and Attention whilst Organisational Knowledge exhibited only a strong relationship to Adjusting. The clear evidence of the influence of Organisational Knowledge on Adjusting indicates the manner and extent to which performance knowledge is contextualised by the knowledge already existing within the organisation. The relationship between Organisational Purpose and Attention is less ‘obvious’ but, as in Case B, this would be consistent with an organisation that has clearly linked what it measures to its overall objectives. Also, structuring the communication of

interpreted information around organisational objectives to support improved decision making, would account for this relationship.

The question to be answered is whether these similarities and differences are due to a weakness of the model at this level or whether this represents different drivers or causal factors in each case. It is viewed that these similarities and differences in the evidence did reflect actual differences in causal networks within the Cases and that this was not solely attributable to the conduct of the data gathering or the analysis. This implies that the method adopted and the Model were sensitive enough to reflect such differences although, as discussed earlier, the limitations of the method restrict more detailed conclusions in this regard.

10-5.2.3 Theory of Influences

Having considered the influences on the process of PM from a number of perspectives, several findings have been derived regarding the nature of influences. In particular the nature of general and focused influences has been clarified.

General Influences

A consistent picture has been found in relation to the general influence of Alignment and Management Ability. There is also some variation in the degree of influence and the range of Elements affected by these two Dimensions. This is seen as consistent with some local variation in these influences. From this consistent influence it is concluded that these two Dimensions have an overall influence on practice of PM in each of the three cases, and that this is likely to be generalizable to other instances of police PM practice.

Focused Influences

The nature of the evidence supporting strong and weak influences is difficult to generalise when considering a focused influence by a Dimension on an Element. The strong influences

found were most often also general influences. Weak influences tended to vary across cases to an extent that reduces the validity of any conclusions regarding this.

Therefore by considering all the data together we can say that there are general influences on PM process, but whilst focussed influences are likely to exist, these are most likely to vary within individual cases depending on the nature of practice and the case.

10-6 THE COMPLETION OF OL

During this research, OL has been viewed both as process and as an outcome. Chapters 7, 8 and 9 considered the issue of the completion of OL in relation to each Case. It was established, that for PM to fulfil the criteria for the completion of OL, three conditions are necessary, namely:

1. Organisational Action must be based on knowledge derived from performance data.
2. Organisational Action must contribute to Organisational Purpose.
3. The required organisational behaviour must be sustained.

Therefore, the nature of the ‘completion’ of OL can be addressed through considering the evidence that Adjusting is based on performance knowledge and by reviewing the manner in which Dimensions influencing Achieving. Each of these is discussed below, considering both the overall conclusion and the similarities and differences between cases.

10-6.1 Action Based on Performance Knowledge

It was established in the within-case analysis that decisions about necessary or appropriate action may potentially be influenced by the existing knowledge of actors, existing organisational knowledge, or by the performance knowledge created from performance information. As described above, for OL to exist in the feedback/feed-forward process described by the OL Model of PM, action must be derived from performance knowledge. Whether organisational action is based on knowledge derived from performance data is

determined here by the extent to which decisions are influenced by factors other than the knowledge created from performance information (i.e. the products of Advising). This has been captured in the definition of Adjusting (see Adjusting above) where interpretation contexts are referred to:

“... Decisions are taken in the context of existing personal and organisational knowledge, as well as goals, aims, or objectives relevant to that organisational level. ...”

As Case Study A was conducted as a pilot, consistent data for the type of information sources is not easily available. However, it was clear to the researcher that, in all cases, a variety of data and information sources were used at decision making meetings. Also, when these meetings (or a part of these meetings) were focused on performance issues, performance information was the primary source referred to.

10-6.2 Knowledge Action Overlap

The relationship between Knowledge and Action is fundamental to the process of OL. For OL to be completed, action would be anticipated to be influenced by performance knowledge.

As in the within-case analysis, to examine the overlap between the Knowledge Creation process and the Action creation process, a query was developed in NVivo. This query captured items that had been coded both with the Knowledge Creation and the Action Creation set.

10-6.2.1 Overall

A summary of items coded at both Knowledge Creation and Action Creation have been summarised according to the elements involved in Table 10-6.

Cases A, B and C		Knowledge		
		Attention	Analysis	Advising
Action	Adjusting	99	72	131
	Affecting	116	28	64
	Achieving	38	9	10

Table 10-6 - Knowledge Action Overall - All Cases. Source: Derived from data.

This data demonstrates the extent of evidence for the following relationships:

- Attention was most commonly associated with Adjusting and Affecting.
- Analysis was more strongly associated with Adjusting.
- Advising was most associated with Adjusting and this was the most apparent relationship.
- Adjusting was more strongly associated with Advising but links to Attention and Analysis were also well evidenced.
- Achieving was more usually associated with Attention.

However, as the Case Studies were not of equal size, the overall totals are strongly influenced by the larger pilot case study, Case A, and caution must be exerted in drawing overall conclusions.

10-6.2.2 Similarities and Differences

The individual values for each case are display in Table 10-7. As the values have different relative meanings in the different cases, each value has been attributed a relative colour depending on the spread in each case. Low relative values within a case a represented in more reddish hue, whilst high values are represented by a more green hue with yellow representing the mid-range. This makes it easier to identify the similarities and differences between relationships across cases.

		Knowledge								
		Attention			Analysis			Advising		
		A	B	C	A	B	C	A	B	C
Action	Adjusting	77	4	18	60	2	10	114	9	8
	Affecting	82	3	31	21	2	5	48	2	14
	Achieving	28	2	8	7	1	1	10	0	0

Table 10-7- Knowledge Action Overall – Case A, B and C. Source: Derived from data.

Most clearly apparent is that there were some strong similarities across cases, namely:

- The strong evidence of a relationship between Adjusting and Advising
- The low level of evidence between Achieving and the Knowledge Creation process.
- The above medium level of evidence for a relationship between Attention and Adjusting and Affecting.

The relative consistency of some findings across cases may be partially attributed to a product of the coding method and the criteria used to support the coding, however, there is a sufficient range of data sources and coding pairings to provide evidence that consistently across cases aspects of Knowledge Creation influenced aspects of Action Creation.

The pairing between Advising and Adjusting is anticipated by the model and is particularly well evidenced within and across cases. However, the model proposed in Chapters 8 and 9 (refer to Figure 10-2) is not supported by the cross case analysis. In particular, there is little evidence here to support the mediating influence Management Ability and Organisational Purpose. From this, it is concluded that either there are differences in the nature of the mediation in different cases, or the association seen in individual cases, whilst apparent was not real.

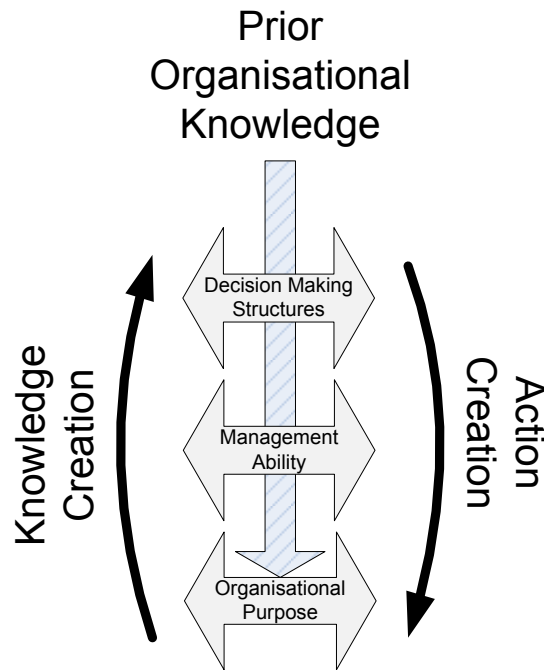


Figure 10-2 - Mediating Influence of Organisational Knowledge. Source: Derived from data.

10-6.3 Contributing to Organisational Purpose / Sustained Behaviour

Here, to provide further validation to the constructs identified in the within-case analysis, the data from the all the Cases are considered in relation to the ‘completion’ of OL.

The ‘completion’ of OL implies behaviour aligned to Organisational Purpose and behaviour that is sustained. The definition of the Achieving Element (see sub-section [Achieving](#) earlier) already reflects these conditions. The influences on Achieving therefore, are reviewed to determine in what ways the completion of OL is affected. This is accomplished first by examining the data regarding the Dimensions influencing this Element from all the Cases together and then by considering the similarities and differences between the Cases.

10-6.3.1 Overall

By adding the data for each case together, the relative quantity of evidence for each Dimension on Achieving is established. This is displayed as a graph in Figure 10-3.

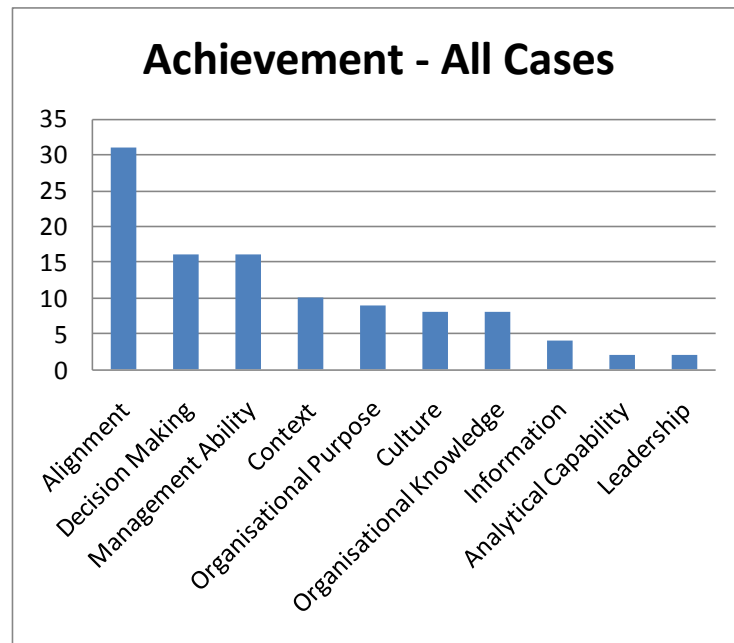


Figure 10-3 - Influences on Achieving. Source: Derived from data

From the chart, it can be seen that Alignment had the most identifiable influence, with Decision Making structures and Management Ability also providing a clear influence. These are shown in Table 10-8. The remainder of influences are relatively weak and are not considered further here.

The Action Creation aspect of this is predicted by the closeness of these Elements within the OL Model of PM. The influence of Knowledge Creation is assumed to be less apparent, rather than non-existent.

The completion of OL therefore is seen as most clearly influenced by Alignment, Decision Making structures and Management Ability. Each of these Dimensions influences the likelihood of the OL process leading to an OL outcome.

Dimension	Relationship to Achieving
Alignment	<p>Management efforts to align organisational activities and the behaviour of with Organisational Purpose will clearly have an influence on the extent to which resulting behaviour contributes to ‘productive’ action.</p> <p>In the Cases discussed, Alignment was expressed through strategic planning, corporate documentation, as well as holding top level management to account for delivery of strategic aims. However, there is the potential for this to be a negative impact, and instances of overemphasis on targets, or too much control, were apparent in each of the cases. This indicates a balance is required between management by control, and providing sufficient clarity of purpose that staff can follow appropriate course of action.</p>
Decision Making	<p>Decision Making structures are most clearly related to the Adjusting element, although also showed a relationship to Achieving. This relationship indicates that clear and efficient processes for decision making had an influence on the likelihood of creating successful behaviour.</p> <p>This reflects practice across the Cases where it was apparent that performance outcomes were more likely to be achieved where effective structures and processes were in place to support decision making.</p>
Management Ability	<p>The ability of management to apply knowledge in order to influence behaviour underpins the potential for performance knowledge to lead to Organisational Learning. Where Alignment relates to the methods applied, Management Ability relates to the how these are applied by managers in order to influence organisational behaviour.</p> <p>This relationship encompasses a very wide range of management activities and was seen to depend on the skill and experience of managers at all levels. Inappropriate management styles, such as an excessive focus on numerical targets undermined successful outcomes.</p>

Table 10-8 - Relationships to Achieving. Source: Derived from data

10-6.3.2 Similarities and Differences

Within Chapters 7, 8 and 9 it has been shown that some Dimensions influence the completion of OL, but they do so to different extents and in different ways. It would be anticipated therefore that the different nature of each case was result in a variation in the causal influences prevalent across cases.

Type	Dimensions Influencing Achieving		
	Case A	Case B	Case C
General Influence	Alignment Management Ability, Culture	Culture, Alignment	Alignment
Focused Influence	Decision Making structures	Decision Making structures	<i>None identified</i>

Table 10-9 - Dimensions Influence Achieving. Source: Derived from data

Table 10-9 summarises these similarities and differences across cases by showing the Dimension influencing Achieving and the type of influence found in each Case Study (general or focused). Some consistency is apparent in that Alignment was strongly evidenced and was identified as a general influence on the PM process in each case.

Decision Making structures were also was strongly evidenced and were found to have a focused influence in Case A and Case B. Culture was absent in Case C, but present in the other two cases.

The difference in Case C in relation to Culture and Decision Making is attributed to its emphasis on accountability and individual performance. Accountability has been associated with delivering organisational training and is seen to limit organisational learning. There were signs that this was being recognised within the Force concerned.

Based on this, it is proposed that the data reflects variation in the influences of Dimension on the causal networks which underlie the OL phenomena. In light of the similarities and

differences identified, and in the context of this research, it is proposed that the OL process as a whole, and the Achieving Element in particular, were influenced primarily by the nature of Alignment and Culture. Depending on this nature, either a positive or negative influence on OL outcomes was delivered. That is, practice aimed at ensuring action is aligned to organisational purpose (Alignment), a culture which promotes the use of performance information to support learning, and supportive decision making structures, will positively influence OL outcomes.

10-6.4 Summary of the Completion of OL

It was identified in Chapters 7, 8 and 9 that there were instances of the completion of OL. In this section, the completion of OL has been considered through reviewing:

- 1) Is Action Based on Performance Knowledge?
- 2) The knowledge action overlap?
- 3) Does action contribute to Organisational Purpose and is it sustained?

It has been seen that some inconsistency exists in the nature of the data from the Pilot Case Study and this has resulted in the questions relating to action based on performance knowledge not being fully addressed in this cross-case analysis.

The knowledge action overlap is apparent through the anticipated flow of Advising in Adjusting. Other relationships may be present as proposed in Chapter 8 and 9 but they are not supported by the evidence here.

In relation to the completion of OL, some consistencies were found across Cases but this was not universally so.

It is concluded that the causal networks in each Case vary to some degree and that whilst some Dimensions have a more predictable influence on the completion of OL, others may

also be present. The cross-case analysis has added to the validity of the constructs but has not resolved them completely.

10-7 CROSS-CASE ANALYSIS - SUMMARY AND CONCLUSION

The retroductive research strategy, outlined in Chapter 5, has involved testing the OL Model of PM as a hypothetical description of actually existing entities and their relations, through developing and addressing the research questions through data from Case Studies. As the tests are successful, this gives us good reason to believe in the existences of the structures and mechanisms (Blaikie, 2007).

Chapter 5 also described the nature of the Case Study method intended and identified that this largely followed the process identified by Yin (2003). Whilst this Chapter (Chapter 10) reviews the same data as Chapters 7, 8, and 9, and, at first glance, appears to provide similar conclusions, it necessarily provides some strength and validity to the constructs developed in that earlier analysis. This cross-case analysis has been able to consider the data from the three case studies as a whole, and the similarities and differences between the cases. This has added significant value to the within-case analysis and has helped to identify the extent of variation possible within the OL Model of PM.

Identifying and understanding this variation provides some basis for grounding conclusions about the extent to which the conclusions may be generalised to other Forces or organisations.

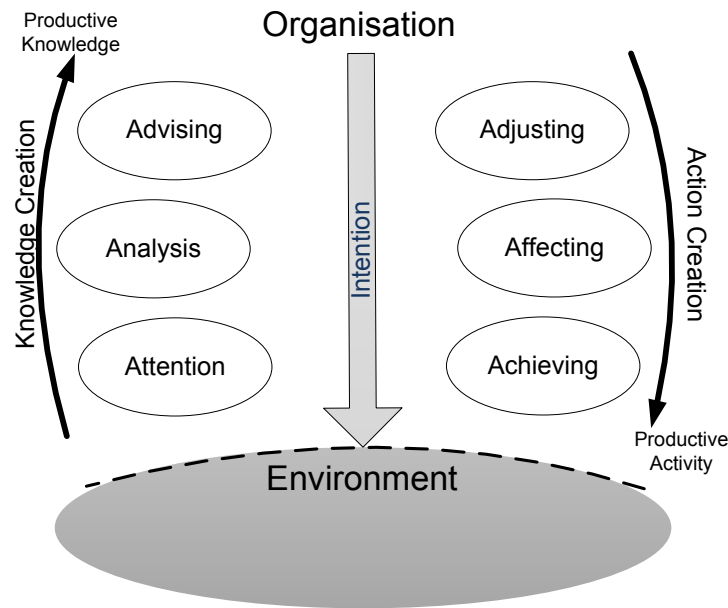


Figure 10-4 - OL as Interaction. Source: Chapter 7

As with the basic flow model, the refined OL model of PM was found to be relevant and applicable to each case. Again the caveat in relation to accountability is relevant and it is expected that, had there been greater evidence of accountability in Case A and Case B, this would have been apparent there also.

The nature of the analysis for Case B and Case C did not dwell on the interaction aspect of the OL Model, but this was included in the data collation and nothing was found to contradict this.

As it fits each individual case, it is seen as an appropriate model for all the cases together.

The conclusions reached in the within-case analysis can now be augmented as follows:

1. Theory of process

The within-case analysis has shown the OL Model of PM is relevant in individual cases. This cross-case analysis has found that the model is sufficiently robust to cope with variation in practice across different areas of the UK, and that it is also sensitive enough to reflect those differences.

The elements of the model have been refined through the analysis process and a final set of definitions is proposed. Again, these are sufficiently robust to cope with variation in practice across different areas of the UK, and sensitive enough to reflect those differences.

The robustness of the Elements, together with their foundation in the wider OL and PM literature, indicates that their relevance to be more widespread than just these three Cases.

2. Theory of influences

The set of dimensions derived from the Pilot Case Study (Case Study A) have been used as the basis for analysis of Case Study B and C. This has helped to identify the nature of the influence i.e. whether general across the whole of the process or focused on a specific element or elements. Considerable variation in the influence of some of these Dimensions has been found and this was attributed to local variation in the individual cases.

The nature of the Dimensions is seen as relevant and applicable to PM practice in other UK Police Forces.

3. Theory of completion of OL

The completion of OL was more difficult to assess through a cross-case analysis due to the manner in which the data from Case A was initially structured. This is a limitation at this point in time, and further analysis is possible to extend these findings further. It has been seen that the completion of OL is variously influenced by the Dimensions within the individual cases. This may have implications for practice and these are discussed in Chapter 11.

Based on PM as a specific type of OL, these findings are though unsuitable for direct application to the wider field of OL. There is however implications for the ways in which OL outcomes are influenced.

Returning to the Research Questions identified in Chapter 6, Table 10-10 summarises how these have been addressed by the Cross-case Analysis outlined in this Chapter.

Research Questions	Addressed Through	Cross Case - Conclusion
RQ1. How is knowledge created within PM practice?	Considering the nature of the Elements, confirming their presence and refining their meaning.	Attention, Analysis, and Advising were clearly present and their consistency across cases strongly supports the conclusion that there is a positive correlation between them and the process of knowledge creation.
RQ2. How is action created within PM practice?		Adjusting, Affecting, and Achieving were clearly present and their consistency across cases strongly supports the conclusion that there is a positive correlation between them and the process of action creation and which may be more broadly applicable.
RQ3. Does performance knowledge influence organisational behaviour?		In a general sense PM practice was seen to be informed by performance information; however the nature of the data analysis was unable to support a detailed cross-case analysis of this aspect.
RQ4. What is the nature of elements within each case?		Final, revised definitions were derived which could be applied across all cases and which were capable of accounting for differences between cases. The Elements derived are considered sufficiently robust to cope with variation in practice across different areas of the UK, and likely to be sensitive enough to reflect those differences.

Research Questions	Addressed Through	Cross Case - Conclusion
RQ5. In practice, what factors influence the PM process?	Considering the Dimensions that influence the process of OL and exploring the extent to which each Element is influenced by the Dimensions.	It has been seen that the Dimensions identified in Case A remain consistent indicating their relevance. The extent of influence of various Dimensions has been identified.
RQ6. What is the relationship between these factors and the individual elements of the process?		General influences on PM process were found to be more consistent across cases in particular Alignment and Management Ability were strongly apparent, whilst focussed influences such as Decision Making and Organisational Purpose were most likely to vary depending on the nature of practice and the case within individual cases.
RQ7. In practice, which factors influence the completion of OL?	Considering the extent to which the completion of OL was present.	Across cases, the completion of OL was influenced most clearly by Alignment. Also, Culture was strongly evidenced as influencing the completion of OL in two cases. This clear influence implies a link between the completion of OL and the nature of Alignment and Culture in these organisations.
RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?		There was insufficient data across cases to support the conclusion that organisational knowledge influenced the interaction of Knowledge Creation and Action Creation mostly. In particular, there is little evidence here to support the mediating influence Management Ability and Organisational Purpose.

Table 10-10 – Addressing the Research Questions

10-7.1 Case Comparison – Summary

Although the process of OL is seen as operating in very similar ways within each case, the distinctive nature of their underlying influences provided a unique character to PM practice. In line with the critical realist approach, these idiosyncrasies are seen as a result of the way

in which different influences reflect off the same underlying process. These individual natures and the stronger influences are elaborated below.

Case A

- The introduction of structured and comprehensive computerised data strengthened the knowledge creation aspect.
- Data was efficiently and comprehensively produced and context was provided to make it meaningful.
- The analytical capability was strongly enhanced but was not yet coordinated throughout the Force.
- Data was focused around strategic goals enhancing its focused application.
- Decision making was well structured but an unclear relationship between dominant processes of PM and T&CG resulted in sometimes conflicting objectives undermining alignment.
- The value of process based improvement was recognised but it was difficult for individuals to affect key centralised processes.
- There were variations in approaches to management that reflected either the desire to hold individuals responsible for their contribution, or the understanding that group output was the result of organisation factors.
- There was a broad, but not comprehensive, appreciation of the limitations of data and the need to understand its meaning. This was seen as driven by a history of senior officer training.

Case B

- Had been able to move away from PM practice focused purely accountability, and had started to focus on other important issues such as service delivery issues. This was underpinned by strong alignment and leadership.

- Training of both managers and analysts had delivered a consistent and well informed approach to the value and use of data. This influenced management ability and analytical capability.
- Decision making focussed on PM and played down strategic nature of T&CG.
- Was seen as having improved performance over time and this was attributed, in part, to the use of information to guide behaviour.
- This change in performance involved addressing OL influences such as culture, leadership, and alignment, management ability, and analytical capability all of which had been triggered by the intervention by the Home Office and then adopted by the organisation.

Case C

- Was most strongly influenced by the need for performance data to drive accountability. That accountability, although directed at an individual senior officer reflected a collective responsibility. This was underpinned by leadership approaches and culture.
- Being a relatively new police service, this case could be seen as in a more rapid state of evolution of practice. This reflected changing culture.
- There were wide variations in PM practice which reflecting local learning and development. Old embedded practice was being replaced one area at a time as management capability improved.
- Newer practice tended to promote learning from data and move away from seeing individuals as a problem to be controlled.
- Data was accessible, but IT systems restricted the flexibility needed to adapt and improve quickly.
- The analysis of performance information was minimal. This reflected a low analytical capability for performance data, with the focus of considerable analytical resources being almost entirely on crime analysis.

- OL was present in the processes delivering accountability, but there were early signs that the importance of learning outcomes were recognised and were being encouraged or actively developed.
- A clear specific example of learning practice identified. Empowered staff were able to identify causes of problems and put in place steps to address process issues undermining effectiveness of all staff. This reflected a changing culture.

These differences resulted in unique practice being established in each case. This could easily appear on the surface to be the result of different processes. However, this research has shown that despite such variation, the underpinning practice is the same but the influences in play vary in extent and nature.

Chapter 11 goes on to summarise the outcomes of this research and to discuss the implications for theory and practice.

10-8 REFLECTION

This cross-case analysis has added significantly to the value of the data collected, broadening the relevance of the findings and clarifying its applicability. As such it has been worthwhile adding this chapter to the thesis. However, as the first Case Study was conceived as a pilot, the data from subsequent Case Studies was collected in more detail and compatibility for a cross case analysis was reduced. Additional effort was required to restructure data in a way that could be utilised for the cross-case analysis and time presents a limit on an already extensive analysis.

This variation in data collection and analysis, whilst inconvenient from the perspective of a cross case analysis was essential and to a degree validates the use of a pilot case study. As the research is breaking new ground there was little guiding research or literature. Whilst the format of the data may have changed, this was justified in terms of the learning achieved

from that first case, allowing the research to move forward and deliver deeper understanding of the nature of the phenomena of OL and broadening applicability of results.

Other than simple comparison, there were few techniques that could be applied to the data due to its nature. However, more sophisticated analysis would have been possible with additional time.

The resilience of the OL Model of PM has been, to a degree, surprising. It was initially anticipated that further revisions would be necessary. However, this is partly due to the conduct of the research in that, rather than exploring the issues that arise from the data, the analysis has focussed on providing some validity to the current model. A balance is found here in that the more the research questions focussed on validity, the less they were able to address concepts and ideas that arose during the research.

Although the Research Questions have been addressed, it is likely that this research will continue in various forms, pulling in data from other case studies, further extending the range and depth of conclusions.

The completion of this cross-case analysis has helped to focus the research back onto the retroductive strategy. This has emphasised the potential for a close relationship between retroduction and case study as a combined strategy.

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11-1 ORGANISATION OF THIS CHAPTER

The following table (Table 11-1) is provided to orient the reader to the content and structure of the Chapter and to indicate its relationship to the Research Problem.

Content	Relevance to Research Problem	Comment
Summary of Research Process	Reviews the approach to the Research Problem.	Chapter contributions
Key Findings	Reviews the key findings and considers whether these have addressed the Research Problem.	The Research problem has been addressed.
The OL Model of PM	Conclusions regarding the relevance of the OL Model of PM	
Research Implications And Contributions	Critically reviews the implications of the research findings for existing theory.	OL & PM, Theory & Practice
Findings in Light of the Literature	Discusses the findings in the context of the extant literature.	In PM and OL fields
Further Discussion	Reflects on a number of issues in relation to the research process as a whole.	Completes the thesis.

Table 11-1 - Organisation of the Chapter

This Chapter summarises the research findings and reviews the Research Questions, the Research Objectives and the Research Problem. The implications for theory and the implications for practice are considered.

11-2 CHAPTER INTRODUCTION

The aim of this Chapter is to summarise the findings from the research process and to contextualise these findings in the fields of PM and OL theory and practice.

This Chapter concludes the research process and reviews whether the research questions have been addressed, the extent to which these fulfilled the research objectives, and whether this has provided an answer to the Research Problem.

In addressing the Research Problem, the research findings have implications both for theory and practice. These are discussed.

11-3 SUMMARY OF RESEARCH PROCESS

This section briefly summarises the contributions made by each chapter to the research process.

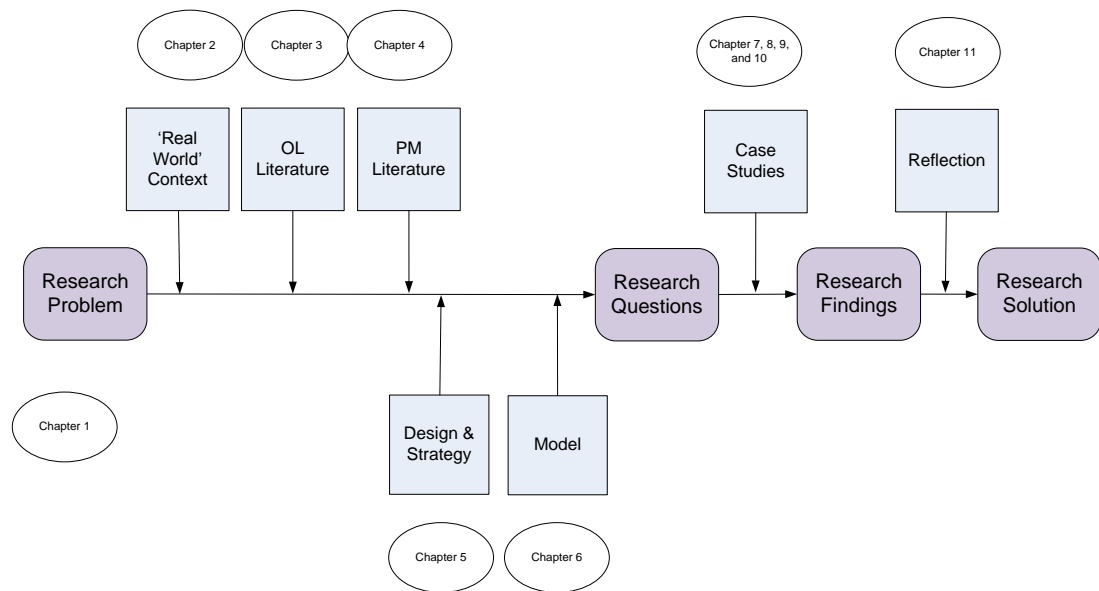


Figure 11-1 – The Research Journey. Source: Derived by Author

	Chapter Content
Chapter 1	Identified the research journey, from Research Problem to Research Solution (represented in Figure 11-1)
Chapter 2	Discussed the context in which the research commenced and how this has changed during the research process.
Chapter 3	Reviewed the OL literature, established the nature of the concept and how this has been brought to light by authors over the past 50 years. The nature of OL as an outcome and a process was unveiled. The gap in the OL literature in being able to answer the research problem was identified.

	The problem of the broad definition and application of OL led to the identification of PM as a specific type of OL that could more easily be investigated.
Chapter 4	Reviewed the PM literature and its derivation from the accounting literature. The nature of PM as a process was examined.
Chapter 5	Identified a Critical Realist position (Bhaskar, 1998a, Sayer, 1992, Archer et al., 1998) as appropriate and proposed to address the problem by adopting a retroductive approach. This retroductive approach was described as - going back from, below, or behind observed patterns or regularities to discover what produces them (Blaikie, 2003). A Case Study method (Yin, 2003, Eisenhardt, 1989, Gillham, 2000) was proposed to structure the collection and analysis of data (see Figure 11-2).
Chapter 6	Derived a provisional OL Model of PM from the literature to structure the data collection and analysis (Eisenhardt, 1989, Miles and Huberman, 1994). This was identified as based on a simple feed-forward feed-back process with a set of provisional components or elements. A range of influences were anticipated but, as these were not specific to PM practice, they could not accurately be derived from the literature. To address the Research Objectives, a set of questions were developed about the nature of the PM process, its causal factors, and the completion of OL.
Chapter 7	Described the Pilot Case Study and examined the data from the perspective of the research questions. An updated OL Model of PM was derived and a set of Dimensions influencing the process of PM were identified.
Chapters 8, 9 & 10	Provided within-case analyses of two more Case Studies and a cross-case case analysis of all three cases. These have validated the OL Model of PM and the set of Dimensions derived in Chapter 6.
Chapter 11	Concludes the research process by summarising the analysis process and its findings, discussing these in the light of the extant literature and considering the implications for policy and practice in UK policing.

Table 11-2 - Chapter Content

As a whole, this thesis has established the Research Problem, identified a method of examining the issue in detail, and explains how this has been undertaken. This thesis has fulfilled the Research Objectives (see Chapter 1) and through this has addressed the Research Problem. Conclusions have been reached about the relevance of OL to the UK police service through exploring its impact and prevalence.

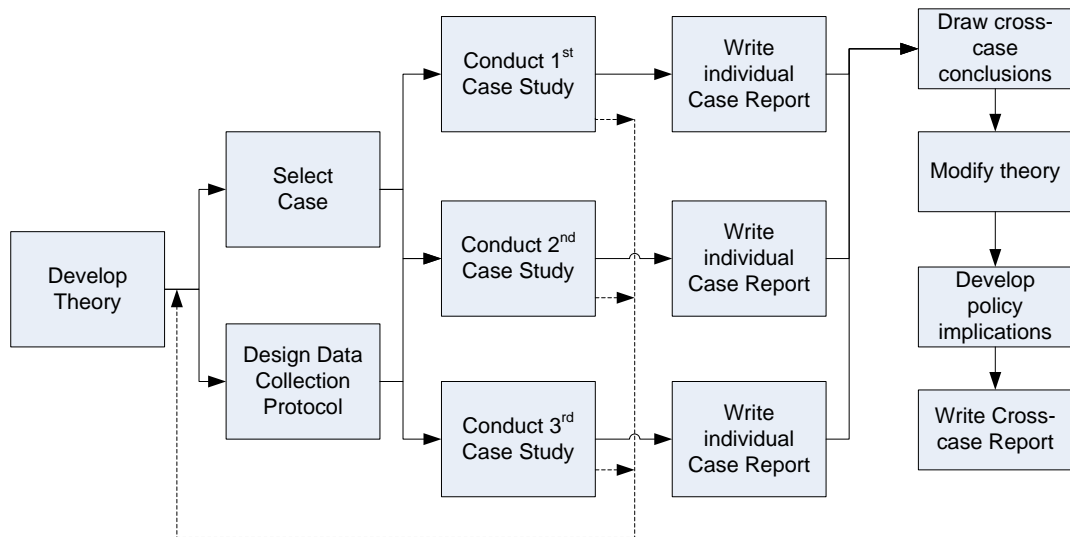


Figure 11-2 - Case Study Method. Source: Adapted from Yin (2003)

11-4 KEY FINDINGS - ADDRESSING THE RESEARCH PROBLEM

This section reviews in more detail the nature of the Research Problem, how this developed into a set of Research Objectives and Research Questions, and how these have been addressed in this thesis. The aim of this research was to shed light on the relevance of OL to policing practice in the UK through examining the prevalence of OL within police Forces and the impact of OL on organisational outcomes.

As summarised in Table 11-3, this was achieved by reducing the Research Problem into more detailed levels, examining the literature, and developing a model which could then be tested against Case Studies. The outcomes from the process are three theories regarding the process of OL, the influences on OL and the completion of OL, all within the context of PM practice in policing.

The research process has been underpinned by the Critical Realist position adopted and the associated retroductive strategy. This has provided a mechanism for identifying the underlying nature of OL within the context of PM practice.


<div style="display: flex; justify-content: space-between; align-items: center;"> Research  Direction </div>						
Level 1	Level 2	Level 3	Literature	Model	Case Studies	Outcome
What is the relevance of OL to policing practice in the UK?	What is prevalence of OL?	When is OL complete?	PM as example of OL	Provisional OL Model of PM	Test of Model	PM Model of OL
			Productive Action	In practice is Action based on performance based Knowledge?	Test of knowledge based action	Theory of Completion of OL
	What impact does OL have?	What is nature of OL in PM?	Models of OL	What are elements of PM process?	Test of Model definitions	Theory of Process of OL
			Identified Factors	What are underlying drivers for Process? What are underlying factors influencing flow?	Dimensions of influence identified	Theory of Influences on OL

Table 11-3 - Research Problem to Research Outcomes. Source: Derived by author.

11-4.1 The Research Questions

The Research Questions were derived from the literature and the provisional OL Model of PM (refer to Chapter 6). The questions and a summary of the final conclusions are shown in Table 11-4. It is concluded that the research process and this thesis have addressed the Research Questions.

Research Questions	Addressed Through	Final Conclusion
RQ1. How is knowledge created within PM practice?	Considering the nature of the Elements, confirming their presence and refining their meaning.	Within the Cases Studies, new knowledge about organisational performance is created through attending to the environment through performance indicators, attributing meaning to that resulting data, and communicating the new information to the persons or group responsible for directing action. This is seen as likely to be similar in other UK police Forces.
RQ2. How is action created within PM practice?		New action, which tends towards the intended organisational outcome, is created through identifying the need for adaptation and the nature of appropriate action, and through influencing the behaviour of organisational members towards that intention. This is seen as likely to be similar in other UK Forces.
RQ3. Does performance knowledge influence organisational behaviour?		Within the cases studies, it was found that within PM practice, performance knowledge created provides a significant input to decisions about the need for adapting organisational behaviour. This is also influenced by existing organisational knowledge and experience. This is seen as likely to be similar in other UK police Forces; however the balance between these two inputs is anticipated to vary across other cases.
RQ4. What is the nature of elements within each case?		Derived from the Cases, a set of definitions have been provided for the elements of the OL process. These capable of coping with the differences across cases These definitions applied across all cases, and it is seen as likely that these could be applied to other cases of police PM practice also.
RQ5. In practice, what factors influence the PM process?	Considering the Dimensions that influence the	A set of dimensions influencing PM practice in have been identified and validated within the cases studied.

Research Questions	Addressed Through	Final Conclusion
RQ6. What is the relationship between these factors and the individual elements of the process?	process of OL and exploring the extent to which each Element is influenced by the Dimensions.	<p>These Dimensions were found to have either a general influence on the PM process, or a more focussed influence on an Element or Elements. General influences on PM process were found to be more consistent across cases, whilst focussed influences were most likely to vary depending on depending on the nature of practice and the case within individual cases.</p> <p>It is seen as likely that these Dimensions would influence other police forces, and that PM practice, and the extent of OL, would be dependent on the nature of the causal networks in play.</p>
RQ7. Which factors influence the completion of OL?	Considering the extent to which the completion of OL was present.	<p>The completion of OL was revealed as influenced most clearly by the Alignment Dimension. The Culture Dimension was strongly evidenced also. The extent of influence varied within cases and this is seen as linked to the nature of the causal networks operating within those cases.</p> <p>It is seen as likely that Alignment and Culture would influence the completion of OL within PM practice in other UK police Forces but the nature of that influence will depend on the nature of the causal networks operating within those cases.</p>
RQ8. In practice, do knowledge creation and action creation processes operate and interact to create OL?		<p>Knowledge was seen to influence Action through several relationships. In addition to the anticipated Advising/Adjusting relationship these were also seen between the other Elements. These relationships were identified as influenced by Dimensions including Decision Making structures, Management Ability, and Organisational Purpose. However these were not sufficiently consistent across cases to draw a conclusion about wider applicability.</p>

Table 11-4 - Addressing the Research Questions. Source: Derived by author.

11-5 ORGANISATIONAL LEARNING FROM PERFORMANCE MANAGEMENT

This section summarises the key findings in relation to PM as a form of OL.

11-5.1 The OL Model of PM

Chapter 6 proposed an OL Model of PM based on the literature. This model, with minor revisions, has withstood a practical test against three Cases-Studies (refer to Figure 11-3).

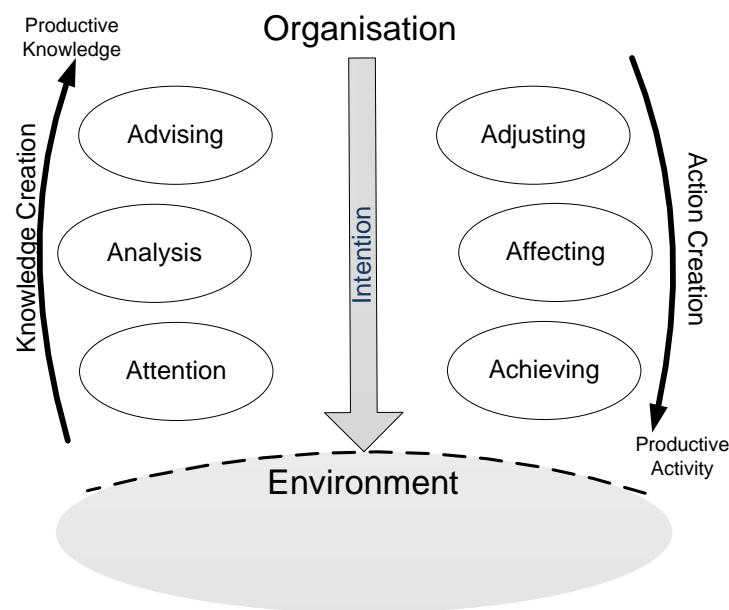


Figure 11-3 - OL Model of PM. Source: Derived by Author

The model reflects the creation of productive knowledge and the creation of productive action as the organisation continually renews itself in order to perform, that is, to continue to influence the environment towards the organisation's intention

11-5.2 The Elements and Flow of PM

It is concluded that The Knowledge Creation process occurs through the Elements of Attention, Analysis and Advising, whilst the Action Creation process occurs through the elements of Adjusting, Affecting and Achieving (all as defined in Chapter 10. Again, the

findings from three case studies have validated the flow and elements proposed. The definitions have been refined to reflect the variation and similarities across these cases.

11-5.3 Causal Factors

A range of Drivers, Factors, and Relationships were suggested in the literature but their relevance to PM was uncertain. From the pilot case study a set of dimensions were derived and these were tested against the data from subsequent cases.

The dimensions of influence identified in the pilot Case Study (A) have been borne out in both Case B and Case C. This has helped to identify the nature of the influence i.e. whether general across the whole of the process or focused on a specific element or elements. Considerable variation in the influence of some of these Dimensions has been found and this was attributed to local variation in the individual cases.

Further work is needed to provide a model of the Dimensions and their influence on OL although this is outwith the scope of the research (discussed also in Section 11-8.4).

11-5.4 Completion of OL

Whilst the presence of a learning process was established, the question arose as to whether this led to a learning outcome, and if so what was its nature. The data from the three case studies has indicated that some factors were more closely linked to the apparent completion of OL and that these had the potential to have both positive and negative influences.

With regard to the relationship between OL and PM, it is concluded that from a behaviourist perspective, performance management provides a form of OL. As Huber (1991) theorised, performance monitoring is one of the clearest and most pervasive forms of organisational search. When this performance monitoring is associated with management of action, it routinely provides a degree of OL.

11-6 RESEARCH IMPLICATIONS AND CONTRIBUTIONS

The findings from this research have implications for theory in both the PM and the OL fields. The research also has practical implications. Along with a summary of the contribution to knowledge and the contribution to practice, each is commented upon below.

11-6.1 Theoretical Implications

The research findings have implications for PM and these can be extrapolated to the wider OL field. From the perspective of each of these fields, the three theoretical outputs from the research are summarised below.

1. Theory of Process

- a. It is proposed that PM operates process of knowledge creation and action creation, acting together to continually adapt or renew the behaviour of the organisation in line with its objectives, and that this is an OL process.
- b. It is proposed that PM is an example of an OL process that occurs within Police Forces and involves an interaction between the creation of knowledge and the creation of action.

2. Theory of Influences

- a. It is proposed that the process of PM is influenced by a range of factors, some of which are identified as Dimensions of influence, and that these influence either through the process as a whole or are more focused on specific aspects of the process. These influences vary according to the nature of the organisation and its environment.
- b. It is proposed that OL is influenced by a range of factors which include the Dimensions of influence identified, and that these will influence either the process as a whole or a specific aspect of the OL process. These will vary

according to the nature of the organisation, its environment, or the type of OL process involved.

3. Theory of Completion of OL

- a. It is proposed that PM is “completed” in three ways, a) through the presence of a PM process, b) through the influence of PM on organisational behaviour, or c) through its impact on achieving organisational objectives. In each of these types of completion, action is influenced by knowledge to create greater alignment of organisational behaviour with organisational objectives. The extent will depend on the nature of the relationship(s) between knowledge and action.
- b. It is proposed that OL may be completed a) through the presence of an OL process, b) through the influence of OL on organisational behaviour, or c) through its impact on achieving organisational objectives. In each of these types of completion, action is influenced by knowledge to create greater alignment of organisational behaviour with organisational objectives. The extent will depend on the nature of the relationship(s) between knowledge and action.

11-6.2 Practical Implications

Supported by a Fellowship from Bramshill, this research has been oriented towards the provision of a practical solution to a policing problem. The problem identified at the outset was that Organisational Learning was propounded as an important aspect of organisations that needed to be leveraged (Argyris and Schön, 1978, Argyris and Schön, 1996, Burgoyne, 1995, Cyert and March, 1963, 1992, Easterby-Smith et al., 2000, Garvin, 1993). Police Forces were uninformed regarding its relevance and this research aimed to address this by examining the impact and prevalence of OL.

Due to the problems with loose or varying definitions of OL and the absence of literature demonstrating practical application, this research has had to focus more on identifying the nature of OL through the example of PM practice. This was especially topical at the outset of the research and the importance of organisational effectiveness has been highlighted by the current economic situation (CIPFA / SOLACE, 2009). As a result, to address the original Research Problem (i.e. what is the prevalence and impact of OL and what does this mean about its relevance to UK policing) this research has had to focus on practical aspects.

11-6.2.1 The Prevalence of OL in Police Forces

The Research Problem identified at the outset, was the need to understand the relevance of OL to policing activity. In considering the prevalence of OL, it was intended to assess the whether it was a rare event or something that was widespread in UK Police Forces. The prevalence of OL is dependent on both the extent to which it is present as a process and the extent to which it is completed as an output.

In light of the wide range of mechanisms through which OL may be found, and the absence of a clear description from the literature, this research identified PM practice as an example of one type of OL and set out to establish whether it was possible to assess either its presence or its completion. The development of the OL Model of PM allowed the elements of the process to be considered individually, but in the context of a mechanism of OL (i.e. PM).

The Case Studies discussed set out to test the provisional OL Model of PM. From the data gathered it has been determined that OL mechanisms existed in each of the three Forces in different areas of the UK in different organisational and cultural conditions within PM practice. PM practice is documented in the practitioner literature as widespread in England, Wales and Northern Ireland, and over the past five years has become embedded in practice in Scotland. It is not anticipated that practice varies to such an extent that PM will operate other than as an OL mechanism, although as identified in Case Study C, the exception to this

may be where accountability practice is particularly strong. It is therefore concluded that the presence of PM practice is likely to indicate the presence of OL mechanisms.

As to the completion of OL, that is, the extent to which an output of OL is achieved, it is less easy to be definitive. Examples of OL outcomes were seen in each of the three Case Studies, however, clearly not all input into the process resulted in an OL output. Both Knowledge Creation and Action Creation were present but a number of Dimensions influenced the extent to which OL resulted.

It is concluded that OL outcomes, in terms of achieving behaviour and results aligned with organisational purpose, were present within the Case Studies and that various Dimensions had either a general influence on the OL mechanism or by specific influences on the Elements of the mechanism. Although each had unique circumstances, it is not considered that these Cases were unique in terms of the nature of the PM process operating. It is therefore considered likely that OL outcomes would be found from PM practice in other Forces, albeit to varying degrees.

However, it is not possible to quantify the extent to which the PM process in the Cases led to OL outcomes and no meaningful measure of this has yet been identified.

It was apparent that those working in the role of Performance Manager are commonly less aware of the need to manage behaviour. This aspect is often left to senior managers and decision takers. The role of Performance Manager has been separated from managing performance. There is therefore a benefit seen in re-acquainting practitioners with the whole process of OL.

11-6.2.2 The Impact of OL on Police Forces

The early literature review identified that OL was a wide ranging subject and difficult to consider as a whole. To address this, a specific example of OL was required and PM

practice was identified as suitable for this purpose. PM was identified as a specific type of OL and was conceptualised within a provisional OL Model of PM.

Through the three Case Studies discussed, the nature of PM practice has been examined and OL identified as an appropriate explanation of the underlying phenomena. Dimensions influencing OL have been identified and the nature of their impact on the completion of OL has been considered.

From these findings and the context of PM practice in UK Police Forces, it is concluded that OL has an impact on the management practice in Police Forces. This is expressed through the nature of Knowledge Creation and Action Creation as well as how these interact to enable the organisation to adapt to changes in the environment and to continue to deliver organisational purpose.

The influence of the Dimensions on practice can have a positive or negative effect on OL outcomes. Based on the OL Model of PM, there is the potential for Forces to identify the nature of that influence and to put in place adjustments to practice to minimise negative influences and maximise positive ones. This could lead to improving OL outcomes. That is, the impact of OL is that the greater its “completion”, the more effectively the organisation will deliver its objectives.

11-6.2.3 The Relevance of OL to the Police Service in the UK

From the above, it is concluded that the relevance of OL to Police Forces and its contribution to strategic advantage (or competitive advantage in the wider organisational sense).

OL has been proposed as a key process that delivers the continual transformation of the organisation, through the feedback and feed-forward cycle of Knowledge and Action, to a more appropriate form of behaviour. OL is not unique or rare, but is instead the everyday

processes of understanding the changing nature of the organisation and its environment and how best to adapt.

Rather than something exotic or unexplained (see Lipshitz et al., 2007), OL is something that, given the continual adaptation of organisations to an ever changing environment, is likely to be present. Its relevance is its importance at supporting successful adaptation.

The extent to which PM practice was found to be influenced by a range of factors, if replicated across all OL types, is clearly something that needs to be controlled in order to minimise the negative influences and enhance the positive ones.

Making the underlying process of OL apparent should enable Forces to manage the process.

11-6.2.4 Summary of Key Implications

At the outset of this research the police service in the UK was uninformed about the relevance and importance of Organisational Learning. Performance Management practice is just one example of how organisations learn in order to continually adapt their behaviour towards the achievement of their purpose, or mission, in the light of an ever changing environment.

Based on an examination of PM practice, this research has shown that the key points of relevance to the police service are as follows:

1. *Organisation Learning is important to policing management as it has a direct bearing on the delivery organisational outcomes.* Organisations must continually adapt to deliver their objectives and the better they are able use information to inform this, the more effective that adaptation process. The output of OL directly relates to the achievement of organisational aims and objectives.
2. *OL processes are prevalent in policing but rarely achieve their full potential.* Far from the exotic or rare, police forces studied have been seen to operate to learn continuously,

using feedback and knowledge to guide how decisions are made. However, OL is not always fully effective and this limits the extent to which it can deliver on aims and objectives.

3. *OL is influenced by a number of dimensions.* A wide range of factors influence OL, some positively, some negatively. This research has categorised these areas of influence as a set of dimensions. The unique nature of OL in each case is the product of the influence of these dimensions. The variation seen between different cases shows that there are ways in which these factors can be mitigated or enhanced.
4. *Reducing the negative influences and enhancing the positive influences can improve the OL potential.* Improving OL processes, using knowledge to guide action, will contribute to the improvement in the achievement of key strategies.
5. *By understanding how OL processes operates, and addressing the inhibitors of OL, Police Forces can better contribute to the delivery of their core mission.* It is important that the police service recognises the contribution and importance of OL processes, and the real potential of PM, to the delivery of continuous organisational improvement.

This research has a significant contribution to make to how Police Forces, and other organisations, use management practices to enhance OL. This is particularly relevant at a time of reducing budgets, squeezed resources, and demands for the same level of service. To support improved performance, it is vital that these organisations understand the processes that are delivering its core functions and it is only appropriate that the public and governance agencies question the effectiveness of these policing management processes.

11-6.3 Contribution to Knowledge

This research clearly positions a number of existing fields of study, such as decision-making, management practice, data analysis, communication, within OL. This allows the research in these fields to be considered in terms of their contribution to OL outcomes. Without this

research, although clearly important, it was difficult to establish the nature of the relationship.

Whetten (1989) identifies a model as a contribution to theory. A provisional OL Model of PM, derived from the literature, has been tested against the three Case Studies of Police Forces in from different area of UK that are subject to differing cultural and organisational pressures. Based on the data, refinements have been made to the model.

A set of Dimensions influencing PM practice have been identified and their relationships to practice explored. The complex interplay between causal powers is amplified by the open systems nature of most social settings (Bhaskar, 1998b, Sayer, 2000).

Based on the literature, Huber (1991) theorised that performance monitoring is one of the clearest and most pervasive forms of organizational search. Here an empirical assessment has identified its presence, and its association with management of organisational behaviour, in three distinct Cases.

Whilst some contributions to knowledge have already been made through development papers and presentations, the author's view was that this research was supported from the perspective of practice. The natural limitations of part-time research have made it difficult to justify the time to add to the academic literature and that the primary aim behind the fellowship was to produce findings of relevance to practitioners. The thesis itself will provide a significant contribution at the National Police Library at Bramshill.

However, the potential for a contribution to the academic literature is significant and several papers are intended based on the topics explored in this thesis and other areas that have arisen from the research process.

11-6.4 Contribution to Practice

This is practice oriented research and, as such, the application of theory is of most relevance. This explains why, above, the Research Problem was addressed under the heading of *practical implications* rather than *theoretical implications*. In addition to the actual research conclusion, a number of practical outputs have been delivered, or the potential for them created.

Early outcomes from the research also fed into collaboration between the Scottish Government, HMIC, and ACPOS and made a significant contribution to the development of the Scottish Policing Performance Framework (SPPF). This influenced the structure, content and use of the framework.

The potential for accountability to influence and break down the process of OL is especially relevant to practice. The need to demonstrate being accountable to the public and other stakeholders, and the need to enable effective organisational learning in order to support real improvement, have to be balanced. This has relevance to all Forces and has been outlined in a presentation to the Performance Management for Police Conference in January 2009. This is a national conference attended by performance practitioners from the majority of UK Police Forces. A paper in the practitioner publications is also proposed to highlight this. Awareness of these conflicting processes and the Dimensions that need to be monitored is useful but would benefit from further research.

Based on the learning from this research, some work has been undertaken to formulate the research outcomes into a practical tool for Police Forces. This was approached by taking the position that making the OL process more apparent, and identifying the Dimensions and their influence, would lead practitioners to build their own views about the relationships and how to address issues.

It was anticipated that a prescriptive approach would create resistance in terms of time to learn and understand, and was therefore avoided. Instead, it was decided to introduce a set of questions that would lead the practitioner to understand how the OL process was operating, and the extent to which this was influenced by the Dimensions. An initial set of questions was drafted and has been discussed with representatives from performance practice in the eight Scottish Police Forces in a one day seminar held at the Scottish Police College.

To support this process a provisional overall model has been developed (shown in Figure 11-4), although this is known to be in need of further revision.

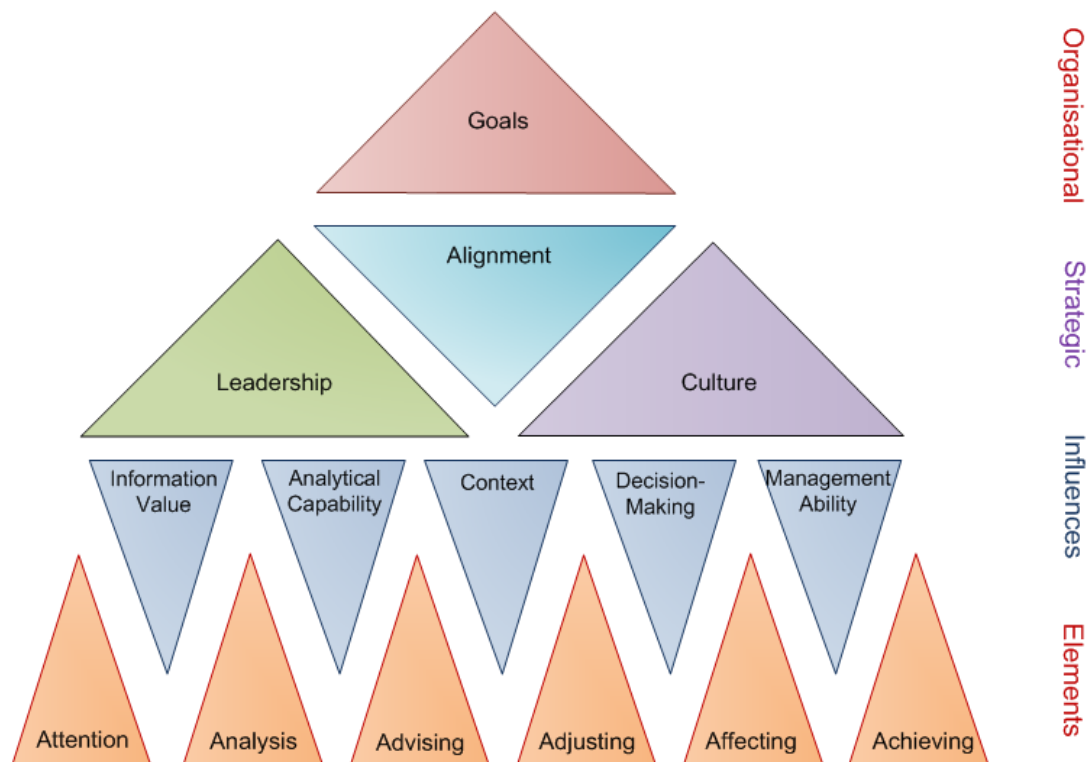


Figure 11-4 - Pyramid Model of OL. Source: Derived by author.

It is anticipated that this development will continue with the support of the Performance Management Business Area of ACPOS and through gaining feedback from practitioners about suitable terminology and clarity of expression within a “questionnaire”. This will also develop the external validity of the model and other constructs.

Whilst this development is a direct result of the research, it is outwith the scope of this thesis to discuss in more detail.

11-7 CONSIDERING THE FINDINGS IN LIGHT OF THE EXTANT LITERATURE

The section above discussed the outcomes of the research process from the perspective of the Research Problem. Here, the findings are considered in light of the relevant literature from the PM and OL fields.

It was identified in Chapter 3 and 4 that there was little overlap in the OL and PM literature. The outcomes of the research and the OL Model of PM have served to provide a link between these two areas.

11-7.1.1 Discussion Regarding PM Theory

The results of the research expand on the elements involved in the process of monitoring and managing performance. These elements are integrated into a single model that applies to PM practice.

Whilst at an early stage, the identification of some factors and influences on OL provide a potential to support the improvement of PM design and implementation. The identification of Dimensions of Influence that operate within the process reinforces the concept of a knowing – doing gap (Pfeffer and Fong, 2005), and are manifested as a strategic disconnect. This strategic disconnect is exacerbated by the failure of strategic objectives to be defined in a manner that support operational delivery.

The variation found in practice and influencing factors, is to some extent explained by Otley's findings of complexity of practice involved in performance management (1999).

Bourne et al (2000) concluded that specific processes are required to continuously align the performance measurement system with strategy. The importance of this relationship can

now be more clearly understood as without this, the process would deliver less OL outcomes.

Measuring organizational performance plays a very important part in translating corporate strategy into results (Kit Fai Pun and White, 2005). The OL Model of PM provides a potential explanation as to how an organisation's continuity is dependent on how well it can position itself and how it optimizes its efforts.

Also, in addition to the perspectives described by Neely (2002), two major perspectives of accountability and learning are identified within this case where practice varies according to the perspectives of organisational member or organisational stakeholder.

Gaming resulting from the imposition of performance measurement by stakeholders has been identified and discussed by a number of authors (de Bruijn, 2002, Hood, 2007, Hood, 2006, Radnor, 2007). Gaming practice was not readily identified within the Cases reported but was referred to as present in wider policing PM practice and has been discussed in terms of "perverse" outcomes.

De Bruijn (2002, p579) also found that performance measurement could contribute to transparency, learning, appraising, and sanctioning and also that it was an elegant way of shaping accountability. Evidence of all of these was found in varying degrees and it may be that there is a relationship between these types and the Dimensions identified in this research. Furthermore, some negative effects he identified, such as: adds to internal bureaucracy; blocks innovation; blocks ambitions; professionalization; kills system responsibility; and punishes good performance; each have some correspondence to the Dimensions of influence and their context.

Otley's assertion (1999) that, at an organizational level of analysis, an organization that is performing well is one that is successfully attaining its objectives is supported, and to some extent explained, by the link between productive knowledge and productive action developed within OL Model of PM.

Overall, whilst there was limited literature around OL models, the application of OL to PM practice has the potential to provide an explanation for a range of findings within the PM field. The simplicity of the model supports this application.

11-7.1.2 Discussion Regarding OL Theory

From the perspective of Shipton's (2006) typology of OL literature, this research sits towards the Organisational level (see Figure 11-5). That continuum represents the level of analysis that it is concerned with organizational-level factors such as routines and standard operating procedures. However, on the descriptive/prescriptive continuum, the research is more explanatory and descriptive, but could be seen as resulting in a prescriptive model. It therefore sits in both Quadrant 2 and Quadrant 3.

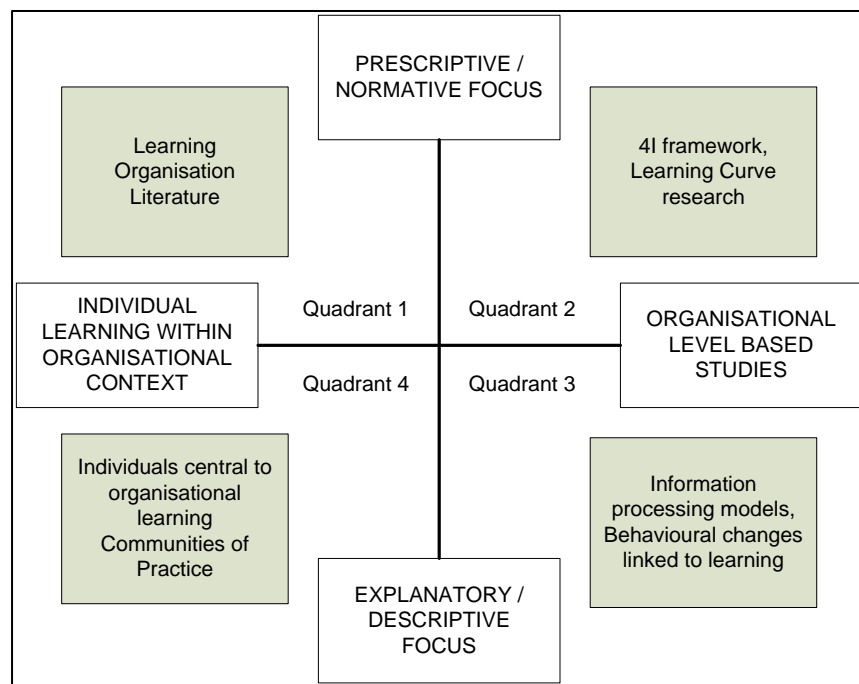


Figure 11-5 - Two dimensions for categorizing OL literature. Source: Shipton (2006),

p235

Whilst the concept of OL was used as a tool with which to examine performance management practice, the outcomes of the research contribute to the body of evidence

regarding the mechanisms of organisational learning. In particular it provides some empirical evidence of Huber's proposal of performance information as a potential source of OL (1991).

In addition, it highlights the need for a context in which OL occurs, which at an organisational level, is its mission, vision or strategic objectives (See Kaplan and Norton, 2008 for further discussion). This indicates that the nature of OL should be considered as relative not absolute.

A key difference from the 4I model (Crossan et al., 1999) is that OL model of PM considers the flow of knowledge and the flow of action. The 4I model focuses on the flow of knowledge and how this is incorporated into knowledge structures, for example, through institutionalisation.

Instead of something rare and to be aspired to, it is valid to view OL as routine and part of the everyday existence of organisations. As ever, taking appropriate care with such metaphors, this can be likened to the type of learning that individuals do every day. However, this does not mean that higher order learning is not present, it merely “demystifies” OL (see Lipshitz et al., 2007).

Shrivasta (1983) identified bureaucratic learning systems as elaborate system of procedures and regulations that exist especially public sector organizations, to control the flow of information among organizational members. The Knowledge Creation aspect of the OL process fits this category but contextualises the role of these bureaucratic learning systems as to support the Action Creation element.

Zietsma et al (2002, pS67) discuss facilitators and impediments to Organizational Learning processes and identified a) that institutionalised knowledge impedes new knowledge, and b) that systems of resource allocation, information and communication impede the flow of intuition and interpretation (as defined by Crossan et al., 1999). This research has identified some of the processes through which institutionalised knowledge impedes new knowledge in

terms of decision making. However the “systems of resources allocation”, did not influence Organisational Behaviour through Action Creation, but could be seen as influencing the extent to which Analysis and Advising were supported.

The recent literature review of OL barriers by (Schilling and Kluge, 2009) identified and categorised different barriers to OL and how these combine. Whilst too detailed to include here, their findings from the literature present barriers at personal, organisational and environmental levels. This would be an area that data from the case studies could be used to develop further.

The OL Model of PM provides a useful addition to the field, providing a practical example of one way in which OL occurs. It also provides a structure in which the extant literature on OL can be contextualised by practice.

11-8 FURTHER DISCUSSION

This final section reflects on the research as a whole and considers the Critical Realist approach, retroduction and case study, strengths and limitations of the work undertaken, future areas for research activity, as well as ethical and other issues raised by the research.

11-8.1 Retroduction, Case Study and Coding Techniques

The retroductive approach has been challenging to develop within a Case Study context. Whilst ideally suited in terms of its search for underlying causes of phenomena, its application relies on empirical testing of data against anticipated results. Whilst it is still argued that the strategy of Case Study and thematic analysis was appropriate and sufficient in the circumstances of the Research Problem, it is also acknowledged that there are limitations here.

The research aimed to deliver broader validity by testing the ideas against the same OL process but occurring in different contexts. Case Study has been increasingly accepted as capable of theory testing as well as theory building (Flyvbjerg, 2006). Within this research, Case Study has been proven to be appropriate for both theory development and initial theory testing. This flexibility has enabled the research strategy to deliver both the development of ideas, such as the Dimensions influencing practice, and to test the model derived from the literature.

The potential richness provided by the Case Study method, however, is somewhat undermined in cases B and C, where it has been used largely for theory testing rather than theory development. The rich data collected from the Case Studies revealed many concepts and ideas; however, these broaden the scope of the research and space precludes them from being discussed further.

The use of NVivo was critical to the management of data from the Case Studies and to the facilitation and coordination of coding. The literature and training around NVivo however tends to promote more open coding and grounded approaches (see Grounded Theory - Glaser and Strauss, 1967). However, an account grounded in the data is not the same as grounded theory (Gibbs, 2002).

It took some time to develop skill in coding and to appreciate the different coding types and their implications. Whilst the coding strategy adopted in Case A was selective (based on the OL Model of PM), rather than open (purely based on emic issues), the subsequent thematic analysis technique applied (Saldaña, 2009) enabled the OL Model of PM to be compared to data from the real world. It is acknowledged that there were limitations on how well a fit could be established, with amount of evidence being easily confused with strength of evidence, but it proved suitable for the purpose it was put to.

11-8.2 Strengths and Limitations of the work undertaken

Evaluative criteria for qualitative research should be commensurable with the aims, objectives, and epistemological assumptions of the research project (Sparkes, 2001). Objectives of validity and reliability, trustworthiness and generalisability have been specifically addressed in the choice of method, the choice of cases, the conduct of the interviews, the coding of the data, and the use of within and cross case analysis. Whilst it is proposed that these have been adequately addressed in the circumstances of the research and the nature of the conclusions, it is up to the reader to assess whether these objectives have been met. This section highlights some areas which can be taken into account in assessing this.

The research has been carried out in fulfilment of a Bramshill Fellowship. The aim of the fellowship is to address practical policing problems. Although this research is unlikely to have taken place without the support of this Fellowship, a drawback of the process involved was the definition of the research topic prior to commencing the research. This meant the topic was defined prior to registration for the research degree and before the subject was investigated sufficiently for the terms to be fully appreciated. This has had a dual effect of both keeping the research focussed and restricting its potential to develop into more relevant areas.

The focus on PM practice was opportunistic in that it was an area that was developing in policing practice in Scotland and this led to significant support for the research in this area to be conducted.

Overall, whilst the research has produced a significant output, the limitations of time (and part-time) impacted on the opportunity to develop more meaningful causal networks and explanations. The volume of data to be coded took a considerable amount of time to get to the stage where relatively simple conclusions could be drawn but then provided such a wealth of information that it became difficult to remain focussed on the Research Questions.

Whilst balanced against the relevance of findings, the Critical Realist approach would ideally aim for better, more detailed evidenced causation.

Having now addressed the Research Problem, the nature and scope of data gathered will allow further, more specific questions to be developed and addressed. Potentially these could derive the more detailed causal networks discussed above.

Whilst this study cannot quantify the extent to which performance management practice achieves organisational learning, it does provide a theoretical basis for its occurrence and some evidence to suggest that, in certain circumstances, it does occur.

11-8.3 Considering Ethical Issues

The ethical issues involved in this research can be categorised as related to:

- i. the nature of policing;
- ii. the nature of management and performance management;
- iii. the conduct of the research.

Policing is a public service and as such has an obligation to the public to achieve its goals, not least of which is the maintenance of public justice. This research addresses issues directly relating to the efficiency and effectiveness of policing, or of the delivery of the aims of policing. As such it impacts on the delivery of that service, the professionalism with which it is conducted and the potential to maintain public confidence in its institutions (Winstanley, 1996). The practice of PM in Forces has also been seen to influence the choices of individuals (Neyroud, 2006). There is a balance then to be achieved between the need to support public justice and the need to support individual choice. The better informed practice is the more appropriately that influence should be exerted.

Management, as in policing, creates an ethical tension between the goals of the organisation and the goals of the individual. In this case, organisations, as communities of individuals,

exist to deliver both meet needs of the organisation (in terms of goals) and needs of its members (in terms of reward). This is a balance that organisations and societies must achieve. This research hopes to inform that debate.

Winstanley (1996) argues that traditional methods and approaches to performance management generally do not succeed in meeting their objectives, are flawed in implementation, act to demotivate staff, and are often perceived as forms of control which are inappropriately used to "police" performance. This research has identified that this is most likely to be associated with accountability processes rather than learning processes and that learning can lead to positive outcomes.

Due to careful planning, the conduct of the data collection presented few ethical dilemmas. Permission was obtained from a representative of the Force involved in the case study and all interviewees were provided with a statement as to the use of the information and their choice to be involved. All interviews were recorded, although one recording was lost due to "operator error". No person declined to be interviewed and the nature of the questions allowed users to provide neutral answers if they wished. Steps have been taken to remove personal information from the data.

During one Case Study a manager asked for feedback based on the interviews with staff. The confidentiality of interviews was explained to the manager and the interviewees and no commitment was made to provide this. However, the interviewees welcomed the opportunity to provide some feedback to their management and it was possible to provide a brief report of the issues raised.

It is not felt that this research has been to the detriment of anyone or any organisation involved.

11-8.4 Suggestions for Further Research

As this has been an exploratory research programme, it is not surprising that it raises many new questions. These arise from the nature of the OL model of PM, the nature of the influences and their relationships to the model.

Further work is needed to model the relationships between the Dimensions and how these relate to different organisational structures. Following on from Schilling and Kluge's work (2009) on factors influencing OL it would be of value to develop the organisational level in which these factors exist (e.g. personal, organisational and environmental). This would also tend to enhance the relationship between the OL Model of PM and the 4I framework (Crossan et al., 1999). This would be an area that the existing data from the case studies could be used to develop further.

Further empirical work is needed to broaden the validity of the constructs. Having now established a detailed model of PM practice from the perspective of OL, quantitative approaches to this are now enabled.

The prevalence of OL remains a valid question which, having now identified in more detail the processes operating and the factors to consider, could also be addressed through quantitative approaches.

The OL Model of PM has implications for research into OL by using the same approach to consider the many other OL mechanisms.

11-8.5 Other issues

The titles of the Elements derived in the OL Model of PM, namely Attention, Analysis, Advising, Adjusting, Affecting and Achieving underwent a number of revisions early in the development of the Model. It was always intended that these would be refined as the research process evolved. However, as these definitions became more familiar and more

thoroughly revised, more appropriate labels were not found. This had the advantage of maintaining the “six As” which were found to be more easily cited, and more easily understood by those taking part in the research process. They have therefore been retained.

11-9 A FINAL WORD

Throughout this research, I have been extensively involved in the research setting of performance management practice in policing. This has meant maintaining an independence during data collection and coding, aiming to capture the perceptions of the interviewees rather than my interpretation. At the same time, I’ve had ready access to practical validation, getting feedback from practitioners about the relevance or accuracy of constructs. Through the research process I’ve been able to maintain independence as researcher, and contribute to practical developments in policing. This has no doubt enriched the overall contribution. However, the other side to this is the isolation from the academic environment of the practice-based part-time researcher. Although contact is maintained and events attended, I can only assume being embedded with other researchers would have provided constant stimulation and academic challenge to developing ideas, thus enriching the overall outcome.

Finally, continuing the Critical Realist approach, a link between knowledge and action will exist and be represented on many levels. Ganesha, the elephant trunked god of the Vedic literature represents the spiritual connection between knowledge and action, which is thought to be physically represented by the brain stem where consciousness is linked to the body. The following traditional Sanskrit prayer invokes Ganesha as the medium through which success is achieved, that is, successfully linking knowledge and action.

*"Vakratunda Mahakaaya, Suryakoti Samaprabha
Nirvighnam Kuru Mey Deva, Sarva Kaaryeshu Sarvada"*

Lord Ganesha has a curved trunk with a powerful body. He has the brilliance of a million suns. May the Lord, remove all the problems from the actions I aim to achieve. (Advaita Vedanta Research Center, 2001)

For me, the process of discovery was always exciting, even the monotony of transcription and coding was interrupted by sparks of insight that illuminated the nature of the field and each of which could have led to a thesis in themselves. Controlling that enthusiasm for discovery and focussing on validating findings has been a hard lesson.

Producing this thesis has been a continual battle between wanting to put more effort into it, and knowing that it would be a long term project and the final product would be more improved by a well-rested, clear head. Whilst some describe the research process as stressful, I've always found it a joy, have worked hard to ensure it remained that way, and would not have completed it otherwise. A greater joy is the understanding it has provided and the different way in which I view not just performance, or organisations, but the world around me.

There is more I wanted to include but, without boundaries, this thesis would never be complete. At last, it is.

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LIST OF APPENDICES

Appendix A – Analytical Approach

Appendix B – Interview Question Schedule

Appendix C – Sample Coding

A-1 ANALYTICAL APPROACH - INTRODUCTION

Chapter 5 identified the *retroductive* approach (Bhaskar, 2008) used in this research and the stages of data analysis as Explore, Model, and Test. By detailing the analytical approach, this Appendix outlines in more detail the approach to the ‘Test’ stage.

The appendix consists of an explanatory section on the use of qualitative data analysis (QDA) and graphically describes how NVivo (QSR International Pty Ltd, 2007) was used.

A-2 USING QUALITATIVE DATA ANALYSIS SOFTWARE

This section describes the deployment of, the reasons for, and the issues regarding the use of QDA software in support of this research.

The author has had experience in the development of the use of computing power to manage textual data since the early 1980’s. Following the failures identified in the Yorkshire Ripper enquiries, the development of the Home Office Large Major Enquiry System (HOLMES), provided all Forces with a tool to organise, interrogate and share large volumes of witness statements. The author provided training for its deployment and specialised training in data interrogation (see Barrington and Peace, 1985). Also, during the 1990’s, with the increase in computing power, indexing techniques were developed that allowed word level retrieval and analysis of large volumes of text and again the author was involved in developing uses for this within the context of policing. The author was involved in the deployment, development and training in both these systems. This experience, and the resulting familiarity and confidence in the use of technology, has influenced the choice to use Qualitative Data Analysis software (QDA).

Making use of the same technology, qualitative researchers developed uses for text based programs and databases (Kelle, 1995) and QDA software has evolved from this basis. Facilities that the technology enabled included:

- Memo writing
- Coding areas of text
- Associating different pieces of text
- Recording attributes related to pieces of text
- Structured searching of content
- Quantitative and Statistical

There have been both optimism and concerns about the development of QDA software, with improved rigour, consistency and transparency on one hand, and fears around the alienation of the researcher and the move from support for analysis to the method of analysis on the other (Kelle, 1995). Their debate about the appropriateness of using computers to analyse qualitative data continues (Bazeley, 2007, Richards, 1999, Kelle, 1997, di Gregorio, 2003, Coffey and Atkinson, 1996). The key issue in the use of QDA software remains the extent to which it enhances or detracts from qualitative research (Bringer et al., 2004). A summary of the benefits and drawbacks of using QDA software is shown in Table A-1.

Benefits	Drawbacks
<ul style="list-style-type: none">• Eliminates problems in handling large amounts of data• Easy to recode data and to approach the data from different perspectives• Encourages planning and thinking ahead• Easy to maintain audit trail	<ul style="list-style-type: none">• Encourages novice researcher to code without knowledge of analysis• Sophisticated analysis may hide sloppy coding• Quick methods may be used exclusively to produce under-analysed reports

Table A-1 - Benefits and Drawbacks of QDA software (adapted from, di Gregorio 2007)

In addressing the drawbacks, Bringer et al (2004) identify the need to maximise transparency in the coding approach and theory development in order to underpin any

conclusions drawn. NVivo, and in particular good practice associated with its use, facilitates this process (Richards, 1999, di Gregorio, 2006).

A-2.1 NVivo

QSR was formally established in 1995, but had its origins in 1981 when their first software product, NUD*IST (Non-numerical Unstructured Data, Indexing, Searching and Theorizing) was first created by Professors Lyn and Tom Richards (Bringer et al., 2004). Their software has gone on to develop through a range of versions with their two key product lines at present being NVivo 8 and XSight (QSR International Pty Ltd, 2007). The primary difference in the approach of NVivo was to move away from coding of plain text analysed through coding and retrieval to *weaving of rich primary sources with commentary and discussion and analysis, our evolving discussions and writings that distinguish research from data archiving* (Richards, 1999: p414)

A new version of NVivo, version 8, was released in 2008 during the course of the research. Due to the enhanced ability to incorporate audio recordings of interviews into the data set, as well as improved ease of use, the decision was taken to take advantage of this upgrade. The following description therefore relates to the NVivo 8. In the discussion below, where the terms used relate to the software these are shown in italics.

A-2.2 Conclusion Regarding QDA

QDA must provide the ability to support qualitative researchers in achieving distance and maintaining the vitality of data (Richards, 1998). Computer software may make it easier to handle data more effectively, but the researcher must still interpret, conceptualise, examine relationships, document decisions, and develop theory (Bringer et al., 2004). In this research, it is argued that structure of NVivo allowed a large volume of data to be efficiently handled, a task that would otherwise have taken considerably longer and produced results

with less reliability and validity. NVivo's other key contribution is that of transparency, allowing the whole data set and analysis process to be retained and scrutinised.

A-3 DATA REDUCTION

Having established the basis for using QDA, how it is applied to the three phases of analysis i.e. Data Reduction, Data Display and Drawing Conclusions, (Miles and Huberman, 1994), is now discussed.

Data reduction is the process of selecting, focusing, simplifying, abstracting, and transforming the data from transcriptions, field notes, etc. This section explains the functions of NVivo that support this part of the analysis process and also explains how it will be undertaken in practice.

The “anticipatory” element of Data Reduction has been explained in Chapter 5 where conceptual frameworks were developed and in Chapter 6 by defining a provisional OL Model of PM. These were used to refine the Research Questions into Case Study Questions that could structure the data collection.

A-3.1 NVivo structures

The following briefly outlines some of the key elements of NVivo and how their application in this research.

A-3.1.1 Sources

Sources can be used to store or represent any aspect of data collected by the research process. Using a standard folder approach, this data can be structured to make it comprehensible and accessible, both to the user and anyone reviewing the data. At the commencement of this research, folders were established for the data collation process which included *Internals*, *Externals*, and *Memos*. *Internals* relates to key items such as

Documentation, Interviews, and Observation Notes, each being sub divided by Case. *Externals*, that is items that cannot be imported into the database, such as artefacts used in meetings, these are recorded in the Externals folder with a proxy title for reference. Whilst the *Memos* folder contains all freehand memos created during the research process. Again, these were structured in a folder tree structure to manage storage and retrieval.

Other *Memos* were created wherever ideas and concepts occurred to the researcher, either prompted by the data or the data collection process. Again these were time and date stamped to demonstrate the development of thinking over time.

Against each individual *source*, the content, *Relationships*, *Coding*, *Annotations*, and *Links* to other sources can be displayed.

After the pilot case study, and the subsequent upgrade to NVivo 8, a copy of the audio recordings from interviews was included to aid transcription and the comprehension of the context of statements during coding. Whilst these can be coded separately from the transcript, this process was not generally used as the transcription method had been established prior to this facility becoming available. However, to support transparency, the associated audio and transcript can more easily be reviewed.

A-3.1.2 Nodes

The *Node* structure again enables a tree structure to be used with categories or overarching concepts being divided into sub-nodes as appropriate. The most relevant nodes to consider at this point are *Free Nodes*, *Tree Nodes*, *Cases* and *Relationships*.

Both *Free Nodes* and *Tree Nodes* contain codes used to capture the essence of the data being reviewed. A code is usually a word or phrase that *symbolically assigns a summative, salient, essence-capturing, and or evocative attribute for a portion of language based or visual data* (Saldaña, 2009: p3). A code can be assigned to a single word, phrase, sentence, or larger section of either text, or audio, as is relevant. *Free Nodes* are used to capture concepts as

they arise, whilst *Tree Nodes* are used to structure related concepts into larger groups or categories as the coding process progresses. At the commencement of the research analysis, to represent the *a priori* concepts that had been developed in the form of an ‘OL model of PM’, *Tree Nodes* were created to collate comment regarding each topic.

The *Cases* area was used to structure data into the relevant case study. Here, each item imported into NVivo was allocated to a specific case and to a specific subject within that case, such as the conduct of an interview or observation. This allows data to be retrieved or analysed at a Case level, supporting within case and cross case analysis.

Although five cases were included within the database only three of these were used to develop this thesis. The manner in which the data was structured within NVivo enabled the data from the additional cases to be selectively ignored and did not influence the results.

Each of the *Nodes* can be considered as a dimension of the data, allowing a multidimensional model of the data to be constructed or dissected as needed by the analysis process.

Once coding has been started, each segment of text coded to any particular node can easily be accessed and reviewed. This enables refinement of the concept and supported the development of thinking around the nature of each node.

A-3.1.3 Sets

The *Sets* area allows groups of nodes to be combined into a new entity, or set, without altering the underlying structure of the component nodes. This function is important in allowing conceptual groups of nodes to be built in various ways as ideas develop. These can then be changed or altered as thinking develops but no change to the underlying content has been committed to. This supports theoretical development whilst retaining the integrity of the “source”.

In this research, *Sets* were used to combine groups of factors identified from the data into dimensions. Each dimension was created as a set and adjusted as the ideas and rationale behind them developed. This enables matrices to be developed comparing the overlap between different sets of data without affecting the original data sources.

A-3.1.4 Queries

The *Queries* folder contains a record of all the queries created to ask specific questions of the data and, where appropriate, a record of the results. The folder structure allows queries of similar types to be grouped together for ease of use.

A-3.1.5 Classifications

Classifications allow attributes and their nature to be defined. These can be used to capture specific information relating to the data collection process, such as attributes of the case or demographics of the interviewee. This enhances the capacity of the software to dissect data according to these attributes if needed.

A-4 APPROACH TO CODING AND ANALYSIS

Here, the approach to coding and analysis and the reasons for their use are outlined.

Within Eisenhardt's (1989) approach to Case Study, the relevant steps are Analysing Data, Shaping Hypotheses, Enfolding Literature, and Reaching Closure. The two methods of approaching analysis of the data are within case analysis and cross case analysis.

Analyzing data is the heart of building theory from case studies, but it is both the most difficult and the least codified part of the process. (Eisenhardt, 1989: p539)

Realist approach to testing is explanatory not predictive (Sayer, 1992). The analysis process involved the preparation of an NVivo 'memo' in which all the references to the topic were

collated around the definition and the relationships to other Elements and Dimension were revealed.

Within-case analysis typically involves detailed case study write-ups for each site which typically involve simply pure description (Eisenhardt, 1989). However, coding techniques have developed considerably since Eisenhardt's paper (see Saldaña, 2009) and a wide range of techniques are available to enhance the description of the case and provide more detailed within case analysis.

Listed below (see Table A-2- Application of Coding Techniques) are a range of coding techniques and how they were applied to assist in understanding the data. Some of these, such as Structural Coding, were used consistently across all the data, while others, such as Themeing, were used to help develop certain ideas and concepts as they arose from the data and therefore were only used at relevant points in reviewing the data.

<i>Coding Technique</i>	<i>Source / Definition</i>	<i>Application</i>	<i>Reason</i>
Provisional Coding	(Saldaña, 2009, Miles and Huberman, 1994, Bazeley, 2007, Silverman, 2006) Coding content to predetermined or theoretically derived codes	Top level tree nodes created for each element, with sub-nodes created for emic issues related to each element	To structure data around <i>a priori</i> OL model of PM
Structural Coding	(Saldaña, 2009, Bazeley, 2007) Coding content according to the question asked	Used to organise all the data around the questions asked	Allowing each section of data to be viewed in the context of the question asked supporting transparency and to avoid bias.
Descriptive Coding	(Saldaña, 2009, Miles and Huberman, 1994) Summarising in a word or short phrase the topic of, rather than the content, of a section of data.	Widely used to organise data into topic headings and, where evident, these were subdivided into lower level nodes. Also used to capture attributes of discussion.	This provided a set of data structured around specific topics associated with practice of PM, allowing thematic and selective analysis of relationships and attributes at a later stage.

Coding Technique	Source / Definition	Application	Reason
Attribute Coding	(Saldaña, 2009, Bazeley, 2007, Miles and Huberman, 1994) Embedding specific attributes of the interview	NVivo Cases used to capture basic data about interview, interviewee and setting	To enable more selective querying if required at later stage.
Simultaneous Coding	(Saldaña, 2009)	Data coded to multiple relevant nodes as text being reviewed.	Minimising review time and allowing emic issues to develop from the text, rather than coding for pre conceived concepts only
In Vivo Coding	(Saldaña, 2009, Charmaz, 2006, Glaser and Strauss, 1967, Strauss and Corbin, 1990) Literal or verbatim coding from the terms used by the participants themselves	Where potentially relevant, new nodes created using in vivo context as free nodes during first review of text	Enable new concepts to arise but maintaining the context and therefore relevance to practitioners
Magnitude Coding	(Saldaña, 2009, Miles and Huberman, 1994) Adding to an existing code to indicate intensity, frequency, direction or evaluative content	Used to capture instances where discussion related to behaviour change and the extent to which this occurred	Attempt to capture extent of relevance or impact of issue, however as interviews were unstructured this proved of limited use
Evaluation Coding	(Saldaña, 2009) focus on patterned observations or participant responses of attributes and details that assess quality	Sections of text relating to assessment of quality coded against sub-node of topic	Used to capture discussion relating to the effectiveness of aspects of the process, as well as to assess what this was being judged against
Versus Coding	(Saldaña, 2009) Identify in binary terms the individuals, groups, organisations, phenomena, processes, concepts, etc., in direct conflict with each other.	Node created for range of aspect e.g. 'centralised versus federalised approach' rather than individual codes for each	Often discussion about one end of the scale was stated as negative aspect of the other, versus coding allowed the range of discussion to be collated under one subject

Coding Technique	Source / Definition	Application	Reason
Themeing	(Saldaña, 2009, Boyatzis, 1998, Rubin and Rubin, 1995)	Method applied whenever questions or discussion related to methods of influencing organisational members.	Used to expand on range of methods used to affect behaviour of organisational members, e.g. Affecting through tasking

Table A-2 - Application of Coding Techniques. Source: Author derived from literature (as cited).

The tactic of having multiple coding techniques and applying these as the data is reviewed, although considerably more time consuming than a single method, allows a genuinely rich picture of each case to be developed, as well as a perceptively deep overall picture of the OL process of PM.

A-5 DATA DISPLAY

Data display is the assembly of information into organised and compressed format that permits conclusion drawing and action (Miles and Huberman, 1994). This section explains the functions within NVivo that support this aspect of analysis and then discuss how this Data display will be undertaken.

A-5.1.1 Matrix Development

The test of any matrix is what helps you to understand, and how valid that understanding is (Miles and Huberman, 1994, p242). Tactics used to develop matrices around Elements and Dimensions included themes, comparison, clustering, and counting. This was followed by memoing and modelling of results as well as by triangulation in the cross case analysis.

A-5.1.2 Models

A useful aspect of NVivo was the ability to create models using visual representations of each *node*, *source*, *memos*, *relationships*, etc. These representations were dynamically

linked to the *node* and its content. Modelling allows theoretical ideas to be represented and aided the development of concepts.

Based on the concepts involved tree nodes, or in other items within the NVivo structure, models can be drawn to allow reflection on their structure and content. These ideas can then be explored further in memos.

A-5.1.3 Links

The *Links* folder collates all *Memo links*, *See Also links* and *Annotations* created within the project. *Memo links* provide a relational connection between sources, allowing conceptual linkage between related materials. *See Also links*, working in a similar way to hyperlinks, provide a means of connecting sections of content to other sources and support the ability to reference other sources where relevant.

Annotations allowed notes to be made against a section of text but were not widely used in this research.

A-6 CONCLUSION DRAWING AND VERIFICATION

One step in shaping hypotheses is the sharpening of constructs. This is a two-part process involving (1) refining the definition of the construct and (2) building evidence which measures the construct in each case (Eisenhardt, 1989).

Note making enables ideas to develop over time. *Memoing*, or the use of free notes, allows ideas to be recorded and refined whilst maintaining a record of that development. As ideas develop, these can be created as *Relationships* between *Nodes* which can be tested were created to explain or capture links between them. Finally, *Models* can be used to provide a diagrammatic overview of the relationships between nodes.

In this thesis, the first stage of the analysis involved restructuring the data from individual interviews to the elements of the model. This involved selecting areas of content that related to the elements of the model. At the same time, emergent attributes of those elements were recorded under the tree node for each element of the model. This can be thought of as a core topic with associated aspects being linked to it (see diagram). Through this method, with one pass of the content, the content was coded to the appropriate element of the model and a rich picture developed about the nature of the model.

Due to the simultaneous coding to cases and interviewees, the original nature of the content was not altered in any way, yet it became possible to selectively retrieve a model element and its associated attributes by case, or at a lower level when required.

Factors discussed by participants were either created as a node, or added to an existing node where this had already been identified. These were recorded under a tree node for factors and recorded as either a catalyst or inhibitor depending on the context described by the participant. Where factors were coded, simultaneous coding against the associated model element was also added to allow the factor context to be captured and retrieved when necessary.

The same approach was taken to content relating to each of the Interview Question areas.

Raw models, that is, elements with their associated emergent attributes as they had evolved from the first stage, were then reviewed and rationalised. This involved reviewing the definitions against the node or tree content and establishing fit, or the need for amendment. An associated memo recorded the development of ideas as they arose. The emergent attributed were also reviewed, grouped according to content, and a *Set* created to capture the new concept without affecting the original structure of the data or *Node*. This had the advantage of allowing Sets to be created in different ways where necessary to try out ideas.

A-7 PREPARATION OF NVIVO PROJECT DESIGN

Following recommendations within NVivo training (see di Gregorio, 2006) and to encourage due consideration to the specific aspects of this study, an initial project design was established based on the nature of the research. In doing so, consideration was given to the unit(s) of analysis, the anticipated attributes of these, the time frame in which it would be undertaken, the nature of potential data sources (primary and secondary sources of data). From this a skeleton Project, including case nodes, journals, and a folder structure, was created into which the data could start to be organised as it was collected. Case nodes were created and appropriately structured to reflect the data collection process. Research, Analysis and Coding Journals were established allowing ideas and decisions to be recorded in text as they occurred, each being entered in the appropriate journal with a time and date stamp to support transparency. Also created at this stage were external folders to contain the original data sources for import into NVivo and facilitate data management.

Tree Nodes			
Name	Sources	References	Created On
Impact on OL	0	0	06/12/2007 15:31
OL Catalysts	0	0	06/12/2007 15:26
OL Inhibitors	0	0	06/12/2007 15:26
Model Amends	0	0	06/12/2007 15:29
Model Contradicts	0	0	06/12/2007 15:28
Model Supports	0	0	06/12/2007 15:28
OL PM Model	0	0	06/12/2007 15:14
1 Attention	0	0	06/12/2007 15:14
2 Analysis	0	0	06/12/2007 15:14
3 Advising	0	0	06/12/2007 15:15
4 Affecting	0	0	06/12/2007 15:17
5 Adjusting	0	0	06/12/2007 15:18
6 Achieving	0	0	06/12/2007 15:15

Figure A-1 – Outline Tree Nodes at Project Start-up. Source: Author derived in NVivo

To provide some structure to the assessment of material, an initial tree node structure was established based on *a priori* concepts based on the OL Model of PM (see chapter 6). This initial structure is represented in Figure A-1.

The initial folder structure based on anticipated data requirements is represented in Figure A-2.

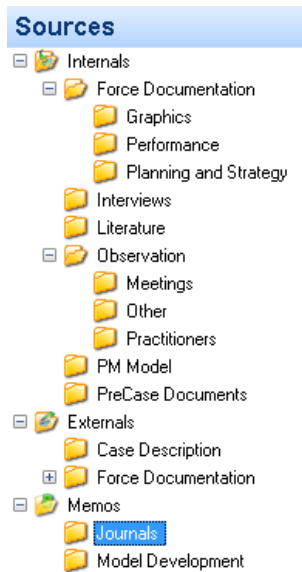


Figure A-2 - Outline Folder Structure. Source: Author derived in NVivo.

It should be noted that, all creations (imports, folders, queries, etc.) and modifications to the content of NVivo is data and time stamped to support transparency in data management.

A-7.1 NVivo Content at Completion of Analysis

The following graphic copy of the NVivo Tree Nodes represents a structure at the completion of the analysis.

It should be noted that this includes two cases (Cases 2 and 3) that are not reported in the thesis.

The majority of nodes are “expanded” to show content; however, due to the size of the list it is impractical to expand all tree nodes. To improve readability, detail such as created date and modified date are cropped or removed. As such, the content shown is intended as indicative rather than comprehensive.

Tree Nodes				
	Name /	Sources	References	Created On
[-]	Analysis Issues	0	0	04/02/2008 15:00
	Name /	Sources	References	Created On
	Absence of Analysis	2	3	22/05/2008 13:27
[+]	Analysis Tools	3	6	22/05/2008 13:27
	Analytical Capacity	2	2	04/02/2008 15:08
	Inadequate Analysis	3	7	22/05/2008 13:27
	Need for Analysis	1	2	22/05/2008 13:27
	Specialisation v generalisation	2	3	04/02/2008 15:01
	Apocryphal Stories	5	10	05/01/2008 16:08
[+]	Artefacts	4	5	04/02/2008 13:50
[-]	Citizen Focus	14	31	11/02/2009 17:09
	Name /	Sources	References	Created On
	Call Handling	1	1	27/02/2009 15:13
	Community Confidence	7	13	02/04/2009 16:00
	Community Engagement	3	4	24/04/2009 14:44
	Community Safety	3	4	26/03/2009 18:22
	Crime Contact	4	4	26/02/2009 10:21
	Crime Management	3	3	26/02/2009 10:18
	Customer Satisfaction	20	57	11/02/2009 10:22
	Driver for CF	2	3	24/02/2009 12:09
	from detection towards preven	2	4	04/06/2009 15:57
	Inactivity on crime investigatio	3	4	23/02/2009 13:57
	Incident Queue Management	2	4	23/02/2009 15:09
	Media Portrayal	1	1	05/06/2009 16:54
	Public Expectation or Percepti	6	8	02/04/2009 19:52
	Quality of Service	14	26	23/03/2009 19:08
	Safe and secure	1	1	17/03/2009 09:24
	Service Delivery	2	2	27/04/2009 13:28
	Suspect Management	5	9	18/02/2009 12:02
	Victim Care	2	2	18/02/2009 12:03
	Communication	6	11	25/01/2008 16:30
[-]	Degree or Extent of Be	0	0	18/02/2009 15:30
	Name /	Sources	References	Created On
	Absent	0	0	18/02/2009 15:31
	Embedded	2	3	18/02/2009 15:31
	Great	0	0	18/02/2009 15:32
	Slight	0	0	18/02/2009 15:31
[+]	Dimensions of Perform	0	0	22/04/2008 16:15
[-]	Drivers	3	3	27/05/2008 16:04
	Name /	Sources	References	Created On
	Accountability	1	1	24/04/2009 16:23
	Attention - Drivers	8	12	27/05/2008 15:58
	Attention - Short term drivers	3	3	27/05/2008 15:58
	Attention and Individual Experi	5	6	30/05/2008 08:15
	Attention driven by Divisional	4	5	30/05/2008 08:15
	Attention Driver - Team Mana	5	6	30/05/2008 08:15
	Attention- Emerging Issues	1	2	17/06/2008 14:41
	Attention on context	2	3	30/05/2008 08:15
	Comparative Performance as	8	9	02/06/2008 19:41
	Decision Making as Attention	1	1	27/05/2008 15:58

Name /	Sources	References	Created On
Diminishing returns as driver f	1	1	16/02/2009 16:13
Driver for PM meeting	1	1	07/06/2008 08:54
Drivers of use of Perf Info	9	10	22/05/2008 13:32
figures driven	1	1	31/03/2009 10:50
Individual Attention	6	9	30/05/2008 08:15
Intelligence Driven Attention	4	4	17/06/2008 13:14
Management Practice - Driver	5	5	26/02/2009 12:11
Managers Drive Performance	1	1	27/05/2009 19:08
National Performance Indicato	5	5	17/06/2008 15:31
Public Perception	4	7	04/06/2008 16:51
Service Delivery as Driver for	1	1	01/05/2009 11:16
Team Leader Attention	3	8	30/05/2008 08:15
Tighter Finance as Driver for P	5	6	16/02/2009 16:18
Underperformance	5	6	17/06/2008 13:54
Element and Dimensio	0	0	20/11/2009 09:49
Case 1	0	0	25/11/2009 11:00
Element 1 Attention	86	448	18/01/2010 18:38
Element 2 Analysis	77	344	18/01/2010 18:38
Element 3 Advising	87	442	18/01/2010 18:38
Element 4 Adjusting	116	457	18/01/2010 18:38
Element 5 Affecting	110	505	18/01/2010 18:38
Element 6 Achieving	63	201	18/01/2010 18:38
Case 4	0	0	20/11/2009 10:06
Dimension Alignment	14	77	20/11/2009 10:21
Dimension Analytical Cap	1	1	20/11/2009 10:29
Dimension Context	10	47	20/11/2009 10:28
Dimension Culture	10	59	20/11/2009 10:27
Dimension Decision Maki	8	34	20/11/2009 10:27
Dimension Information Va	5	5	20/11/2009 10:26
Dimension Leadership	4	11	20/11/2009 10:22
Dimension Management	8	16	20/11/2009 10:22
Dimension Organisational	5	12	20/11/2009 10:18
Dimension Organisational	9	37	20/11/2009 10:21
Element 1 Attention	13	62	20/11/2009 10:14
Element 2 Analysis	8	44	20/11/2009 10:15
Element 3 Advising	11	40	20/11/2009 10:14
Element 4 Adjusting	12	51	20/11/2009 10:15
Element 5 Affecting	10	47	20/11/2009 10:16
Element 6 Achieving	9	33	20/11/2009 10:16
Case 5	0	0	20/11/2009 10:05
Dimension Alignment	11	104	20/11/2009 10:02
Dimension Analytical Cap	1	2	20/11/2009 09:58
Dimension Context	9	42	20/11/2009 09:59
Dimension Culture	10	29	20/11/2009 10:01
Dimension Decision Maki	8	21	20/11/2009 09:59
Dimension Information Va	7	11	20/11/2009 09:57
Dimension Leadership	4	10	20/11/2009 10:01

Name	Sources	References	Created On
Barrier	6	14	27/12/2007 08:46
Name	Sources	References	Created On
Ability to explain why	5	8	09/01/2008 15:53
Absence of clarity around	2	3	18/03/2008 11:24
Absence of context	5	8	13/03/2008 19:19
Absence of meaningful fe	3	3	14/03/2008 09:46
Absence of prior experie	2	3	03/01/2008 16:52
Accuracy of data	1	2	13/05/2009 16:49
Analytical Ability	7	8	20/01/2008 10:21
Analytical Undercapacity	6	8	20/01/2008 10:19
Assumed Culture	1	1	18/03/2008 11:26
Assuming Performance i	1	1	13/03/2008 16:17
Assumptions about mean	2	3	25/05/2009 11:03
Attention Imbalance	2	2	28/12/2007 14:30
Avoidance of issues	4	6	11/03/2008 11:17
Backward Looking Repor	1	2	02/06/2009 10:31
Bureaucracy	2	2	03/04/2009 14:29
Centralised Use of Perfln	1	1	03/02/2008 12:10
Centralised v federalised	2	2	04/03/2009 17:05
Competing Demands or	1	1	11/05/2009 10:26
Competition	6	7	12/03/2008 14:19
Complexity of PM system	1	2	13/03/2008 13:58
Comprehension of PM	2	2	20/01/2008 10:30
Conduct of Meeting - Ava	1	1	13/05/2009 14:35
Conduct of Meeting - loss	1	1	13/02/2009 17:47
Conduct of Meeting - Too	2	2	04/03/2009 17:29
Conduct of Meeting inhibi	1	1	04/02/2008 14:19
Confidence in Analysis	4	13	22/05/2008 14:36
Different Approaches to	1	1	26/05/2008 14:37
Different level - different	1	1	03/01/2008 16:56
Difficulty in creating mea	2	5	26/05/2008 14:33
Discontinuity in Pls	1	1	20/01/2008 20:26
Disembodied feedback	2	3	06/03/2008 14:21
Focus on Geographical p	1	1	04/03/2009 17:33
Focus on Individuals as c	10	17	26/01/2008 11:17
Focus on number rather t	6	8	30/03/2009 11:27
Impact of risk	8	9	13/01/2008 17:50
Improper use of evidence	1	1	18/03/2008 14:15
Inability to look forward	1	1	04/02/2008 14:16
Inappropriate choice of In	4	4	18/03/2008 11:20
Incomparable data	2	2	30/03/2009 11:10
Inconsistency in use of d	1	1	02/06/2009 19:29
Influence of Analyst at M	3	4	22/05/2008 14:20
Influence of performance	4	4	06/02/2008 11:15
Info not accessible	6	6	28/12/2007 14:45
League Tables	11	16	13/03/2008 15:04
Limit on availability of us	4	5	03/02/2008 12:12
Limit on effectiveness of	5	5	26/01/2008 11:07
Loss of skills transfer thro	2	2	11/02/2008 12:48
Loss of Supervisory Expe	1	1	13/03/2008 14:59
Management capability	9	11	26/01/2008 11:16
Misuse Potential	3	3	28/12/2007 14:41

Name	Sources	References	Created On
Need for central support	1	3	12/02/2009 12:27
No ability to address proc	1	1	30/05/2009 14:18
Not all objectives quantifi	1	2	13/05/2009 18:51
Perf Review missing bigg	3	3	14/03/2008 09:42
Perverse impact from PM	26	43	28/01/2008 09:29
Police focus on crime an	2	3	10/05/2009 17:34
Reporting not Analysing	2	2	21/05/2008 16:18
Resistance to change	3	5	18/02/2009 15:04
Rigidity of T&CG structur	1	1	04/02/2008 14:14
Separate Business and C	5	6	30/03/2009 11:33
Small numbers difficult to	4	4	24/04/2009 14:52
Strategic Operational Dis	2	3	02/03/2009 15:55
Survey - cost	1	2	13/02/2009 18:52
Surveys - getting particip	2	2	12/02/2009 13:37
Too Many Indicators	3	3	06/05/2009 19:56
Too much information	6	10	13/01/2008 17:48
Uncertainty applying PM	1	1	26/05/2008 14:48
Unresolved Tension - Lo	7	12	13/03/2008 16:20
Validity of Targets	9	16	20/01/2008 20:28
Formal Centralised Im	1	1	05/06/2009 16:18
Governance Inspection	7	11	13/02/2009 17:34
Influence of Ministers o	4	6	10/05/2009 16:21
Influence of Role on M	2	3	18/01/2008 15:11
Influence on Goals	2	2	14/03/2008 14:50
Influence Risk and Rep	12	19	16/02/2009 16:04
Interview Questions	0	0	13/01/2008 15:04
Name	Sources	References	Created On
Elite Interview	9	10	23/03/2009 15:03
Q Awareness of Div or Force p	9	16	13/01/2008 17:56
Q Centralised v Local PM	2	2	13/01/2008 15:06
Q Change over time or differe	16	17	13/01/2008 17:45
Q Data Collation Process	1	1	02/06/2009 19:34
Q Descriptive of Case	2	2	10/05/2009 11:29
Q Impact of Green Paper	1	1	31/03/2009 20:36
Q Other Issues	31	32	09/02/2009 19:50
Q Received influence from ab	1	2	13/01/2008 15:05
Qs 1 Attention	7	14	18/02/2008 18:03
Qs 2 Analysis	5	6	18/02/2008 18:04
Qs 3 Advising	7	12	18/02/2008 18:16
Qs 4 Adjusting	4	4	18/02/2008 18:11
Qs 5 Affecting	13	27	18/02/2008 18:12
Qs 6 Achievement	2	2	18/02/2008 18:05
Qs 7 Direction Planning Objec	15	22	19/01/2009 14:20
Qs Management of Performan	1	1	18/02/2008 17:55
Qs Nature of Management	1	1	23/01/2009 16:05
Qs Nature of performance	1	1	18/02/2008 18:01
Qs Potential Barriers	2	3	18/02/2008 18:21
Qs Process Improvement	2	2	11/02/2009 16:20
Model Development	0	0	26/12/2007 14:38
nim	0	0	18/05/2009 19:54
OL PM Model	2	2	06/12/2007 15:14

Element 1 Attention	86	448	18/11/2009 11:51
Element 2 Analysis	77	344	18/11/2009 11:57
Element 3 Advising	87	442	19/11/2009 13:49
Element 4 Adjusting	116	457	19/11/2009 13:52
Element 5 Affecting	110	505	18/11/2009 12:17
Element 6 Achieving	63	201	18/11/2009 12:20
Environment The	2	2	13/02/2009 19:32
Feed-back Process of Knowin	4	4	10/03/2008 10:25

Name	Sources	References	Created On
1 Attention	27	72	06/12/2007 15:14

Name	Sources	References	Created On
Aim of performance	2	2	16/05/2008 09:23
Attention to Process or Is	7	8	29/04/2009 16:43
Change of Attention focu	14	17	12/02/2009 13:57
Demand Deployment Acti	2	5	26/03/2009 15:50
Frequency of monitoring	0	0	29/04/2009 15:08
HQ and Support demand	1	1	02/04/2009 16:06
Impact of National Indicators	5	8	13/02/2009 17:31
Meaning of Indicators	9	12	16/05/2008 09:20
Measure Whats Easy to Measure	2	2	05/06/2009 10:59
Method of data collection	12	15	10/02/2009 13:49
Performance Indicator Area	1	2	26/02/2008 18:04
Performance Indicator Source	7	10	26/02/2008 17:55
Performance Metrics in Use	18	33	31/05/2008 20:47
PESTELO	2	4	26/03/2009 15:51
Public Feedback	1	1	29/05/2009 18:34
Quality Control	8	8	26/02/2009 14:09
Review	1	1	01/05/2009 16:21
Specific Problems with Indicators	10	15	11/02/2009 10:48
Structured Debrief	1	1	01/05/2009 15:50
Subject of Assessment	1	1	01/05/2009 11:28
Type of Assessment	0	0	01/05/2009 11:25

Name	Sources	References	Created On	Created
2 Analysis	31	80	06/12/2007 15:14	SR

Name	Sources	References	Created On
Activity Analysis	3	3	26/03/2009 18:42
Analysis by Manager	1	2	29/05/2009 10:55
Analyst and Cont Imp	1	2	02/04/2009 11:16
Analytical Capability	21	35	13/03/2009 15:54
Analytical Support	13	22	27/02/2009 15:17
Analytical Training	9	24	06/03/2009 11:57
Availability of Data to Analyst	10	14	01/04/2009 18:31
Difference Intelligence and Perform	3	4	18/05/2009 19:28
Knowledge Supporting Analysis	9	12	28/03/2009 15:26
Non Analyst Analysis	9	16	28/03/2009 12:20
not to interpret the statistics on beh	4	4	02/06/2009 19:20
Partnerships and Analysis	5	6	17/03/2009 13:03
Reducing Ambiguity of data	12	20	11/02/2009 15:42
Results Analysis	3	6	06/03/2009 11:58
Role of Analyst	15	43	02/06/2008 15:31
Tools to Access Data	15	31	11/02/2009 15:43

Name	Sources	References	Created On	Created By
3 Advising	44	121	06/12/2007 15:15	SR
Name	Sources	References	Created On	Created By
Adding Value through Communicati	0	0	03/06/2009 10:47	
Advising in TandCG	7	17	11/02/2009 11:06	
At the table interpretation	5	9	31/05/2008 20:59	
Balance Analytical with Practical	1	1	05/06/2009 11:43	
Briefing at Team Level	4	10	19/02/2009 11:59	
Centralised preparation of data	3	5	24/04/2009 11:15	
Comprehension of data	7	12	28/03/2009 15:35	
Discussion on Advising	23	53	12/02/2008 20:34	
Frequency or Timing of Report	5	8	29/04/2009 16:16	
Influence of framework	5	7	23/02/2009 14:58	
Level of Satisfaction with Content	3	4	28/03/2009 14:33	
Partnership and Reporting	1	1	02/06/2009 19:22	
Performance Information	13	20	22/05/2008 13:29	
Preparation for meeting	7	11	27/03/2009 15:48	
Qualitative Interpretation of Data	8	13	29/04/2009 16:20	
Role of Advisor	1	1	08/06/2009 16:50	
Standardisation of Reports	1	1	01/04/2009 17:49	
Types of Reports. Analytical Produc	11	29	13/03/2009 14:29	
Name	Sources	References	Created On	Created By
Feed-forward Manage	2	2	10/03/2008 10:26	SR
Name	Sources	References	Created On	Created By
4 Adjusting	34	86	12/12/2007 12:37	SR
Name	Sources	References	Created On	Created By
Accuracy of Information	1	2	13/05/2009 16:50	
balanced approach	1	2	29/05/2009 15:07	
Competing Demands	4	6	11/06/2008 15:58	
Decision Making	14	18	24/06/2008 18:57	
Decision Taken on Data or Analytic	14	28	11/06/2008 15:47	
Frequency or Timing of Meeting or	11	17	29/04/2009 15:09	
Incomplete Information	2	2	02/06/2008 11:32	
Name	Sources	References	Created On	Created By
Name	Sources	References	Created On	Created By
Insufficient data for decision making	2	2	02/06/2008 10:45	
Leadership style	23	52	18/01/2008 14:26	
Management of Issues	5	8	11/05/2009 10:59	
Management of Meeting Descriptio	23	41	22/05/2008 13:57	
Management outwith Meetings	5	6	26/02/2009 10:31	
Meeting Output	3	6	11/05/2009 10:49	
Misleading Information	1	1	11/05/2009 11:02	
Monitoring not Managing or vica ver	14	29	02/03/2009 16:01	
NIM and PM relationship	30	69	04/06/2008 17:02	
Organisational Knowledge	3	3	01/03/2008 12:36	
Performance Review	3	15	27/04/2009 15:51	
Presence and Nature of NIM	16	31	20/06/2008 15:11	
Priority Owners	4	4	29/05/2009 15:48	

	self management	5	5	31/03/2009 14:15	
	Tasking Problem	6	7	11/06/2008 09:42	
	Use of information to support decisi	7	9	13/03/2009 14:33	
Name /		Sources	References	Created On	Created
	5 Affecting	38	84	12/12/2007 12:37	SR
Name /		Sources	References	Created On	
	Affecting through Communication	11	26	02/04/2009 19:51	
	Affecting through Competition	1	2	28/04/2009 20:27	
	Affecting through Culture	15	23	23/02/2009 15:03	
	Affecting through IT support	1	1	29/04/2009 16:50	
	Affecting through People	21	48	18/02/2009 15:12	
	Affecting through Planning	4	6	18/02/2009 12:00	
	Affecting through Process Change	7	9	26/02/2009 12:14	
	Affecting through Process Improve	26	56	18/02/2009 15:09	
	Affecting through Quality Assurance	7	9	01/05/2009 15:59	
	Affecting through Resource Control	16	29	18/02/2009 15:12	
	Affecting through Rewards	3	8	23/03/2009 19:48	
	Affecting through Standards	5	10	23/03/2009 19:13	
	Affecting through Tasking	12	18	11/02/2009 10:59	
	Affecting through Teamwork	1	1	02/04/2009 19:44	
	Affecting through Training	7	10	23/03/2009 19:51	
	Blame and Caution - Responsibility	7	8	12/02/2008 18:11	
	Feedback Type	5	8	12/03/2008 13:14	
	Influencing Choices by Staff	4	6	28/04/2009 19:22	
	Intrusive Management or not	6	6	03/04/2009 14:40	
	Perception of being managed	8	15	25/01/2008 15:43	
	productivity and quality	2	4	01/06/2009 11:09	
	silo thinking	1	1	04/03/2009 16:58	
	Tension between objectives from dif	1	1	06/05/2009 11:14	
	Tension Performing and Delivering	2	3	22/05/2008 14:22	
	Top Down Approach	5	7	24/04/2009 11:19	
Name /		Sources	References	Created On	
Name /		Sources	References	Created On	Cr
	6 Achieving	26	59	06/12/2007 15:15	S
Name /		Sources	References	Created On	
	Embedding degree	2	3	28/12/2007 1	
Name /		Sources	References	Created On	
	Communication imp	5	5	20/01/2008 13:48	
	Double loop	3	4	28/12/2007 11:19	
	Formalise procedur	1	1	28/12/2007 11:25	
	Learning in short ter	1	2	20/01/2008 13:45	
	Memo	1	1	28/12/2007 11:10	
	New modes of work	0	0	28/12/2007 11:20	
Name /		Sources	References	Created On	
	Enacted by	1	3	14/03/2008 1	
Name /		Sources	References	Created On	
	DCMU	3	3	14/03/2008 15:00	
	Org Members	4	5	14/03/2008 15:10	

Name	Sources	References	Created On
Performance Outcomes	12	20	05/02/2008 1:
Name	Sources	References	Created On
Appropriate Outcom	1	2	03/06/2009 15:51
Environmental Impa	9	12	14/03/2008 14:32
Impact on Staff	2	5	03/06/2009 15:37
Org Behaviour Cha	16	23	14/03/2008 14:
Outcome - Apparen	11	19	14/03/2008 14:
Outcome - Public c	5	8	18/02/2009 14:
Perverse Outcomes	28	55	11/02/2008 14:
Name	Sources	References	Created C
Time to impact	2	3	02/04/20
Name	Sources	References	Created On
Older Versions of Group	0	0	19/11/2009 13:48
Organisation The	0	0	13/02/2009 19:30
Perception of being man	6	10	24/06/2008 18:36
Performance Goal	13	20	12/03/2008 12:59
Perception of Change	37	64	18/01/2008
Performance Assessment	27	53	18/03/2008
Name	Sources	References	Created On
APACS	13	32	04/03/2009 11:40
Comprehensive Area As	1	1	17/02/2009 16:28
HMIC	4	4	02/06/2009 10:17
Local Assessment Fram	4	6	06/05/2009 11:48
Performance Matrix	2	9	27/04/2009 15:46
PPAF	12	25	04/03/2009 11:40
SPPF	20	60	04/03/2009 11:41
Performance Culture	32	57	28/01/2008
Name	Sources	References	Created On
Acceptance of Culture	1	2	03/06/2009 15:49
Awareness of Performan	7	15	03/03/2009 11:37
Bottom up culture	1	1	09/06/2008 12:18
cascade down	2	5	31/03/2009 11:03
Citizen Focus Culture	5	5	10/02/2009 13:15
Culture and Meetings	6	7	28/03/2009 15:29
Culture and Staff	19	31	16/02/2009 16:27
discretion	3	4	31/03/2009 11:05
Drivers for Culture or cha	23	45	10/02/2009 13:34
Federated Culture	1	1	06/05/2009 14:27
figures as a stick to beat	4	5	31/03/2009 11:01
focus on numbers or not	15	24	31/03/2009 11:06
Introverted View	1	3	12/02/2009 15:25
League Tables	33	66	31/03/2009 11:09
Learning Culture	4	5	24/02/2009 12:01
Looking Forward	2	3	08/06/2009 15:27
Methods of influencing P	11	20	10/02/2009 13:40
Prevention not Detection	1	1	02/06/2009 16:34

	Rollercoaster v Sustaina	3	4	19/02/2009 10:59
	Stickiness of Culture	9	15	06/03/2009 15:48
	Unique culture	1	2	05/05/2009 19:19
	Performance Direction	1	1	27/12/2007
	Performance is outwith co	0	0	28/12/2007
	Performance is within cont	2	3	28/12/2007 14:0
	Performance Level	1	1	28/12/2007 12:0
	Name /	Sources	References	Created On
	Area	17	62	28/12/2007 12:12
	Division	53	147	28/12/2007 12:10
	Force	29	72	28/12/2007 12:09
	Individual	50	137	28/12/2007 12:14
	Joint Partnership Perfor	8	37	04/02/2008 13:40
	National	9	11	05/01/2008 14:51
	Neighbourhood	2	2	19/02/2009 13:03
	Stakeholder	1	5	26/02/2008 11:23
	Strategic	4	8	10/05/2009 17:12
	Strategic - Operational te	5	6	30/01/2008 08:19
	Tactical	3	4	10/05/2009 17:14
	Team	34	106	28/12/2007 12:13
	Performance Management	3	4	12/02/2008 20:4
	Performance Process	9	18	15/01/2008 21:1
	Performance Role	12	15	26/12/2007 14:3
	Name /	Sources	References	Created On
	Accountability Role	47	137	26/12/2007 14:39
	Control Role	27	71	26/12/2007 14:40
	Getting more from less	1	1	07/01/2008 11:45
	Improvement Role (as di	38	103	21/01/2009 17:58
	Learning Role	13	29	26/12/2007 14:39
	Relevance of PM to Res	3	3	30/05/2009 14:27
	Performance Type	2	2	08/01/2008 16:5
	Name /	Sources	References	Created On
	EFQM Type	5	6	08/05/2009 11:09
	General Performance Pr	9	12	08/01/2008 16:56
	Non Crime Business Org	4	7	10/02/2009 20:03
	PAM	19	54	29/04/2009 14:42
	Strategic Objectives	5	6	04/02/2008 14:29
	Type Continuous Improv	8	13	18/02/2009 15:11
	Type NIM TandCG	33	72	08/01/2008 16:55
	Type Single Issue PM	1	1	09/02/2009 18:55
	Unit Method	2	3	29/04/2009 12:03
	Platform Project	19	32	05/06/2009 15:0
	Process Evidence Type	3	6	15/01/2008 13:3
	Sources of Learning	1	1	29/04/2009 16:3
	Structure and Function	6	7	22/04/2008 15:3

Targets	19	30	27/05/2008
Name	Sources	References	Created On
hits the target but misses	2	4	27/04/2009 10:45
Impact of Centrally Impos	8	16	27/05/2008 16:01
Impact of Target	20	30	27/05/2008 16:01
Source of Target	5	6	24/04/2009 11:20
Targets reduce discretio	3	5	28/04/2009 20:20
Targets replace 'Thinking	1	1	29/05/2009 15:23
Understanding role of tar	5	6	27/05/2008 16:01
Tasks	1	1	17/12/2007
Tensions	1	1	06/05/2009
Name	Sources	References	Created On
Departmental Tension	1	1	05/06/2009 11:41
Tension between Plannin	1	1	06/05/2009 14:32
Tension between SPPF	3	6	02/06/2009 16:51
Tension from hierarchy o	2	2	04/02/2008 13:42
Tension public police	3	4	06/02/2008 11:10
Theory in Use	3	4	25/05/2009
What is Performance	39	63	27/12/2007
Name	Sources	References	Created On
Case 1 - What is perform	11	31	10/09/2009 12:33
Performance as Outcom	7	13	27/12/2007 08:28
Performance as Potential	2	3	03/01/2008 15:43
Performance as Producti	12	21	07/01/2008 13:20
Performance is Measure	1	1	01/06/2009 19:53
Risk Reputation Results	7	9	09/06/2008 12:28

Figure A-3 - Tree Nodes List. Source: Author derived in NVivo.

The tree node list is extensive, representing the wide range of issues identified by interviewees. All of these issues are not discussed in this thesis, many being related to separate questions regarding the nature of PM and OL.

The folder structure at the conclusion of the analysis is shown in Figure A-4. Again, this is the result of the data collected from five Cases, three of which were used to develop this thesis.

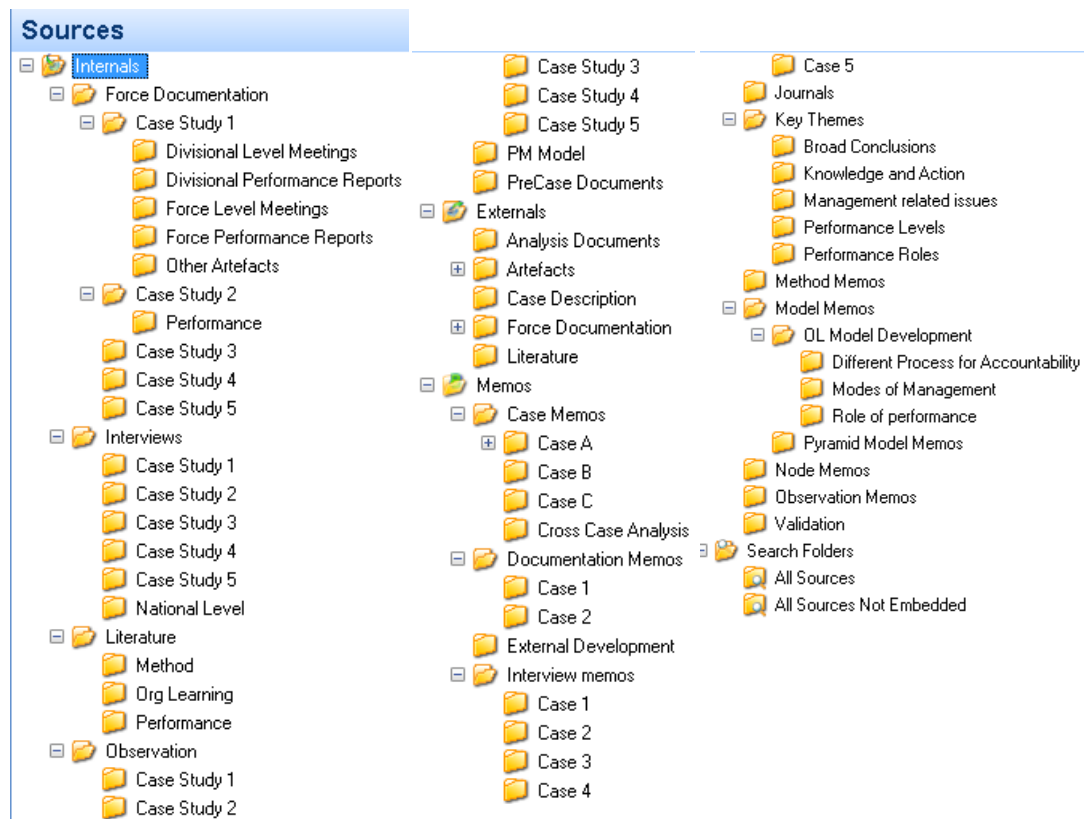


Figure A-4 - Folder Structure at Conclusion. Source: Author derived in NVivo.

It has been shown that the use of NVivo enable a large volume of data, and the resulting analysis, to be structured in a comprehensive and understandable manner. Without such a tool, in all likelihood, the analysis would have been unmanageable.

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B-1 INTRODUCTION TO INTERVIEW QUESTION MATRIX

Chapter 6 described the development of the research questions from the OL Model of PM.

This appendix identifies the nature and distribution of interview questions used within the data collection process. The format of questions depended on prior discussion and the knowledge of the interviewee. They are therefore situation dependent. These have therefore been summarised in this Appendix under a question topic.

Questions are largely structured around the “a priori” construct of the OL Model of PM (see Chapter 6). Few questions were specifically asked regarding factors influencing PM as these were derived from the emic issues raised by the interviews.

The variety of questions is explained by three factors; the range of roles and aspects in which interviewees were involved requiring specific sets of questions for each role; the refinement of questions as knowledge developed through the case studies, responding to issues raised by interviewees during interviews in order to explore these further.

A small number of elite respondents (Miles & Huberman, 1984) were also included, that is senior or experience staff who provided a statement of their views of performance without the need for specific questions being posed.

Figure 1 shows the number of question subjects against each case. It should be noted that the Case Studies were driven by replication rather than sampling logic and are therefore not of equal size.

Subsequent pages provide a matrix for each case, A, B and C. Each matrix provides the list of questions areas, grouped by topic, against the list of transcripts from both interviews and focus groups. A filled cell represents the use of that question in that interview or focus group.

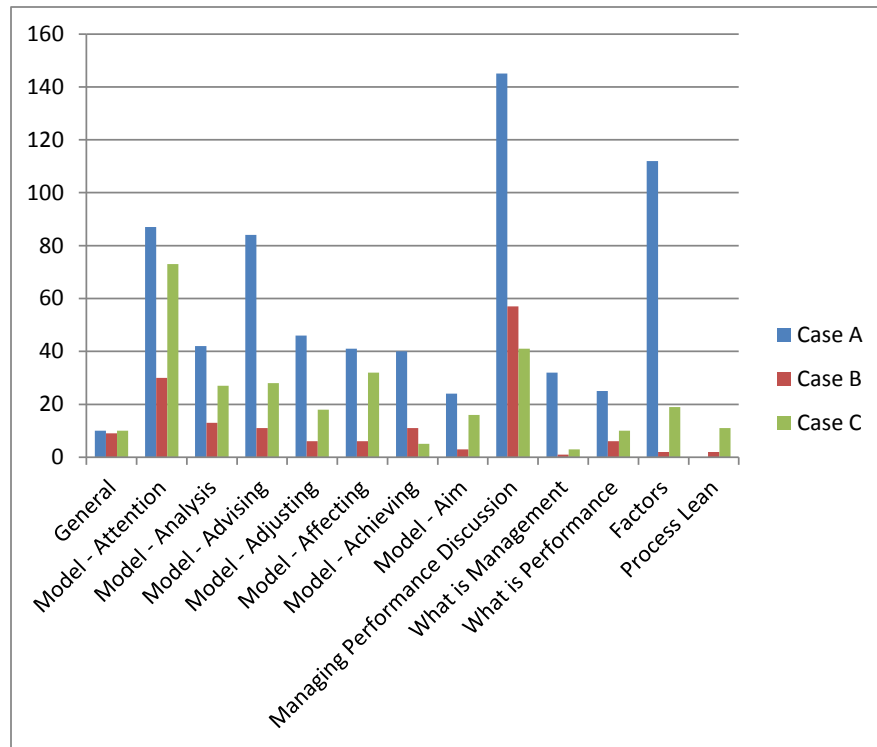


Figure B-1 - Distribution of Interview Questions by Case

Case A		Int 101	Int 102	Int 103	Int 104	Int 105	Int 106	Int 107	Int 108	Int 110	Int 111	Int 112	Int 113	Int 114	Int 115	Int 116	Int 117	Int 118	Int 119	Int 120	FG 121	Int 124	Int 125	Int 126	Int 127
Attention	1 Attention																								
	Activity Analysis																								
	Assess Performance																								
	Assessing Public Perception Service																								
	Availability of Perf Inf																								
	Change of focus																								
	Choice of Indicators																								
	Contribution of Indicators to Outcomes																								
	Effectiveness/ Role of information																								
	Frequency of Attention																								
	Impact of performance targets or indicators																								
	Level of Attention																								
	Limitations of the use of Perf Inf																								
	Links between National and Local Indicators																								
	Method of Annual Assessment																								
	Use and misuse of information																								
	Use of Quality Indicators																								
	Use of surveys																								
	What or how is assessed																								
	Data Collation Process																								
Analysis	2 Analysis																								
	Analyst Capability																								
	Analyst Training																								
	Analytical methods and support																								
	Data Availability																								
	Qualitative Analysis																								
	Role of Analyst																								
	Use of Control Limits																								
Advising	3 Advising																								
	Ability of Recipients to Comprehend																								
	Capability to create reports																								
	Design of perf information																								
	Impact of reports																								
	Means of presenting data																								
	Nature of Reports																								
	Performance Artefact Use																								

Appendix B – Interview Question Schedule

[illegible]

Appendix B – Interview Question Schedule

[illegible][illegible]

[illegible]

Table B-1 - Interview Questions Matrix Case A (Derived by author)

Case B		Int 401	Int 402	Int 403	Int 404	FG 405	Int 406	FG 407	Int 408	Int 409	Int 410	Int 411	Int 412
Attention	1 Attention												
	Activity Analysis												
	Assess Performance												
	Assessing Public Perception Service												
	Availability of PerfInf												
	Change of focus												
	Choice of Indicators												
	Contribution of Indicators to Outcomes												
	Effectiveness. Role of information												
	Frequency of Attention												
	Impact of performance targets or indicators												
	Level of Attention												
	Limitations of the use of PerfInf												
	Links between National and Local Indicators												
	Method of Annual Assessment												
	Use and misuse of information												
	Use of Quality Indicators or Approach												
	Use of surveys												
	What or how is assessed												
	Data Collation Process												
Analysis	2 Analysis												
	Analyst Capability												
	Analyst Training												
	Analytical methods and support												
	Data Availability												
	Qualitative Analysis												
	Role of Analyst												
	Use of Control Limits												
Advising	3 Advising												
	Ability of Recipients to Comprehend												
	Capability to create reports												
	Design or content of performance information												
	Impact of reports												
	Means of presenting data												
	Nature of Reports												
	Performance Artefact Use												
	Relevance of context to interpretation												
	Reports and Advising on perf												
	Selection of Focus												
	Users or Role of Performance Information												

Appendix B – Interview Question Schedule

[illegible]

[illegible][illegible]

	Dangers of accessible information											
	Means of avoiding chasing numbers											
Process	Process Improvement											
	Trained in Process Improvement											
	Nature of Learning Role											
	System Thinking											
	Presence of Process Focus											
General	Centralised v Local PM											
	Descriptive of Case											
	Other Issues											
	Received influence from above on action											
	Elite Interview											

Table B-2 - Interview Questions Matrix Case B (Derived by author)

Case C		Int 501	Int 502	Int 503	Int 504	FG 505	Int 506	Int 507	Int 508	Int 509	Int 510
Attention	1 Attention										
	Activity Analysis										
	Assess Performance										
	Assessing Public Perception Service										
	Availability of PerInf										
	Change of focus										
	Choice of Indicators										
	Contribution of Indicators to Outcomes										
	Effectiveness. Role of information										
	Frequency of Attention										
	Impact of performance targets or indicators										
	Level of Attention										
	Limitations of the use of PerInf										
	Links between National and Local Indicators										
	Method of Annual Assessment										
	Use and misuse of information										
	Use of Quality Indicators or Qual Approach										
	Use of surveys										
	What or how is assessed										
	Data Collation Process										
Analysis	2 Analysis										
	Analyst Capability										
	Analyst Training										
	Analytical methods and support										
	Data Availability										
	Qualitative Analysis										
	Role of Analyst										
	Use of Control Limits										
Advising	3 Advising										
	Ability of Recipients to Comprehend										
	Capability to create reports										
	Design or content of performance information										
	Impact of reports										
	Means of presenting data										
	Nature of Reports										
	Performance Artefact Use										
	Relevance of context to interpretation										
	Reports and Advising on perf										
	Selection of Focus										
	Users or Role of Performance Information										
Adjusting	4 Adjusting										
	Balance Quality with Productivity										
	Decision Making Process										
	Does Information Support Decisions										
	Learning based on why question										

Appendix B – Interview Question Schedule

	Nature of Meetings									
	Outcomes of decision making processes									
	Performance Info as driver for change									
	Role of Meeting									
	Subject of Meeting									
	Who is perf information user									
Affecting	5 Affecting									
	Activity as behaviour change									
	Causes of Unintended Consequences									
	Deal with process or individual									
	Embedding new or best practice									
	How is behaviour affected									
	Impact of measures									
	Impact on SMT									
	Putting Responsibility on FLM to Manage									
	Role of TCG or NIM in Affecting									
	Use of Comparison to influence									
Achievement	6 Achievement									
	Achieving strategic alignment									
	Cause of performance change									
	Means of Monitoring Results									
	Outcomes of PM practice									
	Priorities as driving PM									
	Results Analysis									
	Value of Public Perception									
Org. Purpose	Direction Planning Objectives									
	Nature of Direction Received									
	Downward guidance on direction									
	NIM and Strategic Planning									
	How are aims developed									
	Planning as driving PM									
	Awareness of Div or Force performance or priorities									
Management	Management of Performance									
	Ability of Team level to address process									
	Accountability and Objective Based PM									
	Accountability and PM									
	Changes to PM practice									
	Changing Performance Culture									
	Change over time or difference									
	Timeline for change									
	Impact of Green Paper									
	Q Concerns with applied process									
	Dealing with Issues									
	Difference in P at Ind level									
	Direction of PM use at Div Level									
	Driver of low level accountability									
	Drivers for introduction of PM									
	Experiences. Description of PM									

	Extent of Challenge and PM Process									
	Future Development of Practice									
	Impact of Platform Project national data									
	Impact of SPPF or other framework									
	Nature of Performance Culture									
	Partnerships									
	PM and TandCG process									
	Relationship of NIM to other performance approaches									
	Subjects role in performance process									
What is Management	Nature of Management									
	Causes Focus on Numbers									
	Drivers for adopting role									
	Make up of Performance Team									
	Management Training									
	Nature of PM at Team level									
	Source of performance culture									
	Role of performance									
What is Perf	Nature of performance									
	A-L conflict									
	Apparent v Actual									
	Relative Performance									
	Views of what performance is									
Factors	Potential Barriers									
	Need to develop skills of management									
	Means of avoiding silo thinking									
	Means of avoiding competition									
	Means of overcoming barriers									
	Barriers or issues									
	Knowledge retention									
	Dangers of accessible information									
	Means of avoiding chasing numbers									
Process	Process Improvement									
	Trained in Process Improvement									
	Nature of Learning Role									
	System Thinking									
	Presence of Process Focus									
General	Centralised v Local PM									
	Descriptive of Case									
	Other Issues									
	Received influence from above on action									
	Elite Interview									

Table B-3 Interview Questions Matrix Case C (Derived by author)

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C-1 INTRODUCTION TO NVIVO CODING EXAMPLE

Appendix A described the application of NVivo 8 (QSR International Pty Ltd, 2007) to the analysis of data within this research and the coding techniques applied transcripts of interviews. To provide an illustration of the coding method, this Appendix shows a worked example.

The nature of the analysis (see Chapter 5) required a range of coding techniques to be applied to the transcripts of interviews obtained during case studies. Given this range and the range of coding topics it is impractical to fully represent the full range of coding in one page. Furthermore, despite all the advantages of NVivo, there are limitations on its ability to output a concise representation of coding in larger studies other than a detailed list of the content coded at each node (effectively turning each interview into 1000 page report). To address this then, an example demonstrating how the key nodes were applied to the text of the transcript is provided.

The choice of sample is based on the need to provide a clear indication of coding techniques, whilst maintaining the anonymity of interviewee (as agreed at the time of the interview) and any personal information contained in the interview. The example chosen is based on this criteria rather than being representative.

The practice of coding involves the selection of the relevant text, followed by the selection (or creation) of the relevant node or nodes. Whilst coding was often based on whole paragraphs, coding may apply to a number of paragraphs, the whole interview, a sentence or even a group of words as was appropriate to the content.

Presented on the following pages are a series of “screen prints” of a transcribed interview within NVivo. The “coding stripes” indicate where pieces of text are coded to a selection of the more relevant nodes.

NVivo indicates areas of coding using “coding stripes”. The layout of each page has been transposed to allow the maximum number of coding stripes to be displayed in a landscape layout. Coding stripes are labelled according to their how these were categorised at the end of the coding process. For clarity the colouring automatically provided in NVivo has been retained.

Whilst in NVivo coding stripes can be selected on screen to more easily identify the coded text, this cannot be represented in a “static” document such as this Appendix.

[illegible]

[illegible]

503 SMT E District

File Edit View Project Links Code Format Tools Window Help

Source of Target

Impact of Centrally Imposed Targets
Learning Role
Improvement Role (as distinct from Learning)
Perception of Accountability
Accountability Role

Individual
Division
Area
Performance Assessment Framework
Influence Risk and Reputation
Achieving - Evidenced by
Achieving - Completion of OL
Achieving - Alignment with Purpose
Element 6 Achieving

Trigger Change
Sources
Outcomes
Element 4 Adjusting
Advising c - Origin
Advising a - Provision and Communication
Element 3 Advising
Element 2 Analysis
Element 1 Attention

Dimension Organisational Knowledge (provisional)
Dimension Management Ability
Dimension Leadership
Dimension Information Value
Dimension Decision Making
Coding Density

Dimension Organisational Purpose

and because you lead them away from the DPP people and daily...
the idea, you know we're looking at message... coming to me was not know
spending time of others, come in today, come in today, come in today.

Facilitator:
It's not just yourselves.

Interviewee 1:
Absolutely. So basically, that's really what it's about, right? But at the
minute we don't really have a very explicit mechanism to capture the qualitative
work that being done and its being moved forward now across the districts.

Facilitator:
So I'm able to talk to people in a broad sense, is the topics in there that they
cover, are they the topics or do they just happen to be that the target is that
are several measures that we've got to respond to in terms of account ability or
do you think covers the issues that you've got within this area?

Interviewee 1:
Well I think most of them, some of them, you know, I certainly wouldn't look
at volume crime, if that's one of those areas, like police district, I don't think I
know, the sort of two or three of the police districts are used because it
doesn't tend to be as much as we don't have a particular capability with in the district. So, I
think that's the main reason why we don't have a particular capability with in the district.
I think that's the main reason why we don't have a particular capability with in the district.
end of the coming year, next March, the Chief Constable will be led to account
around the organisational performance against those particular crime classification
areas. So that's likely to be the point of view of the phase and the
cascading down, then it's two regional MOCs perspective, they need to be leading the
performance targets to account because the Chief Constable is leading them through it,
but then it's cascaded down to the regional level and then it's cascaded down to the district
level so it's a series of things that are going on.

Facilitator:
Yeah that's right.

Interviewee 1:
So that's where we're doing it, it's not performance management, it's just what
our targets are, we'll be making sure that we are basing what we
against those targets.

Facilitator:
Yeah that's right. We've got a problem in Scotland, the Board's noticed they've over-
in deciding what the target is and then they can become quite arbitrary and you know
to process, when it's the Board and the Chief Constable you're dealing with the relevant
is important, that's what gives it the...

Interviewee 1:
Indeed and particularly as the Board is seeking to try and inform that by understanding
what's been achieved, which is seeking to be aligned with the community
processes, it's an attempt to engage the community at the bottom, to try and
inform the thinking around what the best targets are.

Facilitator:
Yes okay. And reliability, the information again here because you said that just
coming to you that situation it's perceived that you're not meeting the target. Do
you think that's an issue that you're facing in terms of reliability of the data?

Nodes: 615 References: 1665 Read-Only Line: 803 Column: 98

[illegible]

[illegible]

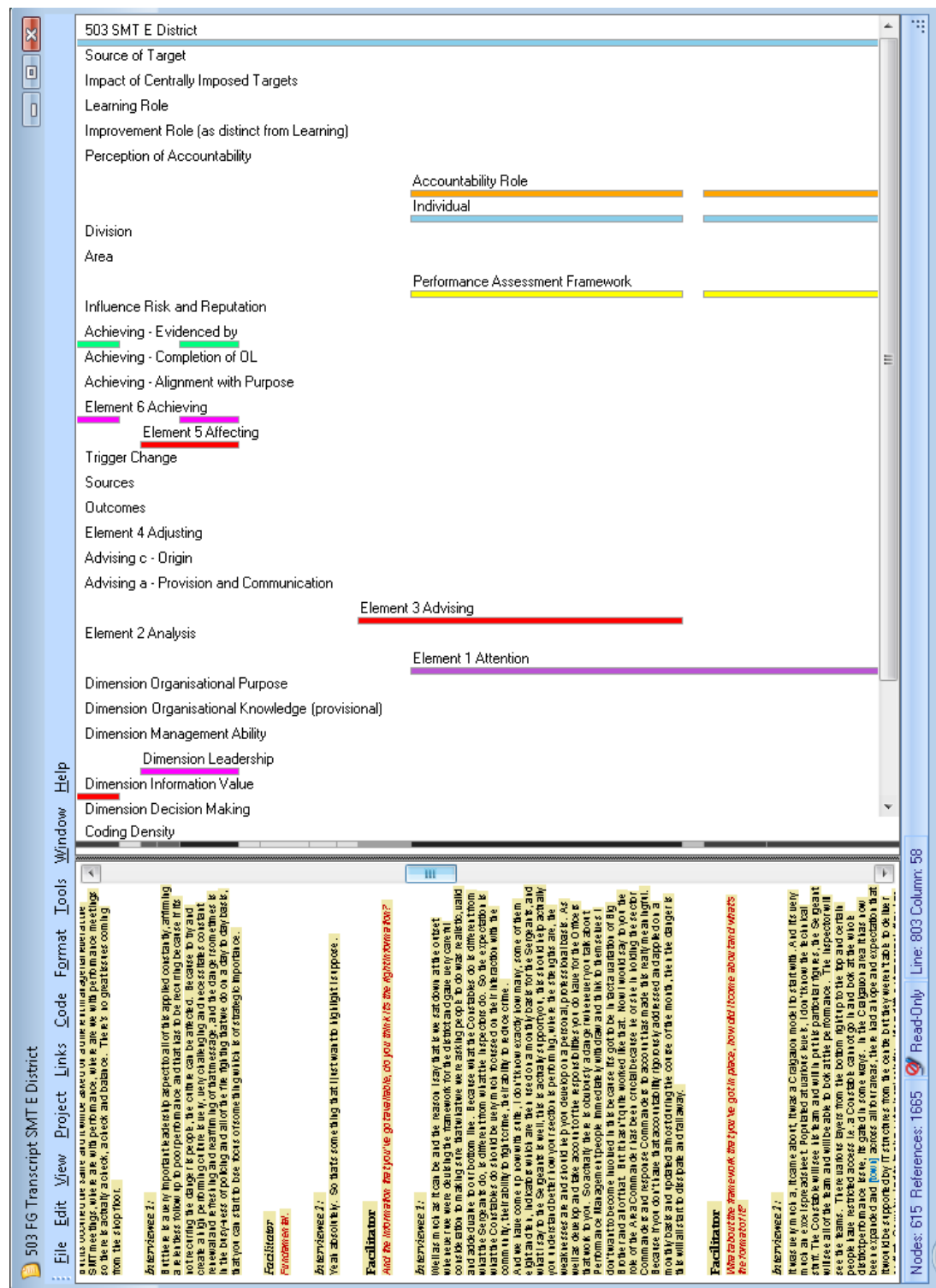


Figure C-1 - Coding Example in NVivo (QSR, 2008) (Derived by author in NVivo)

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