An Examination of Development Factors
in the
UK Children's Multimedia Market

Audrey McIntosh Anthoney
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The Robert Gordon University
Aberdeen Business School
Department of Communication and Languages
Garthdee Road
Aberdeen
AB10 7QE

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AUDREY McINTOSH ANTHONEY

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Declaration

The candidate has not, while registered for this PhD submission, been registered for another award of the University or other academic or professional institution.

None of the original material in this thesis has been used in any other submission for an academic award.

Audrey M Anthoney

This work is dedicated to my Mum and Dad.

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Abstract

The project topic developed in early 1998 as it emerged that there was a need for research into the area of children's multimedia in the UK. Research by others into the area of 'generic' multimedia, products and technology, had been ongoing since the mid-1990s when the multimedia market started to develop rapidly. However, research focusing specifically on children's multimedia was lacking. Children's multimedia, which makes up a large share of the UK multimedia market, grew rapidly in the late 1990s as PCs, hardware, software and online use increased and related costs reduced in the UK. It was useful to study the children's multimedia market, as a leading edge example from the multimedia sector undergoing change, for publishing companies in other sectors learning how to develop their 'businesses' for multimedia production. This sector was identified as an interesting, evolving and original area in which little was known about in terms of the market forces, consumer, company types involved, company activities and product features. The research analysed in depth the children's multimedia industry in the UK and the challenges and successes in adapting to change in this volatile market. Questionnaire surveys in 1998 and 1999 were used to obtain market and background information into the market situation and company activity (successful and otherwise). A Children's Multimedia Five Force model (developed from Porter's model (1980)) was designed to outline the key external forces affecting the strategic development of two company types, publishing and 'new media companies' (companies set up in the 1990s for the purpose of producing solely multimedia), studied in the UK children's multimedia market. Interviews were undertaken in 1999 and 2000 with the successful companies identified in order to critically analyse both their internal and external activity and development. Internal activities, factors adding value, or contributing towards development which the companies studied either had or required, (in relation to product, structural, procedural, and strategic development) have been outlined in a Children's Multimedia Value Chain. This value chain was informed by elements of Porter's Value Chain model, and adapted versions of his original model by Vista International, and Diebold. This more detailed model has been developed with empirical evidence from a sample of successful children's multimedia companies. This seems to be the first study involving the development of models grounded in the reality of the developing and changing world of multimedia. The research also directly contributes towards projects and initiatives being encouraged by the European Commission and UK Government encouraging the growth and development of multimedia products and companies in the UK at the time of study. It also provides original insight into strategic change management in the publishing sector, and outlines analytical approaches which can be adapted or transferred to other publishing areas. The findings, particular to this children's multimedia market study, are intended to create interest in the model and to provide a starting point that can be further elaborated by researchers in other sectors of the publishing industry, or related areas such as the information, communications or 'multimedia' industries. Other studies surveying the requirements of 'children', 'parents' or 'educators' could potentially build on the findings of this research, which focused on the company and market situation. The modelling structures could also be developed or adapted to involve a more quantitative analytical approach – measuring costs, financial output and implications of multimedia production, which would develop this study which focuses on the core resources, skills, competencies and relationships within children's multimedia companies.

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GLOSSARY OF ABBREVIATIONS AND TERMINOLOGY

AAIM	Association for Applied Interactive Multimedia
ADMEDIA	Advertising Media
ADOL	Automated Data Online
AIM	Association for Information Management
ASDLs	Abstract Syntax Description Language
AV	Audio Visual
BA	Booksellers Association
BBC	British Broadcasting Corporation
BECTA	British Educational Communications and Technology Agency
BETT show	British Educational Technology Trade Show
BIC	Book Industry Communications
BIDS	Bath Information and Data Services
BIMA	British Interactive Multimedia Association
BML	Book Marketing Limited
Bookweb	Book publishing information online
Broadband	Enables the provision of long-distance, international and wireless services and internet access
Broadcasting	Transmission by wireless or digital platforms in the form of a 'programme' or 'show' usually on television or radio
BT	British Telecom
BUBL	Bulletin Board for Libraries
CAPP	Council of Academic and Professional Publishers
CD Extra	Compact Disk Extra
CD I	Compact Disk Interactive
CD Rewritable	Compact Disk Rewritable
CD-ROM	Compact Disk Read Only Memory
CD-ROM XA	Compact Disk Read Only Memory XA
Children	Persons of pre-school, 5-8, and teen age groups
CONDRINET	A study looking at Content and Commerce-Driven Strategies in Global Networking
DFEE	Department for Education and Employment (UK Government)
DGXIII/E	European Commission Programme on Multimedia Development
DIALOG	Database of Information on a wide range of disciplines
Digital	Displaying and representing data as a series of numerical values
DTI	Department of Trade and Industry (UK Government)
DVD	Digital Versatile Disk
Educational Multimedia Task Force	Collection of content providers and projects funded by the European Union
E-commerce	Sales and transaction of content and services online
EC	European Commission
ECTS	European Computer Trade Show
Electronic	Concerned with operating or using CD-ROM devices
Electronic publishing	Publishing in a format for CD-ROM, DVD and other new media, defined as 'multimedia publishing' in this research study
EMA	European Multimedia Association
EPIC	Electronic Publishers International Conference
ELPUB2	Project on Strategic Developments for the European Publishing Industry towards the year 2000
EPC	Educational Publishers Council (holds multimedia seminars with PA and IEPRC) (EPC also refers to the European Publishers Council)
EPF	Electronic Publishers Forum

EPS	Electronic Publishing Services
EPSG	Electronic Publishing Steering Group
EPTNIS	European Publishing Training Needs in the Information Society
EP users	Electronic Product Users
ESPA	Educational Software Publishers Association
EU	European Union
FAME	Financial Analysis Made Easy
Five Force Model	Porter's model developed to display external forces influencing and shaping companies in an industry
Games	Multimedia products with playable values (not necessarily educational, but often providing entertainment values)
GEST	Government Educational Support for Technology
Hardware	The physical equipment used in a computer system, such as the central processing unit, peripheral devices and memory
HMIE	Her Majesty's Inspectorate of Education
Home market	Children and families in the home
HTML	Hyper Text Mark-up Language
Hybrid	Cross-over offline and online product or service (with linkages complimenting formats)
ICCC	International Council for Computer Communication
Interactive Digital Media	Study assessing potential impact of technology on the development of interactive media up to 2003
ICT	Information Communications Technology
IE214 SIMPLE	Study of Integrated Multimedia Publishing Learning Environments
IE443	Study of dynamic publishing with multimedia, information engineering in communication
IEEE	Institute of Electrical and Electronic Engineers Computer Society
IENM	Institute for Information Economy and New Media (hold joint seminars with PA and EPC)
IEPRC	International Electronic Publishing Research Committee
IMPACT-2	Programme set up to provide information about projects and initiatives in electronic publishing
IMAS	Interactive Media Association Scotland
Info 2000 Programme	Project set up by EC in 1996 to provide strategic insight and guidance to European publishers entering the multimedia market
In-house	Within a company
Interactive (or web) TV	TV with features offering option to interact online
IT	Information Technology
Leonardo da Vinci	A European Commission EUROPA Education and Training funding programme
LIBF	London International Book Fair (host of Digital Media Showcase)
LISA	Library and Information Science Abstracts
MIDAS-NET	Initiative of INFO2000 programme aiming to create new markets by stimulating the creation of high quality multimedia content
Multimedia	Electronic, digital, audio-visual, CD-ROM, online, e- and book Publishing (e-books and games not included in this study)
National Grid for Learning	Gateway to educational resources on the internet
Networked environments	Inter-connected environments online
Net Year	Labour Government's year of focusing on the Internet 1998
New Generation	Children in the late 1990s, 2000s onwards possessing a good working knowledge of new media

New Generation Publishers	Publishers set up in the 1990s with the specific purpose of producing multimedia (as defined by Feldman, 1997). These companies are referred to as 'New Media' companies in this research
New Media	Most recent multimedia products (CD-ROM, DVD and 'online content', and interactive TV at the time of this study)
New media companies	See New Generation Publishers
NC	National Curriculum
NCET	National Council for Educational Technology
NMK	New Media Knowledge seminars (Seminars set up to provide information about new media developments with presentations from industry speakers such as Morrisson, Ball et al. Information about NMK is available online)
NOP	National Opinion Poll
Offline	Book, audio-visual, CD-ROM, DVD (physical product)
OFTEL	Office of Telecommunications
Online	On the Internet
Online community	Community on the internet (users and suppliers)
OUP	Oxford University Press
Outsourcing	The supply and use of resources externally
PA	Publishers' Association (holds joint multimedia seminars with IEPRC and EPC)
PC	Personal Computer
PDAs	Personal Digital Assistants
PIN	Parent's Information Network
PIRA	Publishing International Research Association
Publisher	A company publishing books and other media
Publishing	Producing and issuing (printed matter) for distribution and sale.
Schools market	Teachers/educators and children in a classroom or childcare group situation (products sold to this market for teaching and learning purposes)
S-Curve	Foster's diagram which explains the relationship between time and technology (innovation)
SIIA	Software and Information Industry Association
SMEs	Small to Medium-sized Enterprises
Software	The programmes that can be used with a particular computer system. CD-ROM, DVD for example, for use within a particular system
SPA	Scottish Publishers Association
Successful companies	Defined for this study as those companies producing a substantial range of innovative, creative offline and online multimedia products for children which has increased over the past five years
TEEM project	Teacher's Evaluating Educational Multimedia project
Telecommunications	The science and technology of communication of audio and video information by means of radio waves, optical signals, etc.
TFPL	TaskForce Pro Libra (an information services provider) (TFPL Directory information was updated in the Waterlow New Media CD-ROM, 1999/2000)
Traditional Publisher	A company producing books as its main business
Value	The desirability of something often in respect of its usefulness, exchangeability, worth, merit or importance, reasonable or equivalent return, and satisfaction (referred also in this research to be core resources, skills, competencies, capabilities)

Value Chain Model	Porter's model used for outlining areas of value in a company
Virtual Libraries	Libraries active on the Internet
Virtual Marketplace	Internet platform for companies to buy, sell, promote and distribute products and services
Virtual Organisation	Organisation active on the Internet
Vista International	Group of associated writers such as Bide, Shatzkin, et al researching and commenting on the publishing industry. Information about the group's projects is available online.
WAP	Wireless Application Portal
WWW	World Wide Web

Chapter 1: INTRODUCTION

The research aimed to develop an in depth analysis of the children's multimedia market in the UK and the challenges and successes companies have experienced in adapting to change in a volatile market. The children's multimedia market was studied as an example of a leading edge sector undergoing change, and consequently provides an insight into some of the issues other publishing companies should be considering when entering the 'business' of multimedia. The study examined two company types in the UK: book publishing companies and 'new generation' publishers (companies set up in the 1990s for the purpose of producing solely multimedia) (Feldman 1997, 14) or 'new media' companies (as referred to in this study). Models were developed to outline firstly, external forces affecting companies in the marketplace, and secondly, companies' strategic, core and support activities identified as adding value and encouraging development in the children's multimedia market. Although there had been some research into the development of the generic multimedia industry from the mid 1990s onwards, there appears to have been no research investigating factors affecting the development of companies in the children's multimedia market. The models (adaptations of Porter's Five Force and Value Chain models) help to outline the development factors particular to the children's multimedia companies studied in this research. They are the first evidence-based models outlining the children's multimedia market situation in the UK. The research recognises the need to develop business models which companies could use to help their systems and functions cope with a changing market environment. The study had to take into account the evolving terminology and concepts relevant to the product, company and market structures, features and influences and forces involved in the children's multimedia market. Such concepts or terminology included descriptions such as 'electronic', 'digital', 'interactive', 'multimedia' and 'e-publishing.' There was a need to gather and assimilate knowledge from the rapidly changing areas within the field of 'multimedia'– with changing company types, technology, platforms and product types being used or produced, and the varying influences and forces in the market.

1.1 Market Development

1.1.1 Generic Multimedia

> 'Traditional book publishers have had a chequered and stormy past with new media...but nothing stands still for a long time. The multimedia industry has taken on new meaning and a whole new mature market.' (Craddock 1998)

In 1994, Luey recognised that formal research into strategic and structural processes within even the generic publishing industry was lacking, and three years later, publishers were offered recommendations from a European Commission (EC) study to aid their development in the industry which could be encapsulated in the advice, 'use your core competencies to transform your company' (Andersen Consulting et al. 1997, 5). The project topic developed in early 1998, as it emerged that there was a need for research into the area of children's multimedia in the UK. Research by others

(Feldman, Evans, Cunningham and Smith and Vista International et al.) into the 'generic' multimedia market, products and technology, had been ongoing since the mid-1990s when the multimedia market started to develop rapidly. However, a gap existed in research focusing specifically on the children's multimedia market. The importance of the multimedia industry has been recognised since the mid 1990s and research and development in the industry has been encouraged with initiatives aiming to stimulate the development and use of multimedia (European Commission 1996, 1) and to identify publishers' training needs (Richardson and Birn 1997, 2) in the UK and Europe. As a result, multimedia products have begun to increase in complexity and more sophisticated technology, content, and competition is emerging. These types of studies have recognised and highlighted a compelling need for systematic academic research into the generic multimedia publishing industry involving a requirement for both an external (market) and internal (company) analysis to enable companies to develop strategic models to help them cope with change.

A gap was also identified in research into the process of change and decision-making in the sector. At the London International Book Fair (LIBF'98), it was suggested that the economic cycle of change in the publishing industry had shifted from '7 years to 12 months' (Pethick 1998). Pethick of Encyclopaedia Britannica stated that his company had changed more in the past two years (with the production of their electronic version) than in any other part of their 230-year history. This shift in the industry had become prominent due to the emergence of the Internet as a viable medium, increased accessibility of products, convergence of technology, products and industries, and the globalisation of markets. These external factors and their impact on companies in the multimedia market required investigation based on empirical evidence from a robust and specific market sample. Pethick also noted that the 'multimedia' publishing environment, at that time, required:

> 'altered distribution models, new competitive environments, new product strategies, strategic alliances, a more focused approach on the customer, the emergence of smaller organisations and a requirement for new business models to be created.' (Pethick 1998)

No previous research appeared to have been undertaken examining UK companies' internal factors or activities such as the product and alliance strategies, Pethick mentioned, and developing a coherent model within which development factors for successful adaptation to change could be identified. In the mid to late 1990s, Feldman, Evans, Cunningham and Smith and Vista International were beginning to consider ways of outlining areas of value and strategies for development, but again a more robust model needed to be designed based on empirical evidence from a focused sample from an appropriate sector. Industry commentary at the turn of the century also suggested that companies in the multimedia market must be prepared for further change (Horn 1997) so it was felt that there is a need to research this area if practitioners and researchers alike are to understand, evaluate, and prepare for the challenge of change.

1.1.2 Children's Multimedia

Children's multimedia publishing is of particular interest as it appears to have become one of the largest and most established areas within the UK multimedia market (involving audio-visual, CD-ROM, DVD and online content production) and is the focus of this study. It provides an example of a leading edge sector undergoing change which practitioners in other publishing, information, and communication sectors can learn from. The children's market (schools and home) grew rapidly in the late 1990s as PCs, hardware, software and internet use increased and related costs reduced in the UK. Projects and initiatives by national, educational and EC teams encouraged the growth and development of children's multimedia companies and products in the UK at this time. This area was identified as an interesting, evolving and original area of study in which little was known about in terms of its products, company types involved, and the unique nature of the user/purchaser relationship. The outcome of the research into strategies and models which are to be employed will help facilitate processes for children's publishers in the multimedia market and will be beneficial to industrialists and practitioners in children's publishing, multimedia publishing and related industries.

Collaboration with organisations involved in the study, including Oxford University Press (OUP), BBC Multimedia, The Publishing Training Centre at Book House (formerly the BookHouse Training Centre), and Book Industry Communications (BIC) has kept this research at the forefront of change occurring in the children's multimedia publishing industry and contributes to the development of new links between publishing education and the publishing industry. The Publishing Training Centre, along with the other organisations involved, has confirmed a need for this research, the findings of which may be used within the Publishing Training Centre's training programme in the future. 'The current and future training needs and skills shortages of publishers responsible for the multimedia product need to be researched' (Smith 1997). The research also directly contributes towards trends being encouraged by EC initiatives, in particular, to a study in the Info 2000 programme, which is providing strategic insight and guidance to European publishers entering the multimedia market, enabling Europe to remain ahead of its competitors as it progresses in the 21st century (European Commission 1996).

It was suggested in the literature reviewed prior to this study that a variety of company types were operating in this market, but there was no evidence in the literature about the different nature of these company types. Well established players in the children's publishing industry have arguably been slow in adapting to change and the challenge of 'new media' companies is greater still because of the challenges of product development, negotiating rights and brands, and staff changes and training requirements:

> 'Even the leading and most successful publishers are suffering from the change and instability in the electronic publishing market and new generation publishers are more likely than conventional publishers to embrace change.' (Feldman 1997, 14)

There existed a need to investigate firstly the nature of company types in the market, and the activity of both publishing and new media company types to uncover the areas of development within a variety of

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companies in the UK market. Skills, processes and strategies that both publishers and new media companies have developed for multimedia production also required identification.

1.2 Model Development

Developing effective business models was found to be critical in this new and changing market environment by commentators in the fields of publishing, media and technology such as Feldman, Negroponte et al. Models have already been created in response to the continuous developments in the information industry and as Bide noted, 'Publishers will come under increasing pressure to adapt their business models to the new reality of a commercial environment ruled by the networks' (Bide 1997, 5). Studies have been undertaken on developing a 'strategic fit' to cope with changes in corporate culture and strategy (Scholz 1987, 38), on creating a comprehensive model for measuring the potential impact of IT on organisational strategic variables (Mahmood 1991) and on developing technology strategy surveys for publishing companies (Evans 1996). The research also recognises this requirement, but focuses specifically on the creation of new models for publishing companies entering the children's multimedia market to prepare them for continual changes in a volatile market environment. It appeared that developing an understanding of the external market forces and internal areas of value or activity, which are considered best practice for children's multimedia, could help companies develop new or better practice or business models in the children's multimedia market. Models also needed to be developed to highlight and outline development factors in the context of the children's multimedia market situation, which could also be adapted to fit other sectors of the publishing industry.

There appears to be no business models to date which have been applied to the children's publishing field in relation to the changes in strategies and processes which have been required for multimedia production. No research has specifically studied children's multimedia companies' internal activities or factors contributing towards their development. These areas required investigation within the context of an adapted children's multimedia value chain model (Porter 1985) which aimed to identify and outline areas of development and value in the children's multimedia market.

Porter's Five Force model, 'a checklist for identifying opportunities and formulating strategies' (Porter, 1980, 5), which outlines the structural or shaping forces affecting an industry, (including the threats of competitors such as toy and software companies, buyer power, entry, threats of new or substitute products such as DVD, supplier and buyer power, and other entry effects) was identified in the literature as being a useful tool to help place in context the various factors which are shaping children's publishing and new media companies, providing a good representation of the reality of the market situation. It also aimed to display factors which children's multimedia companies (and others) should be considering to prepare for change. Key elements from change management models studied such as the Change Management Process (Galpin 1996), the Innovation Impact model (Krell 1992), and the Behavioural Change models (Maybey 1993), also provided a theoretical confirmation of the processes which the research sample noted they had undertaken for adapting to children's new media production.

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Factors which both publishers and new media companies use, or consider to be important, for effective adaptation in the children's multimedia market need to be outlined in models adapted for both external and internal company analyses within the children's multimedia market. The models, to be developed, in this study were required to provide empirical evidence specific to the children's multimedia market situation rather than the generic and speculative studies carried out previously. However, from an in depth study analysing key skills, activities, resources, relationships, and product features specific to the children's multimedia market, lessons can be learned in other sectors about developing company strategies focusing on core values, and preparing companies for change in unstable market environments.

1.3 Research Aims and Objectives

To summarise, the overall aims and objectives of this research are set out below:

Aims of Research

1. to develop an in depth analysis of the children's multimedia industry in the UK and the challenges of adapting to change.

2. to gain an understanding of the current thinking on change management within organisations and apply this understanding to the children's multimedia industry.

3. to develop an awareness of factors used by conventional publishing companies and 'new media' companies who produce multimedia for children.

4. to create models (based on these factors) which will help facilitate processes for publishing and new media companies in the children's multimedia market.

Objectives of Research

1. to survey and evaluate the activity and position of a selection of publishing companies in the UK producing multimedia products in tandem with their traditional output for children.

2. to analyse critically external developments affecting these publishing companies (or divisions) in relation to their strategic development.

3. to identify and evaluate factors of internal value or development (in relation to strategic, cultural, procedural, product and structural development) for publishing companies to succeed in the children's multimedia market.

4. to widen the scope of research to include 'new media' companies who entered the multimedia market in the mid 1990s.

5. to identify and evaluate external influences or forces and internal factors of value or development that these companies have or require for the multimedia market.

6. to incorporate new media companies' external and internal factors of development and value into the models developed.

7. to develop models which provide an original insight into strategic change management for companies in the children's multimedia sector in the UK – an approach which could be transferred across other sectors of publishing.

The research formalises the factors used or required by children's multimedia companies to achieve success in the multimedia market and makes a valuable contribution to the discipline of publishing as the developments in multimedia publishing are still very dynamic. The research seems to have developed the first empirically researched models for outlining development factors for publishers and new media companies in the children's multimedia market. The research methodology adopted to achieve the aims and objectives discussed in this Chapter is explained in Chapter 2. A review of relevant and pertinent literature to the study is presented in Chapter 3, followed by a presentation of the research results in Chapter 4. The development of models designed to outline key results from the study is described in Chapter 5. Key results are discussed and analysed in Chapter 6 and, from this, conclusions and potential areas for future research have been outlined in Chapter 7.

Chapter 2: METHODS

2.1 Introduction

The aim of this chapter is to provide an overview of the methods used for the research and to justify why these methods were chosen for this study into the UK children's multimedia market. The methodological design is explained, which is, as Yin describes, 'the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions' (Yin 1994, 110). The chapter includes an in-depth discussion of the approach, techniques used and issues which arose when researching the changing children's multimedia market. Parts 2.4 to 2.7 describe the analysis and interpretation of the data gathered and the techniques used. Part 2.8 explains the development and construction of models used to outline external and internal factors of development and value in the UK children's multimedia market. An overview of the stages and methods used in the study is set out below. These are fully described in sections 2.3 to 2.8.

Date	Method
1998	Literature review
	Contact with key informants
	Conference/seminar attendance
	Children's Publishers' Pilot Study and Questionnaire 1998
1999	Literature review
	Contact with key informants
	Conference/seminar attendance
	Children's Publishers' Pilot Study and Interviews 1999
	Children's New Media Companies' Pilot Study and Questionnaire 1999/2000
	Model development
2000	Literature review
	Contact with key informants
	Conference/seminar attendance
	Children's New Media Companies' Pilot Study and Interviews 2000
	Analysis and comparisons
	Model development
2001	Literature review
	Analysis and comparisons
	Model Completion and conclusions
2002	Final writing up

Fig. 2.1 Overview of Methods

2.2 The Research Approach

The project has aimed to survey and evaluate the activity and position of a selection of publishing companies in the UK which are producing multimedia products in tandem with their traditional output for children, and 'new media' companies - companies which were set up in the 1990s with the sole

purpose of producing multimedia for children. The research is interdisciplinary in its approach, focusing on the development of multimedia production in the children's publishing industry, and emphasising the particular importance of effective change implementation and management in publishing organisations for new media. The methodology for the research was made up of four elements: a review of relevant literature, two questionnaire surveys of 50 UK publishers and 50 'new media' companies producing children's multimedia, and two sets of interviews with a selection of 'successful' children's multimedia producers from each company type identified from the questionnaire surveys' responses. These three elements contributed to the final element, the development of a Children's Multimedia Five Force model and Value Chain model (developed from Porter 1980 and 1985). These models outline the market situation and forces at work, and development factors, or areas of value found in the companies studied in the UK children's multimedia market.

Research into the publishing industry is relatively new and many of the representatives from the more conventional organisations targeted were not aware of the significance of research into the area. The researcher therefore had to emphasise the importance of the research and also be persistent in tracking down responses at varying stages of the research process. The issue of confidentiality was important to the majority of the publishers and new media companies targeted. Layder's bracketing and selective focusing technique was adopted in order to maintain a concentrated focus on 'one layer of social reality', a feasible option entailed 'bracketing off' the analysis of other sectors in the UK multimedia industry, and fixing attention on the area of current interest (the children's multimedia sector). It is important to note that this is a strategy to make relevant data more easily accessible and to stabilise the focus due to the changing nature and stage of development of the both the children's and generic multimedia industries. The objectives of the research demand a restricted focus of a robust sample of children's multimedia companies that limits the amount of analytic attention that is devoted to broader theoretical and empirical questions of interest (Layder 1993, 20). The research, primarily qualitative in nature, has been undertaken with a view to gaining a better awareness of the children's multimedia market, companies involved in the market, and factors relevant to that area of study. The research is grounded in theory, meaning:

> 'the discovery of theory from data is systematically obtained from social research suited to its supposed uses....which has associated flexible techniques and strategies of both quantitative and qualitative research.' (Glaser and Strauss 1967, 271)

Theory was built inductively and a hypothesis was derived, by using pilot studies and questionnaire surveys for up-to-date information on the UK children's multimedia market. Categories were refined, inter-related and developed at different levels of conceptualisation based on information gained from publishing and new media company samples' responses. The total theoretical framework was integrated and developed by use of the questionnaire and interview data, and the study of key publishing industry, change and strategic management, IT and innovation strategy texts, market studies and value chain studies relevant to this study. The study also compared the results which emerged with publishers and new media companies in 1999 and 2000, noting differences between each study group

and discovered and applied useful comparison groups as found by Strauss and Corbin (1990), to be essential in the generation of theory (see Appendix I).

The research adopts a substantive theory, which is grounded in focusing on one particular substantive area and might be taken to apply only to that specific area (in this case, the children's multimedia industry, in particular, publishers and new media companies). A theory at the conceptual level, also has important general implications and relevance, to the development of a grounded formal theory for other companies in other areas of publishing. The most significant factor to consider about the area of study is the constant and rapid change ongoing within the children's multimedia market in the UK and the themes developed in this study aimed to identify and link areas which added value and development for companies trying to cope with a changing market. This continuous change meant it was important to maintain flexibility regarding study focus for as long as possible, (for example, the types of 'multimedia' products produced by the companies studied and online developments). The dynamic nature of the market also necessitated continued contact with the sample groups to keep up with developments, to validate findings, and to ensure that questions arising from previous data gathering could be addressed.

As the field was so new at the start of the study, the research approach taken (including questionnaire surveys) was largely exploratory (Frankfort-Nachmias and Nachmias 1996), eliciting mainly basic up-to-date, quantitative data. There were also notable changes in some of the opinions and focus of the questionnaire respondents and interviewees in the time difference between the two questionnaire surveys and company types and between the questionnaires and interviews of the same company types due to the volatile nature of the subject and this was taken into account in the analysis of results. In 1998, questionnaires were sent to directors, senior mangers and editors in book publishing and new media companies (as is fully discussed later). Unfortunately, in the time period that the targeted survey respondents had been identified and sent the questionnaire survey, several publishers had dropped out of the market. In retrospect, this can be seen as an example of the changing nature and complexity of the issues involved in a study of a developing market. It became necessary to develop an additional study to investigate and uncover reasons for publishers dropping out of the market (see section 2.3.5.8) which provided some interesting insight into some of the problems publishers had been encountering in the market. The study has drawn on all of the above research elements, chosen as the most appropriate methods, in attempting to realise the aims and objectives of the research. The next sections of this chapter will describe, in more depth, the research techniques applied.

2.3 Research Techniques

2.3.1 The Literature Search

2.3.1.1 Introduction

An intensive literature search has been ongoing since late 1997. This involved using the most recent company and industry directories, reports, web sites, databases, journals and texts (online and paper-based) considered relevant to the subject of study. The study concentrated on key words considered relevant at that stage – including electronic publishing, multimedia publishing, children's (electronic and multimedia) publishing development, and models for strategic change management, IT, innovation, development and added value.

The focus of the study became clearer and the literature search began to focus around central themes, including children's publishing-related, multimedia-related, and change management/strategy and value-added-based terms or concepts. Key authors including Feldman (who studied generic electronic and digital publishing developments), Negroponte (developments in IT generally), Krell, Scholes and Tushman (strategic development for new technology and innovation), Bide and Shatzkin (areas of value for generic print and online publishing), Porter (strategy for competitive success and value within a company, and the industrial forces affecting a company externally), and others, were identified. This enabled searches to be conducted which uncovered useful materials. Research groups and online discussion groups/forums in online journals or sites dedicated to the area of research proved to be useful and included Vista International, New Media Knowledge, Stanford Business, Harvard Business Change Management Reviews, Red Herring, Wired, Publisher Association Briefs and The Bookseller. A review of these materials suggested that comment and opinion, although industry specific, or of relevance to the area of study, was very much experiential, generic multimedia- or publishing-based, and needed empirical validation or testing within the context of the UK children's multimedia market.

While the main research area became increasingly focused (moving on from the generic topic of 'multimedia' or 'electronic' publishing development), it also became evident that there was a need to study the business strategy elements underpinning this study, for example: strategy for managing change, innovation and competitive success, measuring added value (and impact), evaluating success and development, and industrial forces affecting companies. Aspects of research methodology were also studied in depth. This was valuable as a means of informing the research. However, it was equally necessary to recognise when to stop following a sub-theme in order to bring the study back to focus. For example, while it would have been possible to focus more on change management processes, this would have diverted the study away from its purpose of examining company activity for multimedia and its influences in context. The evolving terminology and concepts relevant to both the children's multimedia market structures and influences/forces, company, product and features, had to be considered at the literature searching stage. It was important to use a range of keywords, including

'electronic', 'digital', 'interactive', 'multimedia' and 'e-' publishing and to conduct searching of paper-based journals as well as database and online searching to ensure as much relevant material as possible was traced. This echoed what Clarke's comments about the field of electronic commerce:
'The research domain of electronic commerce is particularly challenging because of the lack of established definitions and the high volatility of the phenomena.' (Clarke 2000 56). The term 'multimedia' is used to describe media in its 'widest' sense, including books, audio-visual, CD-ROM, DVD, and online content.

2.3.1.2 Information Sources Consulted

Various sources were consulted to find information on 'company' - both book publishers and new media companies, 'industry', 'external forces/influences', 'technology', 'strategic/change management', 'IT strategy', 'innovation' and 'value chains.' The burgeoning literature on generic electronic publishing and change management had to be focused on information particular to this study. Literature of relevance to these topics is published in a range of journals spanning the fields of social science, information science, communications and media, computing science, public policy and business. There was a need to gather and assimilate knowledge from the rapidly changing areas within the field of 'electronic publishing'– with changing company types in the multimedia market, technology, platforms and product types being used or produced, and the varying influences and forces in the market.

2.3.1.3 Databases

Databases searched regularly during the course of study included: the Social Sciences Citation Index, Library and Information Science Abstracts (LISA), Publishing and Multi Media on DIALOG, Global Bookbank, Extel Company Analysis, FAME (Financial Analysis Made Easy), Key Note Market Research, Mintel Market Research, Bath Information and Data Services (BIDS), Bulletin Board for Libraries (BUBL), and the Waterlow New Media CD-ROM 1999/2000, 2000/2001.

2.3.1.4 Internet Resources

Some of the most useful web sites for gaining relevant information to the study were as follows: Vista International, Publishers Association (PA), Booksellers Association (BA), Educational Publishers Council (EPC), Electronic Publishing Services (EPS), International Electronic Publishing Research Committee (IEPRC), Electronic Publishers Forum (EPF), Scottish Publishers Association (SPA), Interactive Media Association Scotland Interactive Media Association Scotland (IMAS), Association for Applied Interactive Multimedia (AAIM), British Interactive Multimedia Association (BIMA), Software and Information Industry Association (SIAA), European Commission, Publishing Training Centre, National Curriculum, National Grid for Learning, Parent's Information Network (PIN), Harvard and Stanford Change Management Reviews, Red Herring, Book Marketing Ltd Internet

Reports, Book Industry Communication, Department of Trade and Industry (DTI), Bookweb, and New Media Knowledge.

2.3.1.5 Email Discussion Lists

The following e-mail discussion lists and their archives were also used and consulted: Vista International, Red Herring, Wired, Harvard Change Management, and PA International and Educational and Professional Bulletins.

2.3.1.6 Other Sources

As the study progressed, a range of additional information sources were monitored systematically on an on-going basis. Relevant web sites and key journals were researched at approximately two-weekly intervals. Regular visits were made to libraries at The Robert Gordon University and Aberdeen University and visits to Napier and Glasgow University libraries were also made for additional information.

A number of other sources consulted provided useful information including company information and newsletters, pamphlets, leaflets, product information and training brochures. Various organisations such as university departments, research groups and organisations, the EPS newsletter and the Publishing Training Centre at Book House distributed such information. Correspondence, conference proceedings or seminar bulletins, and attendance and participation at conferences and seminars such as the International Council for Computer Communication and International Electronic Publishing Research Committee (ICCC and IEEE) conferences, LIBF Digital Showcases, PA seminars on Multimedia (in association with the EPC and IEPRC), British Educational Technology Trade Show (BETT), Youth Multimedia, the European Computer Trade Show (ECTS), Children's Book Fair and Online Information events also provided useful materials. The information gained has been used as background material. In addition, useful contacts were made for future follow up and proceedings were consulted on a regular basis, which proved to be useful in the continuous updating of information. As mentioned above, key journals which were available locally, such as The Bookseller, Publishing Research Quarterly, Publisher's Weekly, Publishing News, Journal of Electronic Publishing, New Media Age and Electronic Publishing News were also searched on a regular basis. (Most of these are now also available online).

Information about individual companies was gathered from company reports, websites, the TFPL Directory, and the updated version of this the following year, the Waterlow New Media CD-ROM. Advice and direction regarding areas of training requirements and gaps in research in the market was given from the Publishing Training Centre and the project's industry advisers, from organisations and companies such as Book Industry Communications (BIC), Electronic Publishing Services (EPS), BBC Multimedia and Oxford University Press (OUP). Email and telephone contacts with these individuals

were key in establishing context and informing early development of the study. In addition, it was also useful to consult with various advisers and researchers when the direction of the study indicated that specific topics needed to be explored in some depth, for example, interviews with change management advisers from Aberdeen Business School and innovation and entrepreneurship advisers from the Centre of Entrepreneurship at The Robert Gordon University. Individuals from the Robert Gordon University and Napier University were also consulted to discuss and advise on the methodology chosen for the study area.

2.3.2 Quantitative Research

Initially, quantitative data was gathered in the form of questionnaire surveys in order to obtain some quantifiable information about what was happening in the children's multimedia market as this type of information was difficult to gather from the publishing directories and databases at the time of study. Most directories contained dated information including 'multimedia' companies producing audio-visual materials only, or those which had already dropped out of the market. Other databases offered search category options including 'games', 'entertainment', 'home', and 'education' for example which were all related to, but not specifically 'children's multimedia.' From these categories, companies which appeared to be producing multimedia for children (2016) in the home, education, games and entertainment markets were identified. It was decided that the games market itself was worthy of a separate study as this seemed to be a huge market. From the remaining companies left, 70 were chosen as appropriate for the purposes of this study and this again was narrowed down to 50 companies who were contacted. These companies varied in size, range of production, number of employees, from large conglomerates with broadcasting operations such as BBC Multimedia and Granada Media to smaller innovative companies such as Childs Play and Act Two, for example. As there was little information about these companies in journals and databases tracking their most recent developments in terms of 'multimedia' production and the changes that have come with these developments, it was felt that a substantial amount of quantitative evidence would be required (by using questionnaire surveys) in order to base and develop the more in-depth questioning and analysis which would come later on in the study.

2.3.3 Qualitative Research

'Qualitative research methods have become increasingly important modes of inquiry for the social sciences as a means for better understanding of a complex social phenomenon.' (Marshall and Rossman 1989, 45)

Although most of the data from the questionnaire surveys contained quantitative elements, a qualitative perspective was adopted throughout the rest of the research. However, some of the data from the questionnaire surveys contained quantitative elements. Dennis observed that media studies (which publishing studies has, conventionally, been considered part of) conform to 'a methodological metamorphosis of the social sciences generally, applying qualitative research methods to the study of

social and cultural processes.' (Dennis 1988, in Jensen and Jankowski, 1995, 34). Strategic planning and development methods, models and analytical techniques (Dyson 1990 and Dyson and O'Brien 1998), communication research models and methods for mass communication (McQuail and Windahl 1993), and public sector research concepts, models and approaches (Lane 1993) were all studied. The methods described in these studies informed the development of the two models used in this research to outline the forces at work in the children's multimedia market and the internal activity within children's multimedia companies contributing to their development. The research focused on the strategic activity, culture, processes, structure relationships, skills, and product development adopted by the two company types studied adopting the approaches noted above.

In determining the choice of research approach, the research considered some of the issues Greene highlighted regarding linkage such as the complimentary differences across methods and the purposes for using them. (Greene in Miles and Huberman 1994, 40) and used a questionnaire-interview approach in order to gather information about the activity of publishing and new media companies. Through the use of questionnaire surveys and interview methods to study children's multimedia companies in the UK, new knowledge, 'fresh slants' and insights were attained, which are, as Strauss and Corbin, note 'difficult to convey with quantitative methods' (Strauss and Corbin 1990, 19). These 'fresh slants' and in-depth comments were required in order to gain a thorough analysis of the children's multimedia market due to its volatile nature. Questionnaires were used to uncover information about the market situation and initial information about publishing and new media companies and their activities in the children's multimedia market. To elaborate and develop the analysis of the background data gathered from the questionnaire responses, it was decided that further qualitative methods in the form of interviews with successful companies (identified at the questionnaire stage) would be carried out. Interviews were found to provide richer detail and initiate new lines of thinking and fresh insight. This method was applied to the study of both publishers and new media companies.

2.3.4 Questionnaire Surveys

A survey may be defined as, 'A method of gathering information from a number of individuals, 'a sample', in order to learn something about the larger population from which the sample is drawn.' (Ferber et al. 1980, in Marshall and Rossman 1989, 47)

This research involved gathering information from a number of individuals from publishing and new media companies in order to provide an insight into, and analysis of, the children's multimedia market and companies' activities of value or development in the market. Postal and email questionnaire surveys were conducted in 1998 and 1999 (See Appendices II and III) which ran in parallel with desk-based research into companies such as Dorling Kindersley and other relevant companies. The questionnaire surveys designed were of an exploratory nature (Marshall and Rossman 1989), and were used to uncover background information into the children's multimedia market. They provided an insight into the key players from each set of company type studied, their company strategies for change

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and innovation, culture, procedures, relationships, product development and strategies for future development of their children's multimedia. This was important as the relevant information in directories and databases at this time was misleading, inaccurate, or unclear. There did not appear to be specific lists of 'children's multimedia' companies at this time. Quantifiable questionnaire data obtained, as Sieber notes

> 'helps with the qualitative side of a study during design by finding a representative sample and locating cases. It can help during data collection by supplying background data, getting overlooked information, and helps avoid 'elite bias'.' (Sieber 1973, in Marshall and Rossman 1989, 48)

In order to avoid repetition, the following section will discuss primarily the design of the book publishing companies' questionnaire survey. In dealing with the design of the new media companies' questionnaire, the discussion will be limited to any differences between it and the questionnaire for book publishers.

2.3.5 Children's Book Publishers' Questionnaire 1998/9

2.3.5.1 Sample

In October 1998, questionnaires were sent to 50 children's publishers in the UK (See Appendix II for a list of the companies targeted) with the aim of obtaining data on basic information such as company product types, reasons for entering the multimedia market, product features, marketing, design, promotion, sales and distribution techniques. This informed the investigation into how these publishers were adapting to change and helped identify factors which were contributing to their successful development in the children's multimedia market (See Appendix III – the book publisher's questionnaire survey). The questionnaire results were intended to provide background information for the interviews to follow and also enabled the researcher to identify the successful children's multimedia producers within the sample.

This target group was identified from the TFPL Multimedia Directory (TFPL, 1998/9) and The UK Publishing Directory (PA, 1998/9) and other relevant web sites and databases. The survey attempted to be as comprehensive as possible in terms of distribution by obtaining the addresses of all UK publishing companies producing children's multimedia and the names of the senior staff involved in children's multimedia. Telephone and email contact was made with the staff identified to introduce the research and questionnaire survey, to confirm that they were the most relevant staff to respond to the questionnaire survey (i.e. in control of children's multimedia operations), most familiar with the issues involved in the questionnaire and to request their involvement.

A varied cross-section of the type of companies which were the subject of the study was chosen. As May notes,

> 'For the purpose of sampling validity, it is necessary to use a method of selecting a sample (selection of companies) in order to make generalisations to the population (market) at large.' (May 1993, 90)

The sample included, therefore, a wide range of publishing companies from large conglomerates with broadcasting operations supporting their traditional output such as BBC Multimedia, to the more conventional print publishing department, for example OUP, to smaller, innovative companies such as Child's Play and Longman Logotron, also producing multimedia products in tandem with their traditional output for children. It was necessary to gather a substantial amount of data within a limited period of time. The 50 companies targeted were geographically dispersed across the UK so the questionnaire survey enabled the whole sample to be targeted within a short period of time. Individuals who were identified as directors, senior managers or editors of children's multimedia (managing children's multimedia operations) were targeted and questionnaires were posted or emailed directly to those individuals within a particular department, division, or company. The researcher recognises identifying relevant individuals as being key to the high response rate obtained and also helped at the chasing-up stage of the questionnaire collection process.

Although it has been noted that using questionnaires does not allow personal contact, and there is a potential lack of response, there are several advantages to using this method which have been noted by many researchers (Moser and Kalton 1983, Munn and Drever 1990, and Oppenheim 1992). Questionnaires were used in this research to target companies in the UK as it was more cost effective to collect by this method than individual interviewing time for the researcher and the organisation involved. They also allowed for anonymity in replies which makes the possibility of a high return rate more likely and if respondents know their comments are to be treated as anonymous then there will be a tendency for them to be more frank and outspoken in their answers. The questionnaires also allowed for an efficient use of time in analysing and processing responses where closed questions were used. They were also useful for eliciting straightforward descriptive information and standardised questions meant that there was no interviewer interpreting and distorting meaning.

2.3.5.2 Pilot Study

The questionnaires were piloted before they were sent out to the targeted sample (See Appendix IV and V). Contact letters and emails were sent and telephone calls were made to individuals and organisations related to the area of research in order to test the feasibility of the study; gather industry opinion and interest in the area of research. Advisers, contributors and potential respondents were also contacted. In choosing a sample for the pilot, the aim was to get maximum useful feedback as readily as possible. Individuals were chosen who were likely to be sympathetic to the work but who were also willing to give forthright comments. 'Questions need to be tested as thoroughly as possible before sending them to respondents' (Munn and Drever 1990, 102). Once a final draft of the questionnaire had been agreed with supervisors and advisers, the questionnaire was piloted by sending it to a director at BBC Multimedia and a senior editor at OUP working in children's multimedia divisions and advisers from the Publishing Training Centre, EPS and BIC. Use of book publishers from the total sample as a pilot group is justified by Oppenheim who noted that it is sometimes necessary to use some of the total sample population to try out drafts of the questionnaire surveys. He stated that 'it is not uncommon to

'use up' several hundred respondents in pilot work' (Oppenheim 1992, 55), although in this case, it was only two of the sample who were piloted. Following this pilot survey, it was agreed that the term 'multimedia was most appropriate for the context of this study. It was requested that questions on training requirements, skills gaps, and recruitment difficulties should also be included (suggested by the Publishing Training Centre). The importance of questioning about branding and market focus groups was highlighted by BBC Multimedia. In response, questions were designed or altered to elicit more information about these areas. Many difficulties can be anticipated and corrected by testing the questionnaire in field conditions prior to the full-scale study (Ackroyd and Hughes 1992). The questions designed in the questionnaire were tested for their usability before the main survey was distributed to publishers to ensure that the questions would provide appropriate responses. A pilot study was necessary in order to test how long the questionnaire took to answer, if there were any features within it likely to put publishers off and so reduce the likely response rate. Scaling and open-ended questions were tested in the pilot study and effective responses were received. It was also necessary to check that the wording was clear, using familiar and unambiguous terms, and to check the pilot respondents saw the relevance and importance of the questions and interpreted them as expected. The test was also used to discover if the questions allowed respondents to express their answers with ease and to their satisfaction, and to discover if the answers given could be interpreted correctly.

2.3.5.3 Questionnaire Design and Construction

The design of questionnaires is pivotal, for the quality of the data produced depends upon their design (May 1993, 18). Some method of grouping trends had to be employed even before the questionnaire went out. The researcher thought about the responses which may be received, how these may be analysed, the different types of answers which may be received, the type of information desired and how the data obtained was going to be analysed. The survey objectives were designed to concentrate on six principal areas, based on the research aims and objectives, from advice from key informants and advisers, and the literature on issues specific to children's publishing, adapting corporate strategy and change management for companies dealing with new products and technologies. The principal areas include company strategy and culture, staff structure and skills, product development, company procedures, strategies for future development, and external factors. Question construction involved returning to the overall aims of the project to ascertain what the research was setting out to discover and discovering how to design questions that would elicit this particular information from the respondents.

Overall, the publishers' questionnaire elicited background information on: company turnover attributed to children's multimedia, commercial objectives for entering the sector, type of products being produced and general issues and opinion regarding relationships, key skills, training needs, companies' adaptation and market development. The content of the questions was discussed with advisers and the wording and presentation of questions were discussed with study supervisors. The questions drafted in the questionnaire were phrased in a way that matched the vocabulary of the respondents (jargon was

avoided and acronyms were explained if necessary). Questions were specific and concise and categories of response were clear and unambiguous so that respondents would have the knowledge or information at hand to answer the questions in a short space of time. If not, the response rate would be low, or respondents would guess or estimate and so cast doubt on the reliability of the information provided.

It was necessary to ensure that administrative data was included in the questionnaire such as the title of the questionnaire, the date by which it should be returned, and a pre-paid envelope with the name and address of the researcher it should be returned to. Survey respondents were also thanked for their participation. At the end of the questionnaire it was noted that data collected would be treated confidentially if respondents wished. Respondents were also invited to offer further comments (again if they wished) and to contact the researcher if they had queries or if they were willing to be interviewed at the next stage of the study. Other straightforward design points were followed to ensure the questionnaire was easy to read, with clear instructions, a logical sequence, an appropriate length of questions, a reasonable amount of space between the questions, and a column on the right hand side for coding the replies. It is generally found to be helpful to categorise questions into headed sections as it can help the reader see the overall logic of the design. However, in this instance, it was decided not to use headings as it may guide or alter the respondent's natural way of thinking, although the questions were structured in a logical sequence. The questionnaire was of a relatively conservative appearance and the briefest of instructions were given where appropriate to direct respondents as simply as possible.

2.3.5.4 Question Type

In the publishers' questionnaire survey, the majority of questions were of a structured, closed format, allowing for ease of analysis (either having yes/no options or set categories of response for respondents to choose from). Out of the 35 questions in the questionnaire, only eight were of an open-ended (or unstructured) format, and in four of these, responses were restricted for respondents to identify specific information such as a staff title or departmental name. The other four open-ended questions received a greater variety of response which proved to be more time-consuming to analyse than the majority of closed questions which made up the rest of the questionnaire. Some of the responses to this type of question were not as expected, but it was of more interest to construct a picture of participants' overall ideas of factors affecting them in the market rather than providing a precisely measurable answer to the questions. Questions 11, 21 and 28 (See Appendix III) which asked respondents to rank a range of responses in order of importance (on a scale of 1-5) also proved to be more time consuming to analyse. Although these scaling questions and open-ended questions did not receive a total response and proved to be time-consuming to analyse, the information gained proved to be both interesting and useful. The responses given to the open-ended questions (by the majority of publishers) also provided useful, in-depth information on which to base interview questions.

2.3.5.5 Question Wording

While meanings have become more clearly defined amongst researchers, studies have shown that there are still difficulties with shared understanding of terminology, particularly among practitioners (Greenhalgh 1998). Within the literature and industry 'speak' related to the research area, new terms and concepts had been emerging and evolving (as mentioned previously in Chapter 1, page 1). 'Multimedia' publishing may also be termed by others as 'electronic', 'digital', 'interactive', or 'e-publishing'. At the start of the study, advisers were asked whether terms to be employed in the questionnaire were those most likely to be understood by study subjects. However, certain areas of the sector are still changing and definitions are also still changing or new terms are emerging. A definition of what the researcher understood as multimedia, in this case: books, audio-visual, CD-ROM, DVD, and online content, was explained to the sample targeted (as agreed with those tested in the pilot study).

2.3.5.6 Question Order

The questionnaire was structured so that most closed questions or those questions which were straight forward to answer came first. Open-ended questions which tended to probe for more lengthy responses about personal circumstances or opinion on changes and development of the UK children's multimedia market or companies' strategies for future development for example, tended to be placed towards the end of the questionnaire. Munn and Drever noted by the latter stage of the questionnaire,

> 'the researcher would probably have engaged the respondent's attention and he/she may be more likely to complete the questions. You risk antagonising the respondent by plunging straight into sensitive and personal questions.' (Munn and Drever 1990, 42)

They further noted, 'There is merit in ending in an open question as a sweeper. This can encourage respondents to give you a new angle on the topic' (Munn and Drever, 1990, 42). These open-ended questions proved to be useful for exploring the drivers for purchase used by companies, lessons learned by companies who entered into the multimedia market, future market development, trends in the area, and speculation about how companies felt they would be faring in the children's multimedia market in 2003/4.

2.3.5.7 Covering Letter/Email

Some administrative data was also included in the covering letter or email (see Appendix VI). This was sent to potential respondents attached to the questionnaire alongside a brief note outlining the aims and objectives of the overall research. The covering letter gave a short explanation about the purpose of the questionnaire and its relevance or benefit to the potential respondent, noting how the research aimed to provide insight into success and development factors and areas of value for companies to focus on in the children's multimedia market. The letter stressed that the questionnaire should take no more than ten minutes to complete – with the aim of encouraging company managers, directors, or editors to comply.

2.3.5.8 Collection and Response

The survey had a 100% response rate from the sample of 50 publishers which were targeted which has been invaluable to the research findings. The original methodology was adapted in response to changes in the market. Approximately 30% of the publishers who replied had already dropped out of the market, indicating that within a few months, yearbooks are out of date. The response from publishers who had noted they were no longer producing multimedia for children was not predicted in the original methodology and consequently a reactive strategy was constructed including telephone interviews and short email questionnaires which considered the following points:-

1. Why these publishers are not producing multimedia
2. What their future intentions are regarding multimedia production
3. What hindrances or problems were previously encountered
4. For what other purposes multimedia is being used
5. Are these publishers producing only audio-visual products

These telephone interviews and short email questionnaires were sufficient as the type of questions being asked were not complex, and as Oppenheim notes, 'the telephone often seems to reduce resistance to 'sensitive' items.' (Oppenheim 1992, 60) The questions were simple in design and the response was 100%, and effective in uncovering some of the reasons why publishers had dropped out of the children's multimedia market. Publishers' responses also provided some useful insight into some of the forces at work (including competitors, new players and products) within the children's multimedia market.

2.3.6 Children's New Media Companies' Questionnaire 1999

2.3.6.1 Sample

As noted previously, the research took in to consideration some of the issues Greene highlighted regarding linkage such as the 'complimentary differences across methods and the purposes for using them.' (Greene in Miles and Huberman, 1994, 51) and used a questionnaire-interview approach in order to gather information about the activity of publishing and new media companies. To elaborate and develop the analysis of the background data gathered from the questionnaire responses, it was decided that interviews with successful companies (identified at the questionnaire stage) should be used to provide richer detail and to initiate new lines of thinking. The research scope widens to include a questionnaire survey of new media companies, and seven in-depth interviews which were conducted with a sample of new media companies identified as being successful from the questionnaire response (as is fully discussed later). In the questionnaire survey sent to new media companies, information about the market situation, activities, products, services, staff skills, departmental relationships, marketing, design, production, sales and distribution of the sampled new media companies'

development factors were initially identified and developed in the interviews held later with successful new media companies.

In December 1999, a questionnaire survey (Appendix VII) was sent to 50 new media companies producing children's multimedia in the UK (See Appendix VIII for a list of those companies targeted). Again, a cross-section of new media companies was chosen, including a wide range of new media companies from larger companies with online, broadcast and digital operations supporting their CD-ROM output such as Granada Media, Anglia Interactive and Channel 4 Learning, to the smaller creative web development teams which had often broken off from larger companies such as Act Two, also producing children's CD-ROM and online content. The most relevant and up-to-date source, the Waterlow New Media Directory 1999/2000 CD-ROM (an updated version of the paper-based TFPL Directory used in the 1998/1999 survey) was consulted to find a sample for which to target the second questionnaire survey. However, postal, email addresses, telephone contact details and web site addresses had changed for some of the chosen sample since the compilation of the CD-ROM (even in a matter of months). It was thought that some of the new media companies chosen for the survey sample had been difficult to track down as these companies seemed to have been constantly merging or transforming. There were similar problems with the category search options again not including a 'children's multimedia' category, so the potential sample was identified from a range of companies from the 'entertainment', 'education' and 'home' sectors. Postal questionnaires were sent, where reply-paid envelopes were supplied and emails were also sent with the questionnaire attached in case potential respondents preferred to type up their answers and return via email. This method was found to be more effective in terms of speed of return. A covering letter/email was also sent to all respondents outlining the aims and significance of the research to potential respondents (see Appendix IX) as well as some of the other points noted in section 2.3.5.8.

2.3.6.2 Pilot Study

Once a final draft of the questionnaire had been agreed with supervisors and advisers, the questionnaire was piloted to two new media companies in the UK, Granada Media and Anglia Interactive (See Appendix V). Piloted questionnaires were returned and the answers given to questions were analysed to ascertain if they had been understood as intended. Following this pilot, a small number of amendments were made to the questionnaire, including an increased focus on outsourcing, branding and online use.

2.3.6.3 Design and Layout

Rather than reiterate much of the general design points previously described about the book publishers' questionnaire design, when discussing the questionnaire for the new media, only the key features unique to the new media companies' survey design are described. There is not so much a line of questioning focusing for new media companies on the adaptation and changing of companies' structures as new media companies had been specifically set up for the purposes of producing new

media (so the focus was more on how they were developing). There were also no questions designed on product development from the book, and transferable skills from conventional publishing processes. It was considered important to be able to compare, as much as possible, book publishers' approaches, factors and opinions with those of new media companies so the bulk of the questions had to be of a similar theme. Therefore, discussions about designing a more new media company-specific questionnaire were carried out with advisers and the book publishers' questionnaire was used as a base from which to work. The survey objectives were also designed to concentrate on the six principal areas based on the research aims and objectives, stemming from advice from key informants and advisers and the literature on issues specific to children's publishing, adapting corporate strategy and change management for companies dealing with new products and new technologies. The principal areas include: company strategy and culture, staff structure and skills, product development, procedures and relationships, strategies for future development and external factors. Other straightforward design points (as discussed in the publishers' questionnaire design above) were followed to ensure an efficient response. These themes were adapted as more empirical data was gathered from the questionnaire and interview samples throughout the study.

2.3.6.4 Question Construction

The new media companies' questionnaire survey again, did not contain as many questions which were of an exploratory nature. The questions designed were more specific and the line of questioning was adapted in response to the results of the publishers' questionnaire and interviews, and the pilot study of new media companies. However, it was used to provide background information about companies and the market for the interviews to follow. The survey was based on the publishers' questionnaire, with similar themes, but various new questions were designed specific to new media companies and those questions specific to book publishers were omitted. Questions, which had not received effective responses, or any responses at all, in the previous questionnaire were either altered or also not included in the second survey. Respondents were asked additional questions about new media services they provided alongside the products they produced (which differed from book publishers' activity). Other questions were designed to obtain more information about issues that were raised by publishers in the previous survey and interviews. Questions designed to probe further into issues such as online development and usage, branding, outsourcing and partnerships were expanded on. Questions exploring multimedia use referred to CD-ROMs and DVD-ROMs (instead of CD-ROMs only) as in the publisher's questionnaire. Another question asked companies to identify their main multimedia focus: introducing the terms 'offline' or 'online'.

More specific questions were designed and included in the new media questionnaire to discover why new media companies were using the internet (for example question 13, with the options given: market research and development, product marketing/promotion, selling children's products, delivering content or other). Question 14 was also designed to discover what features new media companies looked for on a web site to strengthen their promotion and sales of children's multimedia products.

More direct questions were also designed with the aim of discovering which factors new media companies found appeared to lead to successful children's multimedia production, who had been the main competitors and most successful companies in the market. Questioning was more focused on 'getting straight to the point' (less exploration) second time round, for example looking at what factors made the companies sampled unique? Questions on collaboration with other companies, buying and selling rights or joint production, and functions outsourced were included as a result of some of the responses from the book publishers' interviews. Questioning on the sample's use of branding was also altered and channelled into company and product branding rather than a wider question on 'branding'. Overall, these additional questions in the second survey were more specific, and required more descriptive information in comparison to the more basic data gathered from the book publishers' questionnaire survey which was of a much more exploratory nature. However, there is also some exploratory elements remaining within the new media survey.

2.3.6.5 Question Wording, Type and Order

The questionnaire followed a similar style and layout to that used with the book publishers' sample and attempted to replicate a common core of questions, wording and language so that some meaningful comparison could be carried out. It also had to take into account that due to the volatility of the market and changes in technology, new factors and terminology had come into play. Some of these terms are highlighted in Chapter 1, page 1 and the Glossary of abbreviations and terminology on page xii. It was decided to refer to the study sample as 'new media companies' rather than 'new generation publishers' as it was noted that the term 'new media companies' was used more frequently in 1999. In 2000, there was an increase in focus on online promotion and sales and content development, and questioning had to take into account and adapt to illustrate this change. The majority of the 31 questions in the survey were again of a closed format and several rating scale but open-ended questions were also included. Again, these open-ended questions were more time consuming to analyse than the closed questions. However, in the second survey, the open-ended questions tended to require highly specific responses (which were received from the majority of respondents). The questionnaire, for reasons similar to those in the design of the publishers' survey, was structured so that most closed questions tended to be placed at the start to middle of the questionnaire and most open-ended questions were placed towards the end of the questionnaire.

2.3.6.6 Collection and Response

An initial response of 19 (38%) was obtained. Correspondence claiming 'no such address' was received from four of the 50 companies targeted and two companies had 'no time to help'. It was later found that ten company contact telephone numbers, email and postal addresses had changed within a few months of publication of the CD-ROM (Waterlow's New Media CD-ROM 1999/2000) consulted for the compilation of the research contact list, indicating that the market was continuing to change. Following this, company contacts were relocated and reminders were sent to all non-respondents. This elicited eight further responses, resulting in a total of 27 (54%).

2.3.7 Reliability and Validity of Questionnaires

'Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions' (Bell 1996, 64). It is likely that the answers given by respondents in both surveys would be different if the questionnaires were distributed at a different period of time. Indeed, there were notable differences between the publishers' and new media companies' responses within one year, in terms of product focus (new media companies' online focus was more significant one year later), company types in the market, and differing skills and training requirements, and online usage also changed within the period of one year.

As Silverman (1993) points out, the issues of reliability and validity are important, because in them the objectivity of (social scientific) research is at stake. The results are taken to be valid as, according to Cohen and Manion, 'Validity relates to whether what was measured provides an indication of what the researcher intended to measure' (Cohen and Manion 1994, 206), and the results from both surveys have contributed to achieving the overall aims of the research. The surveys aimed to provide information about the children's multimedia market itself and an insight into the companies' activities as no literature at the time of study could provide this type of up-to-date information.

2.3.8 Interviews

The mainly quantitative (and some qualitative) data obtained from the questionnaire surveys carried out helped inform the more in-depth questioning at interview stage. The qualitative nature of interviews was thought to be more explicitly interpretive, creative and personal than the earlier approach in the questionnaire surveys. The philosophical approach to the interview process conducted in this study relates most closely to a phenomenological perspective, described as including:

> 'a focus on the life world, an openness to the experience of the subjects.... describing the world as experienced by the subjects, and with the assumption that the important reality is what people perceive it to be.' (Kvale 1990, 52)

In 1999 and 2000, interviews were conducted with a wide range of book publishers and new media companies identified as being 'successful' from the findings of the two questionnaire surveys. The purpose of interviewing was to yield more in-depth data from a more focused sample of appropriate individuals to expand on and validate the data gathered from the questionnaire survey. The interviews were used as a resource for understanding how managers or editors of children's multimedia make sense of their business processes, skills, relationships and core resources.

2.3.8.1 Pilot Studies

The research noted the importance of attaining real life experience and uncovering fresh slants or views by the method of interviewing, but also recognised the possible drawbacks noted by writers such as Silverman:

> 'Interview data report not an external reality displayed in the respondent's utterances but on the internal reality constructed as both parties contrive to produce the appearances of a recognisable interview.' (Silverman 1985, 65)

The collaboration with some of the sample in the pilot study before the interview helped to ensure that the interview question design was well informed with advice from those who had a working knowledge of the children's multimedia market. Once final drafts of the interview schedules had been agreed with supervisors and advisers, the schedules were sent to one publisher and one new media company from the interview samples by email (BBC Multimedia and Granada Media). The questions designed in the schedules were tested for their usability before the interviews were conducted to ensure that the questions would provide appropriate answers. Pilot studies were necessary in order to find out roughly how long the interviews would take, if there were any features of it likely to put companies off and so reduce the likely discussion at interview. Following the pilot studies, the interview schedules were reduced in length and amendments were made. (See appendices IX and X).

2.3.8.2 Identification of successful companies

Companies identified as being successful from the questionnaire survey responses were selected for interview. The 'successful' companies were defined as those producing a substantial range of innovative, creative CD-ROM and online products for children which has increased over the past five years. The research considers the identification of factors of 'value' and 'development' to be the most appropriate method of outlining how companies are altering their strategy for children's multimedia production. An analytical process has been undertaken which examined many factors, within the children's multimedia companies studied, that can potentially impact on strategy. The strategist, Ohmae (1983), suggested an effective way of developing strategy is by identifying the key factors of 'success' (in the case of this research, 'value and development') that are 'likely' to deliver the company's objectives. He argued that when resources of capital, labour and time were scarce, it was important that the company should concentrate on the key activities of the business - that is, those most important to the delivery of whatever the organisation regards as 'success'. This concept of key factors for development, value or success is also consistent with Porter's view (1985) that there are factors that determine the relative competitive positions of companies within an industry. When key factors have been correctly identified, they can provide a checklist for the rest of the strategic analysis process. He noted that key factors can be found in any area of the organisation and relate to skills, competitive advantage, history and background of the company, special technologies or customer contacts. These factors can then be placed within a value chain which links the value of the activities of an organisation with its main functional parts. It then attempts to make an assessment of the contribution that each part makes to the overall added value of

the company. The concept was used in accounting analysis for some years before Porter (1985) suggested that it could be applied to strategic analysis. Essentially, he linked two areas together:

- the added value that each part of the organisation contributes to the whole organisation; and
- the contribution to the competitive advantage of the whole organisation that each of these parts might then make.

The approaches and models developed, in particular, by Porter and the Vista International's studies on the value chain were developed in this research into the children's multimedia market.

2.3.9 Interviews with Children's Book Publishers 1999

BBC Multimedia
Child's Play International
Longman Logotron
Productive Play Company
Oxford University Press
Two Can Publishing

Interviews with the six publishers listed above at this stage of the research provided an opportunity to build on the data from the literature read and the questionnaire survey results in order to obtain information about publishers' critical success factors in the children's multimedia market. Publishing company representatives who had returned questionnaires from the 1998/9 survey and identified themselves as 'successful' producers of multimedia for children in the UK (as defined in section 2.3.8.2). These companies included those ranging from large conglomerates with broadcasting or other media operations supporting their traditional output (such as BBC Multimedia, Longman Logotron and TwoCan) to more conventional print publishing departments (such as those found at OUP and Child's Play International). The sample size was determined by the need to obtain depth and a flavour of context within a limited time frame. In addition, actually visiting book publishers provided a flavour of children's multimedia production within their companies' environment and informed the questioning on structure, culture, procedures, working relationships, and staff personalities and skills. As Kvale noted, 'Obtaining insights into the lives of study participants is important as well as gathering interview data' (Kvale 1990, 12).

2.3.9.1 Arranging the Interviews

'Getting respondents to consent to an interview is not always a simple matter. Personal contact is imperative' (Ackroyd and Hughes 1992, 35). Book publishers who had responded to the questionnaire could note on their returned questionnaire if they would be willing to partake in an interview following the questionnaire results being obtained and those who noted an interest were contacted again by email to confirm that they were still agreeable to be interviewed. Book publishers who had not done this but were considered to be 'successful' children's multimedia producers were sent an email and/or letter

indicating the researcher's interest in interviewing them. Within a week, the researcher had heard back from five book publishers saying they were happy to be interviewed. Another two book publishers were too busy to be interviewed. The process of attempting to contact publishers by telephone was then started. Initially, calls were made in the afternoon. However, it proved to be difficult to make contact with the publishers targeted at this time. Phone calls in the morning were more effective in getting a response and over a period of two weeks, interviews and times were arranged and relevant administrative data such as postal and web site addresses were confirmed. The researcher was careful not to encroach upon the publishers' time, so kept the calls brief, and gave questionnaire respondents sufficient information about the researcher, the research aims, how the respondents came to be selected, what the questions would be about, and assurances were given as to confidentiality. A follow up email was also sent outlining the study aims, interview schedule, and included a request for necessary company information and directions.

2.3.9.2 Method

The semi-structured interview method was adopted which, Fielding (1986) noted, utilises techniques from both the focused and structured interview methods. Questions were specified (and semi-structured) by a thematic guide or 'interview schedule', but the interviewer could probe beyond the answers and invite the interviewee to expand on interesting ideas and issues. For example, what their opinion or experience has been on what the government is *actually* achieving in terms of IT education and development, what multimedia and computer facilities are *really* being provided in schools, what parents and children are telling them in their focus groups and testing sessions about their familiarity and competence levels, and how if companies in the market are making tentative steps to develop their online activity. May (1993) noted that these types of interviews allow people to answer more on their own terms than the standardised interview permits, but still provide a greater structure for comparability over the focused interview. In comparison with the structured method, the context of the semi-structured interview is an important aspect of the process.

2.3.9.3 Process

The interview sample was relatively small in order to gain a focused response and the interviews were of some length. The amount of time the interview was to take was dependent on the availability of the interviewee but the majority lasted approximately 90 minutes. It had to be ensured that conditions such as those recommended for the successful completion of interviews by Cannell and Kahn, Moser and Kalton (1983), were adhered to. The potential interviewees were provided with information about the aims of the study, and what was required of them. The interviewer also needed to make the subjects feel that their participation and answers were valued, for their co-operation was fundamental to the conduct of the research. This meant maintaining interest during the interview. At the start of the interview, book publishers were told again briefly about the broad aims of the study. When asked, all agreed that interviews could be taped. The interview then proceeded with questions from the schedule

being asked. Space was left on the interview schedule for writing brief notes as the interview progressed. This was useful in that it provided thinking space and meant that key points could be noted down for further follow-up as the interview progressed. All interviewees had set aside a period of time for discussion and seemed willing to talk at length. In all cases, interviews were conducted in the interviewee's office within the company targeted and, after the interview, the researcher was guided round the appropriate department or company.

Rapports were built up, allowing the interviewee to talk at his or her own speed and also to talk about areas of particular interest to them. It was necessary sometimes to be assertive in asking for a return to focus. At the same time, it was beneficial to let interviewees talk at length so that an accurate picture of their constructions of reality could be ascertained. The researcher tried to avoid interrupting, as this tended to spoil the flow of speech particularly when the interviewees were discussing their experiences, opinions, aspirations and feelings. As May observes, 'in the interview scenario, this type of discussion can yield rich sources of data' (May 1993, 42). Omissions or points which were unclear were dealt with later on. When controversial topics arose, the researcher tried not to judge or show expressions of surprise. Those topics and questions which required speculative or opinion-based responses tended to be placed toward the end of the interview once a form of rapport had been built, when the interviewee subject came to feel at ease with the researcher and the researcher had time to follow up ideas. As recommended by Ackroyd and Hughes, 'Sequencing questions can play a helpful role in easing the respondent into the interview' (Ackroyd and Hughes 1992, 53). It was necessary to establish a suitably relaxed and encouraging relationship as Spradley suggested, 'in order to develop a basic sense of trust that allows for the free flow of information' (Spradley 1979, 51). However, Ackroyd and Hughes noted, 'It is not always self-evident that the establishment of a warm and trusting relationship will necessarily get the respondent to tell the truth' (Ackroyd and Hughes 1992, 93). Some interviewees were quite guarded in their approach to answering questions, while the majority freely named competitors and shared anecdotes of a conversational nature and made interesting predictions about online development and new competitors, for example. Some statements were also followed up after the interview to check for information based on fact.

The interview situation allowed the interviewer to observe reaction to particular questions and the way they were handled. The interviewer had to sometimes interrupt if the interviewee was starting to discuss an area that had previously been covered in sufficient depth. The interviewer would only do this if it appeared the interviewee's conversational track was not introducing or leading into a new area of interest. Questions had to be handled tactfully and efficiently – usually, after the interview, so as not to bias results or allow the interviewee to take over direction of the interview. At the end of the interviews, the tape recorder was switched off. Interviewees tended to ask questions at a more relaxed level about the study and further comments were invariably made about certain issues which had arisen during the interview. Useful information gained at this stage such as diagrams of their company's structure, print-outs of future product ranges, and flow charts of processes added to the overall research findings.

2.3.9.4 Questions

Interview topics were based on a number of theme areas provided by the questionnaire survey (see Appendix X and XI). The general approach was to encourage interviewees to take the conversation forward from the theme questions (Moser and Kalton 1971) developed from the previous questionnaire surveys. It was important to keep the interviewer's comments and questioning as brief as possible to allow maximum time for the interviewee's personal views and commentary. The majority of the interview questions in the semi-structured interview schedule aimed to expand on or validate themes that had already been covered within the questionnaire. They were intended to invite interviewees into a discussion of their perception of the issues, providing their experience, opinions, values and background detail (Patton 1990).

Open-ended questions on technological, educational and future market developments provided more lengthy and detailed responses in comparison to the standardised responses from the questionnaire survey. Questions specifically asking for the identification of 'CSFs' ('critical success factors') or development factors in different areas of activity within companies provided more robust responses in comparison to some of the responses from the survey. These questions tended to provoke a 'realism' in response, including genuine concerns about the changing nature of the market, competitors and products. Leading questions also tended to continue or develop these opinionated responses. As some of the interviewees felt more at ease with questions like these, they would also offer personal information such as 'mistakes made' which was of value to the research findings. Some additional questions, probing more into issues such as 'internet use', were included if they had not been specifically addressed in the questionnaire survey, and prove to be particularly useful. Some of the questions on structural changes and staff relationship, invited publishers to discuss various systems in their companies and questions on branding and the complex target market for multimedia proved to trigger some thought-provoking responses.

2.3.9.5 Recording of Data

As all six of the interviews had been tape-recorded, it was necessary to transcribe them prior to the analysis process. All interview tapes were transcribed verbatim so that all information (pertinent or otherwise) could be documented. However, at times, it was difficult or impossible to hear exactly what people had said on tape. In these instances, interviewees who were involved were contacted when clarification was required. It has also been necessary in certain places to 'tidy up' respondents' quotes. Although certain extra words (if repetitive) have been omitted at no point has the sense or meaning of the quote been altered.

2.3.9.6 Response

Overall, the interviewees involved contributed to discussion and appeared to give frank, uninhibited replies and the interview experience was viewed as positive by both the interviewer and interviewees. Interviewees were considered genuine and honest. Interesting and relevant documentation was offered to the interviewer by the majority of interviewees which included market reports; company information including company reports, company structure diagrams, company brand strategy reports; and samples of their children's multimedia products. The interview response provided a substantial amount of qualitative data relating to the success of children's companies' internal and external developments in relation to multimedia development, structural and procedural change, and strategic development. These elements were crucial to the development of the models designed in this study which outline internal and external factors relating to children's multimedia development.

2.3.10 Interviews with Children's New Media Companies 2000

Act Two
Anglia Interactive
Channel 4 Learning
Granada Media
Hasbro Interactive
Sherston Software
The Learning Company

In 2000, seven new media companies (listed above), which were identified as being successful companies producing children's multimedia from the 1999 questionnaire survey, were contacted for interview. Again, a focus on quality of response (rather than numbers interviewed) was key to answering the overall research questions. For all seven companies, interviews were conducted with staff controlling children's multimedia within the companies – namely directors or senior managers of children's multimedia or multimedia. Five interviews were face to face, and two telephone interviews were conducted due to repeated cancellations of meetings. The sample size, like the previous set of publishers' interviews, was representative and the respondents were contacted by telephone and email to arrange interviews after consenting to be interviewed on the questionnaires they returned to the researcher in 1999/2000.

2.3.10.1 Method and Process

For reasons previously discussed, the interview method was determined by the need to obtain depth and a flavour of context within a limited timeframe. A semi-structured approach was again used to enable the researcher to probe further into ideas or issues which emerged in the interview out-with the interview schedule. Again, seven interviews were conducted at the interviewees' companies, lasting

approximately 90 minutes, expanding on issues which arose in the previous questionnaire survey. Questions were sequenced so that sensitive topics tended to be placed towards the end of the interviews and the interviewer, as in the interviews with book publishers, made every effort to avoid interrupting (usually this would only occur if there was notable repetition) and observed reactions to particular questions.

2.3.10.2 Questions

The interview schedule was designed to expand on themes raised in the new media companies' questionnaire survey. Questions, were also adapted, deleted or expanded upon, on reflection of the publishers' interviews (as had occurred in the new media companies' questionnaire survey design process). However, there were common themes to both interview schedules and it was important to replicate at least some of the questions that were asked in the 1998/1999 questionnaire survey and 1999 book publishers interviews for validation purposes. Most of the questions were again designed using an open-ended format, with the aim of obtaining fuller, richer responses (see Appendix X). It was also anticipated that some of the questions would be changed or left out to more appropriately reflect the focus of the study in 2000. New questions requiring more specific information such as information on competitors, factors contributing to their success and problems encountered were included to determine which specific areas of value were contributing to successful children's multimedia production in the UK.

Similar to the new media questionnaire survey, the focus was on the sample companies' children's multimedia services in addition to their products. The interviews expanded on the areas of strategic development, market influences and external factors through the use of open-ended questions. In dealing with issues such as market research techniques and success factors raised in the questionnaire survey response, the interviewer required more specific responses. The interviewees tended to be very forthcoming in their responses and as a result, many questions in the interview schedule did not need to be asked as the desired information would be offered in earlier responses, for example those questions on collaboration, functions outsourced, staff relationships, skills gaps and training did not require probing or questioning. Short, probing and leading questions (sometimes only containing two words) were used to follow up interesting comments, ideas or areas that were unfamiliar to the researcher. There was a tendency, by interviewees, to discuss the success of other companies if the interviewee was lacking knowledge or their company's activity was weak in the area of questioning. This still proved to be useful, with the information provided ultimately contributing to the research's aims of identifying companies' critical success factors in the market. The same approach, as previously adopted in the recording of the publishing companies' data, was applied to the data recording for new media companies interviewed.

2.3.10.3 Telephone Interviews

> 'Conventional interview schedules have to be specially adapted for telephone interviewing, but otherwise all but the most complex kind of question can be asked successfully over the phone, and the telephone often seems to reduce resistance to 'sensitive' items.' (Oppenheim 1992, 50)

Because of the hectic schedules of two of the persons targeted as potential interviewees for the research, meetings were being repeatedly cancelled. It was decided that interviews would still be conducted, although this time, by telephone. This was basically because of the 'successful' nature of the companies that these individuals worked for and their continued willingness to be part of the study. The questions were of the same design as those in the standard interview schedule used previously on other new media companies. Although the interviews were slightly shorter (60 minutes approximately) than the face-to-face interviews, the main themes and issues were explored and discussed in sufficient detail for the results to be taken as valid and reliable. The response was almost as effective as face-to-face interviewing and was recorded using a device attached to a telephone handset. The recording was transcribed and the data was incorporated into the findings that emerged from the interviews with other new media companies. In most ways, the problems of telephone interviewing tended to be very similar to those that are encountered in face-to-face interviews in general, for example regarding missing words in transcribing data due to recording, and sometimes limited answers to some questions.

2.3.10.4 Response

Again, all of those involved contributed to discussion and appeared to give frank, uninhibited replies and the researcher is satisfied that the interviewees were honest and genuine. The researcher felt that these interviewees were offering fresh, animated and thought-provoking comment and insight into the children's multimedia market. Again, interesting and relevant documentation was offered to the researcher, similar to the items given to the researcher by publishers in the previous set of interviews. The interview response has provided a substantial amount of qualitative data relating to the success of the new media company's internal and external developments in relation to children's multimedia development, structural and procedural change, and strategic development. These elements were crucial to the development of the models as outlined in section 2.8.

2.3.11 Reliability and Validity of Interviews

> 'The modern interview has evolved into a more systematically organised research method. Over the years, the techniques have been refined, honed and sharpened in an effort to improve the interview's reliability and validity.' (Ackroyd and Hughes 1992, 83)

For both the interviews with book publishers and new media companies, interviewing and transcription was carried out by the researcher. All the book publishers and new media companies interviewed provided unique results, but it is noted that there are similar themes between the two company sample types and there was also consistency in questioning themes within the individual samples. In the conversation analytic research, tapes and transcripts were the raw material from which the results were

recorded and the analysis, developed. Accordingly, the quality of tapes and transcripts had important implications for the reliability of the analysis. The quality of recording was good with only a few which were difficult to understand. These parts were clarified with the interviewees concerned throughout the transcription process. Working with tapes and transcripts eliminates at one stroke many of the problems that ethnographers have with the unspecified accuracy of field notes and with the limited public access to them. The tape recordings and transcripts provided highly detailed representations of the activities, functions, and processes discussed with the interviewees in the samples.

In the semi-structured interviews, questions were specified by a thematic guide, but the interviewer was more free to probe beyond the answers and invite the interviewee to introduce interesting ideas and issues. Fielding notes that 'this manner', is 'prejudicial to the aims of standardisation and comparability' (Fielding 1986, 91). However, the interviewees were interviewed in sufficient detail for the results to be taken as true, correct, complete and believable reports of each interviewee's (and their employer's) individual views and experiences. Hakim notes that the great strength of qualitative research is this validity of the data obtained (Hakim, 1987). Validity of the interview data was checked by comparing results with previous survey data and comments from advisers.

2.4 Research Analysis

In the analysis of evidence, where quotes are used, these are not attributed directly to named sources as some respondents requested to remain anonymous. In keeping with their requests, it seemed appropriate to treat all other subjects within their groups the same, but as was necessary, to provide a description of characteristics of the company type. Initially these respondents or interviewees will be referred to as 'interviewees', 'respondents' or 'company representatives', but throughout the rest of the thesis they may be referred to as 'publishing companies' or 'new media companies', assuming that the information they are offering is representative of their employers' views or the general opinion within their organisations. The same treatment will apply when reporting and discussing the findings from both the questionnaire and interview samples.

'We define analysis as consisting of three concurrent lows of activity: data reduction, data display and conclusion drawing/verification.' (Miles and Huberman 1994, 61)

The analytical categories or themes used in this research process continually developed from the questionnaire and interview data obtained throughout the period of study as explained in section 2.3.5.3. This process allowed for flexibility for the variances particular to both the company types and factors occurring and affecting results within the period of a year. Data varied from publishing and new media companies and categories were developed and reflected the differences between the company types as Creswell suggests:

> 'Data analysis requires that the researcher be comfortable with developing categories and making comparisons and contrasts. It also requires that the researcher be open to possibilities and see contrary or alternative explanations for the findings.' (Creswell 1994, 153)

In the analysis of new media companies' activities, more in depth study was carried out on new media companies' content, sales and promotion online (in comparison to publishing companies' interviews previously) as these activities were described more in their response. To distinguish between features particular to general multimedia and online media, the term 'offline' is used to describe general multimedia (books, audio-visual, CD-ROM and DVD products) in the analysis and discussion as opposed to 'online' content. Models were also developed in the analytical process, helping to display, pictorially, structural and shaping forces affecting the children's multimedia industry, and outline factors which added value to companies' cultural, procedural, staff skills, relationships, product and strategic development. Once the themed data was gathered from the questionnaires and interviews, the information was outlined in developed models (stemming from Porter (1980 and 1995) and Vista International (1997-on) which aided the analysis of the overall industry situation and internal developments in companies in the children's multimedia market at the time of study. These models focused on development factors or those factors adding value in terms of core resources, skills, relationships, for example, as mentioned above. It was also felt that this focus in particular would be more useful than developing a model which measured a company's financial output (Porter's approach to vale chain analysis).

2.5 Questionnaire Data Analysis

2.5.1 Questionnaire Quantitative Data Analysis

There were three main stages in analysing questionnaires: data preparation, data description (counting responses in different categories, calculating proportions and applying some statistical tests), and interpretation of the results. In the analysis of both the publishers' and new media companies' questionnaires, grids were prepared to input the data gathered (See Appendix I and XII). The majority of the questions within the questionnaires were closed and this question type was quite straightforward to analyse. Results were input in to the statistical package SPSS for Windows which generated frequency tables and helped make inferences and correlations between questions. The analysis was mostly univariable (looking at one variable) or bivariate (including cross tabulations, breakdowns and different measures of associations between two variables). After that, the analysis was engaged in making comparisons or correlations between identifiable sets of sub-groups in the samples in relation to each independent variable (for instance, the small traditional companies within the publishing company sample, or the companies producing toys within the new media company sample), in accordance with the aims of the theoretical design. Denzin and Lincoln's 'Quasi-statistical' analysis style (Denzin and Lincoln 1998, 102) (as illustrated in Figure 2.2) was the method adopted in this research for analysing the quantitative data collected from the questionnaire surveys.

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              Codebook
                 │
                 ▼
Report         Text
  ▲              │
  │              ▼
  │         Identify units
  │              │
  │              ▼
  │        Sort into categories
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  │        Determine connections
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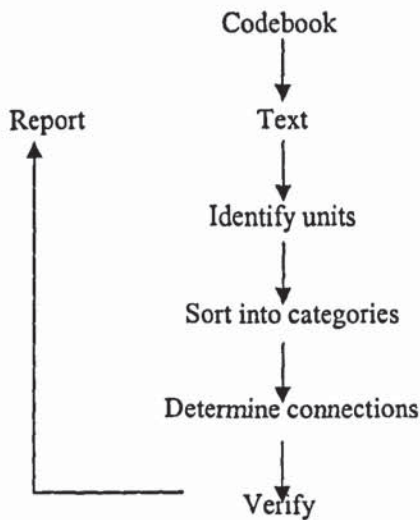
Fig. 2.2 Quasi-statistical Analysis Style (Denzin and Lincoln 1998)

Bar charts and pie charts were produced which enhanced the analysis and interpretation of data in parts. The charts were then converted into the Excel package as it was thought the charts drawn up by Excel were visually clearer for the reader and allowed for better interpretation of results for the purposes of this thesis. During the analysis, quantitative data helped to show the generality of specific observations and verified qualitative findings. Looked at the other way, the qualitative data from the questionnaire surveys and interviews helped to aid the conceptual development, interpretation, clarification and illustration of quantitative findings from both publishers and new media companies, as well as strengthen the empirical grounding of the theory developed from the questionnaires.

2.5.2 Questionnaire Qualitative Data Analysis

However, for the analysis of responses to the open (qualitative) questions used in the surveys, a framework was used which centred around six key themes: company strategy and culture, staff structure and skills, product development, working relationships and procedures, strategies for future development, and external factors under which a coding system was used, and ultimately, categories were developed and placed. These sets of themes and categories were generated deductively from the pilot studies undertaken, and the relevant theory read. However, additional themes were generated for the new media questionnaire survey from the raw data obtained from the previous survey. This approach has some advantages:

- the framework could be closely linked to the research questions
- others are able to comment on whether it is clear and logical without having to read the questionnaires
- it is not restricted to what information respondents give but can also include categories that they ignore

The coding system was created and applied, transferring the results to a prepared grid and the validity and reliability of the coding was checked by having someone else code a sample according to the research instructions. Once all the data was entered on the grid, responses were calculated in terms of

numbers who answered the question. The non-responses (which indicated a particular pattern) were also analysed and followed up by use of a second telephone interview and email questionnaire survey. Responses and characteristics were then quantified, and aggregated with others in the survey sample, in order to examine patterns or relationships between them by employing the techniques of statistical analysis with the SPSS package.

2.6 Interview Data Analysis

2.6.1 Interview Qualitative Analysis

'Qualitative research is interpretative research. As such, the biases, values and judgements of the researcher become stated explicitly in the research project. Such openness is considered to be useful and positive.' (Creswell 1994, 147)

Most of the data gathered from the interviews with publishers and new media companies was of a qualitative nature. Questions had been designed in an open-ended format to elicit certain types of information. Thematic analysis (as discussed above) was central to the analytic process of the two sets of interviews. It is noted by Boyatzis and others to be commonly used in the identification of patterns of enabling behaviour in companies; ethnographic approaches to analysis of various cultures; analysis of shifts in marketplace sentiment and preferences; and analysis of the changing climate in the workforce in organisations (Boyatzis 1998). It appeared to be the most appropriate method of analysis for the interview data obtained.

The interviews were recorded and transcriptions of the tapes were analysed initially through a 'skimming' process, to get a feel for the data. However, key themes developed from the earlier research (i.e. earlier questionnaire and/or interviews) and were used as a basis from which the interview responses could be placed and analysed. These themes, in the process of analysis, were coded with different colours, and within the themes, categories developed which were assigned numerical codes (See Appendix XII). New categories emerged and some categories were revised due to the emergence of new data as an effect of the volatile nature of the research area (with changes in the companies, market, products, and technology involved within a matter of months). For all qualitative data obtained in this research, Denzin and Lincoln's 'Template' analysis style (Denzin and Lincoln 1998, 150) was applied as shown in Figure 2.3.

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Report ◄──────── Text ◄──────────────┐
            ↗                         │
       ┌───┘                          │
       │    Identify units            │
       │         │                    │
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        ╲   Revise categories         │
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       Interpretively determine       │
       connections                    │
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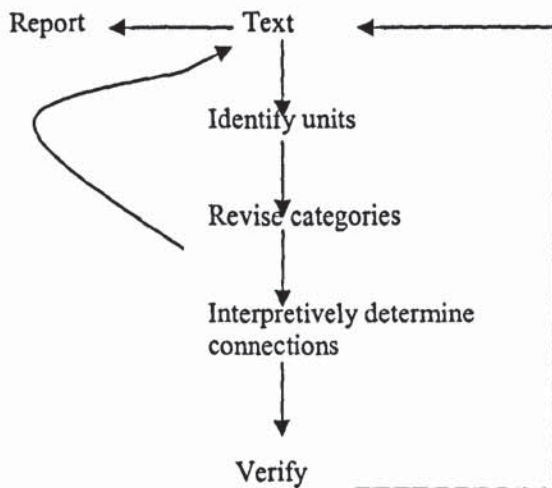
Fig. 2.3 Template Analysis Style (Denzin and Lincoln, 1998)

The researcher understands that the analysis is open to varying interpretations. The themes, coding and categories have been devised from ideas gathered and adapted by the researcher. However, the researcher tried to maintain a degree of objectivity, enabled by ongoing discussion and advice regarding the analysis of the data from her advisers. Guidance from relevant texts by business theorists in the area helped shape the way the data was analysed.

2.6.2 Interview Quantitative Data

A small amount of quantitative data was obtained from some of the closed questions used in the interviews. SPSS was again used to analyse some of the interview data, allowing basic descriptive statistics and frequency tables to be derived. Results were again transferred to Excel.

2.7 Interpretation

'The goal is to develop one's own interpretation of how parts of the culture fit together or influence or relate to one another that is intrinsic to the setting one has studied and, at the same time, sheds light on how similar processes may be occurring in other settings.' (Feldman 1995, 115)

Throughout the interpretation of results, decisions had to be made on important results, patterns emerging between results – and their meanings were related and interpreted in the context of the overall research questions, and ultimately, the implications of the data, for example, the concentration on core resources and relationships rather than financial output, and other areas on which strategists had previously focused. In this study, themes were examined individually, in related groups and holistically. It was important to consider the transcriptions of individual interviews in order to interpret what interviewees' responses said about them and then relate that to the context of the group of transcriptions. Finally, consideration was given to the whole context of the data so that results in relation to one aspect of the study were not being used in a non-representative way. It was also critical to consider results relating to the children's multimedia and publishing industries, and change

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management strategy for competitive success, added value, innovation and IT, in the context of other evidence such as the research literature or data from other parts of the study.

> 'The difficulty in interpreting qualitative data is not in learning how to create interpretations but in learning how to get away from pre-established interpretations. There are two main sorts of pre-established interpretations that are difficult to avoid. One is the interpretations made by people in the setting being studied. The other is the interpretations made by other researchers and theorists about phenomena similar to the ones under study.' (Feldman 1995, 107)

The research had to evaluate which elements from the interpretations to take as believable, applicable, or adaptable within this study on the children's multimedia sector. This study moved away from elements or themes which Porter and Vista International set out in their value chain and five force models. It focused solely on those factors or areas of activity which the sample had noted as adding value or contributing to the development of children's multimedia production. It was also important to bear in mind that trends and relationships could be inferred from qualitative data, but conclusive evidence is a rarity (Platt 1965). However, this study enabled empirical studies on children's multimedia companies to be interpreted where conclusions were based on the factual content from the survey and interviews' responses used. Tables consisting of data from the results were formulated. Columns presented responses (as percentages of groups of respondents) across different company types at different stages of the study. These responses were categorised under the themes which derived from the qualitative analysis (Appendix XII). As well as analysing results for individual data sets (for example, publishers), descriptive comparisons were conducted to examine changes in key areas between data sets (publishers and new media companies). Only results that could be directly and validly compared were used in this synthesising exercise. From comparisons, it was possible to interpret important market development factors, and infer related factors contributing to companies' success or development in the children's multimedia market. Results were also analysed thematically for the requirements of the next stage of the study which was to construct five force and value chain models to outline factors which contributed to development and success for companies in the children's multimedia industry.

## 2.8 Model Development

> 'At best what we have from our research are disparate collections of ideas. The connection between theory, method and data must be a systematic one and models provide that system.' (Hughes 2000)

Hughes offers a scientific explanation to describe what he means by deducing theory by use of a model (Hughes 2000) (Figure 2.4):



Fig. 2.4 Deducing theory (Hughes, 2000)

Cicourel's critique of models states that, 'Models offer presumed relationships. Measurement is measurement by fact only.' However, he also comments that a model also gives 'a commonsense understanding of social structures used through the process' (Cicourel 1981, 52). In this research Porter's generic Five Force model (market analysis) (Porter 1980) and his Value Chain model (company analysis), (Porter 1985), and adaptations of the Value Chain to the print and online publishing industries by Vista International, Cunningham and Smith and Diebold were studied. These studies set out external forces affecting companies in the children's multimedia market, and areas of value within company strategies, activities, structures and processes, and in general terms, some of their understanding and ideas could be developed in this research. However, this study focused specifically on the children's multimedia industry, and applies some factors or areas of value, which are specifically relevant or associated with the children's multimedia market.

### 2.8.1 Aims and Purpose

Porter's Five Force model, and Porter and Vista International's value chains were developed to outline external forces affecting companies and development factors publishers and new media companies use or require in order to achieve effective business practice within the children's multimedia market. Categories within these models can also be used to evaluate the extent to which change management within the children's multimedia industry can be explained and analysed by means of the models. Presenting the analysis of research findings within a 'model' format was considered useful in that it could encapsulate both visually and concisely all the relevant factors, and the relationships between them. After analysing the results from the publishers and new media companies sampled, development factors were identified from the questionnaire surveys and interviews which appear to be critical to the development of companies who are producing children's multimedia in the UK.

### 2.8.2 Theoretical Fit

The study's application of grounded theory, as Glaser and Strauss (1967) observed, required the development of a theory with four inter-related properties.

1. Fit: where the categories must be readily applicable, meaningfully relevant to, and explain the behaviour of the study. This stage involved the development of Porter's Five Force and Value Chain Models designed to outline factors contributing to the development of UK children's multimedia companies. Factors which were analysed thematically from questionnaire surveys and interviews were changed and developed to 'fit' the children's multimedia market. This was undertaken by incorporating specific, descriptive, and relevantly subjective factors such as the findings from the companies studied. It was decided that in this study a more qualitative approach, analysing companies' key strategies, resources, competencies, activities, and skills in comparison to Porter's quantitative approach, would be appropriate and categories were developed to outline the children's multimedia market and company situation.

2. Understanding: where the research has developed concepts and hypotheses to facilitate the understanding for practitioners concerned with this area. The in-depth information which was collected from children's publishing and new media companies and analysed thematically, was outlined and linked clearly within the five force and value chain models developed. This meant that those in the market or considering entering the market or related markets could understand clearly the options and areas of focus children's multimedia companies felt contributed to their success.

3. Generality: the theory had to be sufficiently general to be applicable to a multitude of diverse situations within the substantive area, not to just a specific type of situation. The theory should be flexible enough to make a wide variety of changing situations understandable, and also flexible enough to be readily reformulated, when it does not work in application through the accumulation of a vast number of diverse qualitative 'facts' on many different situations in the area. By focusing on core resources, skills, and competencies, rather than the financial output of a company, this study and the models developed within it helps outline the factors which could potentially add value and assist other companies to cope and survive in volatile multimedia markets (not just the children's multimedia market).

4. Control: the theory should also enable the researcher to understand and analyse ongoing daily situational realities, to produce and predict change in them, and to predict and control consequences both for the object of change and for other parts of the total situation that will be affected. The five force model which itself was developed to help companies control and set out predictions for changeable situations/environments is adaptable and the categories and factors within the five force model can be controlled and adapted to suit other markets in publishing, communications or media-related industries. The value chain, which had been developed substantially from Porter's original Value Chain, has adopted a more qualitative approach, focusing on companies' strengths, resources, activities and relationships of value. The study was controlled to have a more qualitative focus instead of Porter's quantitative approach – measuring financial output or other variables such as warehousing, rights and other services. Another study could develop models which could change focus and outline or measure factors such as finance, rights management and/or other services to demonstrate to companies how to control these areas of activity effectively

## 2.8.3 Other Models

The research focused on literature of related models to consider how best to apply these findings to assist companies in the market or those companies contemplating entering the market. The work of Porter, Scholes, the European Commission, Smith and Cunningham, Diebold, and Vista International (including Bide, Shatzkin et al.) was studied. Key ideas and models of change management, strategic processes and value chain development for 'electronic' publishing, innovation, and new technologies

were identified and analysed from their work, to aid the development of the models in this study. Elements of the main models studied were developed and applied to the research at varying stages of the analytic process and are summarised below under the appropriate areas of study:

1. Industry: Porter's Five Force model was studied and aided the analysis of the structural/shaping and external forces influencing companies in the children's multimedia market (1980) (discussed in further depth in Chapter 3 and 6) by setting out categories including: competition, substitution, supplier power and customer/buyer power to analyse the children's multimedia market situation.

2. Publishing: Evan's technology strategy survey for changes in the publishing industry was also considered (Evans 1996), as were the studies by Vista International (including Shatzkin, Bide et al. 1998) who devised models for change within the publishing industry in general; change for electronic publishing, new media and online developments and also developed a value chain for generic electronic and online publishing) (Vista 1998-2001). Ideas by Cunningham and Smith, and Diebold developing value-added hypotheses, and EC research initiatives on strategic development for multimedia were also followed. This involved ongoing studies tracking market development for new media and on the activities and changing processes of companies in the publishing industry in response to multimedia developments (1997-2001).

3. Company: Porter's Value Chain (1985) and again applications of Porter's value chain model by Vista International, Cunningham and Smith, and Diebold's studies were developed to incorporate children's multimedia factors displaying pictorially elements which added value. These factors had originally been analysed within the six key themes of company strategy and culture, staff structure and skills, company procedures and relationships, product development, strategies for future development, and external factors, and were then developed and outlined within value chain divisions. Primary activities include the categories of supply, production, warehousing/distribution, marketing and sales and service. Support activities in Porter's original model included categories such as management, technology development, human resource development and company infrastructure. These value chain divisions (most commonly categorised as primary and support activities by Porter) were changed to 'strategic', 'core' and 'support' activities within the children's multimedia value chain developed in this study. Again, this developed as a result of the responses from the companies surveyed and interviewed throughout the research process. Porter's original two types of activity are outlined in his model in order to measure financial output. This study, instead by focusing on the three areas of activities noted, adopted an approach similar to Lynch (1997) who focused on core resources, skills and competencies of companies, but within the context and framework of a value chain model. As a result of this, the categories of specific activity also changed and were identified and outlined within the children's multimedia model

developed based on the ideas and information offered by the companies surveyed and interviewed.

Key areas or categorisation of activity developed as data specific to the children's multimedia companies and market was gathered from the companies sampled as follows:

- Strategic activities: including company strategy/background, change management and planning and development strategic activity
- Core activities: including content/editorial, creative, technical/programming, testing and development, product assets, marketing/branding, promotion, pricing, sales and distribution and other services
- Support activities: including human resource management, business process and structural support

These activities were outlined in further detail in a more detailed children's multimedia value chain, which developed as more data was collected and analysed throughout the study.

4. Change Management: Change management models have already been created in response to the continuous developments in the information industry. Studies have been undertaken on developing a 'strategic fit' to cope with changes in corporate culture and strategy (Scholz 1987), and on creating a comprehensive model for measuring the potential impact of IT on organisational strategic variables (Mahmood 1991) and the impacts of innovation on companies and markets (Krell 1992). The research also recognises this requirement, but focuses specifically on the creation of a model for publishing companies entering the children's multimedia market. The research has identified key variables essential for that 'strategic fit' when companies successfully adapt to changes in the publishing market, above all those driven by IT. However, as already stated, the research has found that, to date, no models have been applied to the children's publishing field in relation to the changes in strategies and processes which have been required for multimedia production. Key ideas and models of the change management, strategic processes have been identified and analysed from Mintzberg's (1988), and Johnson and Scholes' (1997) studies to aid the development of the business model and helped shape the structure of an analysis of companies' 'strategic activities'.

5. Overall, Porter and Vista International's 'publishing industry adaptations' of Porter's models were studied and identified as being most appropriate for application to the children's multimedia industry situation. However, key elements from change management models studied such as the Change Management Process (Galpin 1996), the Innovation Impact (Krell 1992), the Action Research, and the Behavioural Change (Maybey 1993) models, also helped shape the category of 'strategic activities' as noted above, one of the key categories of the children's multimedia value chain model.

### 2.8.4 Model Construction and Adaptation

As highlighted previously, elements of all these models (in particular, the Five Force model and the Value Chain) were adapted and refined - incorporating factors specific to the children's multimedia industry and the companies' development and success within it. Figure 2.5 illustrates the different stages of the model construction process, the type of form the model adopted, and describes the model elements applied, adapted and developed at the various stages.

| Model Stage | Type | Description |
|---|---|---|
| 1. Preliminary | Generic | Five Force and Value Chain models (analysis of Porter, Vista International et al) |
| 2. Secondary | Specific | Children's multimedia factors for publishing companies (models developed to be more specific to the children's multimedia publishing companies and market situation) |
| 3. Tertiary | Generic | Children's multimedia Five Force and Value Chain models (models developed for both publishing companies and new media companies, based on empirical data from both company types including strategic/change management, new technology and innovation factors) |

Fig. 2.5 Key Modelling Elements (1-2 deconstruct, 2-3 reconstruct)

Throughout the research process, the model was modified and enhanced, as more factors which were aiding companies' strategic change management and development were incorporated to arrive at a fuller model. The model aimed to provide original insight to the sector and contribute significantly to a better understanding of how companies were coping with change and development in the children's multimedia market. Overall, there have been three key modelling elements, which are highlighted in Figure 2.5. Stages 1-2 involved the deconstruction, application and adaptation of Porter's Five Force and Value Chain models, incorporating the specifics of children's publishing companies, and their development factors or areas of value for the market. At stages 2-3, reconstruction occurred whereby the research arrived at a fuller model which incorporated more generic factors including children's publishing and new media companies' development factors, strategic change management, technology and innovation strategy elements and business process support elements.

### 2.9 Summary

This chapter has explained how the research has applied and developed various research methods and techniques in order to answer the research questions of this investigation into the children's multimedia market, including decisions made, processes adopted, strategies developed, and how these supported the theoretical fit. These methods, which have each had a contributory role to the research framework, included both quantitative and qualitative approaches. Grounded theory; desk-based research (including literature on relevant business theory and company information); questionnaire surveys and

interviews; thematic and statistical analysis methods; and the development of a children's multimedia market-specific Five Force model and a children's multimedia company-specific Value Chain model (incorporating some elements from other relevant models); have all aided the development of a robust conceptual framework.

The study now proceeds to review literature found to be relevant to the area of study which provides a basis from which key ideas are developed, confirmed or disproved. The review is presented in Chapter 3, followed by a presentation of the findings of new data which were obtained in the process of researching publishing companies and new media companies in the UK children's multimedia market (Chapter 4).

# Chapter 3: LITERATURE REVIEW

## 3.1 Introduction

The main aim of the study was to uncover factors contributing to development within the children's multimedia market in the UK and to analyse how publishing companies and new media companies are adapting to change and altering strategy to be competitive in the market. The aim of this literature review is to provide an outline of the main generic themes which provided a background to the research area of multimedia development and success factors for children's multimedia development in the UK. It also reviews the more specific sub-themes related to the area of children's multimedia which shaped the question design of the surveys and interviews undertaken. The business and modelling literature underpinning the study is also outlined. The literature review is structured in the following way:

Section 3.2 examines literature tracking 'generic' multimedia development in the UK (1998-2001) and overviews studies on consumers, forces, technology, products, services, companies and their skills and functions. Most of the literature reviewed in these areas tended to be experiential, practitioner reporting or commentary on the market and company developments involved in the 'generic' multimedia area. A small amount of literature was found on issues relating to children's publishing, and is reviewed at the end of this section.

Section 3.3 focuses on the business elements underpinning this study including change management issues for multimedia production, factors affecting publisher's corporate strategies and processes for this market, and new strategy development. In Section 3.4 literature on model building/development has been studied. Models related to this research topic which were studied are discussed and how the value chain was reviewed and chosen to be the most applicable for this research is noted. The literature reviewed here tended to be of a more theoretical and generic theme but was found to be applicable to the research area.

In the literature and sources consulted throughout the study period, terminology of the companies involved and descriptions of the industry itself had evolved due to the changing nature of the market (see page 1). For example, 'new generation publishing companies' (originally defined by Feldman 1997, 14), became increasingly referred to as 'new media companies' in key related journals and CD-ROM directories such as The Waterlow New Media CD-ROM in 2000. Children's multimedia publishing companies became known as children's multimedia companies, with the term 'publishing' becoming increasingly obsolete in the multimedia field as publishers themselves became a smaller part of the industry towards the end of the 1990s. Terms such as electronic, digital, audio, CD-ROM, online, multiple media, media mix and e- publishing have all been used to describe the area of this study. However, based on the literature reviewed, it was decided that the term 'multimedia' was most appropriate in this research (although this has been commonly used in reference to CD-ROM media in the literature reviewed) as it encompasses all types of media produced by the companies studied. The 'multimedia' produced by the

companies in this study included books, audio-visual, CD-ROM, DVD and online content for children at home and school. Literature about e-books and games products for children was also read throughout the study period but these topics were not considered in this research.

## 3.2 The UK Multimedia Market

In this section, studies looking at the development of the UK multimedia market in the period of research are outlined. The review encompasses literature about the consumer at home and school, and projects and initiatives encouraging multimedia development in the UK and Europe. Literature on new technologies and their impact, products and services, and some of the companies involved in the UK children's multimedia market has also been reviewed. There was a notable gap in research into *children's* multimedia market developments, therefore studies looking at generic multimedia development had to be reviewed in order to obtain an understanding of how companies in the children's multimedia market might also be developing their strategic activity and culture in relation to external factors, staff skills and training, product development, structure, processes and working relationships.

In 1999 and 2000, the CD-ROM and multimedia market in the UK was reported to be producing consumer, professional, educational and entertainment software (The UK Multimedia and CD-ROM Directory 1999/2000). Despite the considerable difficulties faced by this sector in 1996/7, when a number of large companies in the UK closed down and others shed staff to cut costs, the industry saw the number of commercially available CD-ROM titles increased worldwide by nearly 50% in 1998. (Waterlow, 2000). The same directory listed 32050 titles and 3180 publishers worldwide, with 2610 UK companies active in multimedia with around 5333 CD-ROM and DVD titles published in the UK in 1999/2000. The directory also noted that various new media company types were at work in the UK market including around 510 multimedia title publishers, content developers (342), distributors (307), production services (312), web developers (312), support services (444), software developers (225), DVD specialists (146) and hardware producers (146). A variation of formats of multimedia produced by UK companies were noted as being CD-ROM (28172), CD-ROM XA (11), DVD-ROM (108), DVD Video (2318), and CD Extra (194) products. Most multimedia products being produced for children were being sold within the sectors described as 'Education (home)', 'Consumer (reference)'and 'Education (classroom)' (Waterlow New Media CD-ROM Directory 2000).

In the late twentieth century, Bide noted that the publishing industry was engaged in 'an era of technologically-driven change unmatched since the time of Gutenberg'. The impact of that change was thought to be 'as far reaching as the invention of moveable type' (Bide 1997, 22). He also felt that the traditional publishing industry was well placed to take advantage of the opportunities that had been presented by new publishing media:

> 'Change that is so fundamental creates an environment where new entrants (such as new media companies) can have a significant impact and barriers to entry (which have never been high in publishing) are lowered.' (Bide 1999, 23)

There was also a requirement for the study to analyse some of the changes impacting on UK children's multimedia companies, including external threats and opportunities. The strategies companies were developing in-house to manage these changes also required investigation.

In the mid to late 1990s, there was much experiential reporting and commentary in trade journals, reports and websites, on general developments in the fields of generic 'multimedia' or 'electronic' publishing and technology in the UK, US and Europe. There existed a notable gap in empirical research into the activity of UK companies in the children's multimedia market - the focus of this study. Literature in the area of children's publishing tended to focus more on book trends (Fisher 1993, Horn 1997, and Reynolds and Tucker 1997) or the more technical aspects of multimedia design for children and education (Bennet 1994, Rieber 1996 and Druin 1998). Writers such as Feldman, Bide, Shatzkin, Negroponte and Eisenhart (1996-1999) noted how publishers were requiring to restructure, conform to 'new rules' and perspectives, and develop new strategies and management frameworks as 'multimedia came of age' and offered new opportunities. Even in the early 1990s, the world of publishing was changing so rapidly, that even one commentator noted that the need for research that looks at process as well as product was particularly urgent (Luey 1994). Publishing has been undergoing an identity crisis, and research can benefit all segments of the industry in turbulent periods. This research needed to find ways in which children's publishing companies could publish and market their content both offline and online in the changing industry and attempts to answer questions, such as Sucov's, which asked how publishers were going to take advantage of the opportunities available to market their digital content through CD-ROMs, web sites and other online services. (Sucov 1996)

To prepare themselves for success in this new area, publishers needed to ask themselves some searching questions about their business and about the way in which their organisations are structured. This research needed to investigate both internal and external factors which prepare children's multimedia companies for success in their market. The importance of brands in the multimedia market was highlighted as contributing to multimedia companies' development by Andersen Consulting and the Institute for Information Economy and New Media (IENM) in their study on Electronic Publishing, looking at 60 European companies in the publishing media, hardware and software sectors. However, the research needed to investigate whether effective branding and content management may be giving children's multimedia companies competitive advantage in the UK market, and also identify any other factors which may be aiding their development.

> 'The growing sense of online community is frustrated by an inability to find related content easily. Publishers' experience in creating a sense of a shared community of interest, in segmenting audiences, in tailoring content to meet and drive demand, and in building brands will give the industry an edge over other content providers.' (Andersen Consulting and IENM 1997, 32)

Andersen Consulting noted that publishers would need to change their whole business focus from production to customer service in response to the new concepts of readership which multimedia publishing has created, and research investigating the change in focus that is required specifically in companies producing multimedia for children is lacking (Andersen Consulting, 1999). In 1998, the

opportunity European expenditure on multimedia training and education (as highlighted by a UK Multimedia Datamonitor report) was expected to climb from £551m in 1997 to £4.4bn by 2003. Online training and education services in the business, home and education sector were predicted to grow strongly until 2003. The home education CDROM market remained robust with an average annual growth rate of 50 percent over the next five years. The growth was attributed to home penetration of multimedia PCs increasing; more multimedia PC titles being purchased; CD-ROM publishers developing more titles, lower prices, an increased installed base of home multimedia PCs and the release of several national curriculum-based titles (Barker 1998). In the same year, Williams compiled a report for the DTI, The Advance of Electronic Publishing which aimed to look at the problems and opportunities faced by UK publishers at the end of the 1990s. Various areas which were highlighted as undergoing development for multimedia (applicable to all sectors in multimedia publishing) emerged from his study including sales and marketing, product development, technical, legal and regulatory, training and finance areas. The statistics and research noted above highlighted a need for further research into training and development of multimedia sectors in the UK and online developments due to its potential impact on the UK's economy.

On the basis of William's survey, the UK generic multimedia industry appeared to be in a buoyant, confident mood, and despite being forced to confront rapid, confusing, technical change and serious competitive challenges, the industry was in an expansive, experimental phase. There was, at that time, a decisive shift taking place to develop new electronic products, to generate new revenue streams from these products and to exploit the potential of the internet. Williams found there was a high level of expectation that Internet-based services would, in the near future, start to make a positive financial contribution. The chief competitive threat was coming from US products. The lack of trained and qualified staff which small to medium companies can afford; the relatively under-developed consumer market for electronic products; the shortage of useful market statistics and the threat of copyright infringement were also some of the most serious and immediate concerns. (Williams 1998) At that time, it was felt that the future was one of great potential for the publishing industry, but also of uncertainty and threat (Cunningham and Smith 1998). Questions needed to be asked to those involved in the children's multimedia market about their strategies for future development such as online development and how they prepare for external factors such as competitive challenges from the US, and the emergence of new technologies as highlighted above.

### 3.2.1 The Consumer

The market for children's multimedia has been described by various electronic publishing industry employees or commentators in UK trade journals as being one of the largest and expanding sectors in the UK multimedia market within the period of the study. It operates in two distinctive market niches: in homes that have a PC that is used for children's education and entertainment, and secondly, in school classrooms where CD-ROMs and online materials were noted to be used as teaching and learning aids. There existed a need to investigate the unique nature of the children's multimedia

consumer and children's multimedia companies' relationship with the middle market (the adult market). The middle market could be described as the adult buyers of products or content for children. The middle market and the strategies that have been developed by new media and publishing companies to attract both children and adults to their products required investigation. In 1994, a WH Smith survey identified four types of purchaser in the children's book publishing market: 'Parents of pre-school children, parents of 5-10 year old children, relatives and friends, and children' (Report on Survey by Book Marketing Limited 1999, 19). When the buyer is not usually the end user, a middle market needs to be convinced (including teachers, parents, family and friends) and promotional material must be attractive to both child and adult. At the London International Book Fair (LIBF) in 2000, Samper (PR consultant and children's book author), from his experience, noted:

> 'When talking to your customers, each one needs talking to in a different way, even if it is about the same product. This is especially true for children's publishers communicating to multiple markets.' (Samper 2000)

The different degrees of influence the adult can have on selecting and purchasing multimedia for children at different stages of their lives was also an area which needed to be studied.

Since 1970, multimedia production and user demand have increased steadily and there has been a continued market for children's multimedia software in the UK which has developed from an existing base of 'multimedia' kit-based products and printed material. A variety of media is now commanding an increasing amount of children's time and attention and is playing a growing part of their education as society realises the importance of media in effective communication and the relating of ideas. Over the past 20-30 years multi-kit based products and audio cassettes have accompanied books for reading purposes, however, more recently television culture, where people are used to learning by seeing, is spreading. In 1995, a report called 'The New Generation' by Handel Communications suggested that 'a new generation of reader is emerging with a different life agenda' (Askew 1995, 30). It found that children typically spend five hours a day on screen-based entertainment, and that their bedrooms have become a multimedia environment with computers, video games, television sets and music systems, and of all the children in the survey, 35% had read fewer than two books in the previous six months. Two years later, Heppell continued to observe that children's publishers were facing competition from other products and leisure activities, for example, TV, videos, music, sport and computer games and predicted that 'millennium children will call the shots and will want multimedia before books' (Heppell 1997, 42). In 1999, a Book Marketing Limited report looked at children's internet use and noted that over three million internet users in the UK were aged 17 or under. This represented an increase of 12% in just six months. (Book Marketing Limited 1999). Product features which children's companies are providing in response to the needs and interests of UK children need to be investigated. New communities based on interests, needs and lifestyles are emerging, and audiences are defining themselves as groups of individuals with similar interests who can interact online. Andersen Consulting's study noted that companies must focus on integrating their content with services, customer-driven product tailoring, the brokering of information, and 'retail' transaction facilities. Users will be attracted by multimedia products that offer a time/cost benefit over print, and low-cost, easy-to-

use services (Andersen Consulting and IENM 1999). Lakeman also agreed with Handel Communications and Heppell, and more recently noted that children today also have a sound understanding of how to use the internet:

> 'Children are an Internet marketeer's delight. They are vastly more computer-literate and Internet-savvy than most adults, they influence the two big markets of home and school, and they are the internet users of the future.' (Lakeman 2000, 21)

Although UK children have been increasingly demanding new media and online developments, (based on the experiential reports by industry commentators and researchers), there still appeared to exist a need for more responsive activity from children's publishers in the UK market. In an article in The Children's Bookseller, Sylge noted, 'It is shocking how slow children's publishers have been in developing their internet presence' (Sylge 2000, 16). An investigation into the ways in which children's multimedia companies research and respond to their market's needs was required.

### 3.2.2 Multimedia Training and Initiatives

### 3.2.2.1 Educational and Governmental Projects

Throughout the period of research, educational and governmental projects and initiatives in the UK which were likely to affect or influence the children's multimedia companies studied were identified and analysed in the literature reviewed.

At the 1998 BETT Show in London, the UK Government announced a stream of initiatives encouraging multimedia development, particularly for online development, such as Net Year, 'a massive teacher training programme' and the launch of the National Grid for Learning. Cole noted that one of the biggest developments over the next few years could be the ways schools increasingly get content from the National Grid For Learning and the Internet (Cole 1999). Content includes educational software, as well as the massive range of resources on the Internet, from images to data. Granada Learning's Nigel Ward predicted, 'In three to five years time educational software developers will not be selling boxes or CD-ROMS, but delivering content online' (Ward 1999). However, David Taylor, a managing director of Dorling Kindersley Interactive Learning noted, 'Online publishing will be a gradual process as a lot of confidence-building has to be done in the publishing world' (Taylor 1999). In the same year, Young also observed that print-based products were still dominating and there was little evidence that teachers have either the resources, or the expertise, or the inclination to make more than minimal use of material online. 'Despite efforts to bring the benefits of technology into schools, lack of training (in a change of attitude, in particular) is holding things back' (Young 1999). This research needed to find out if it was the view of the companies studied that schools were not doing enough to encourage online and offline multimedia development in the UK for children and investigates which products and services these companies were providing for UK schools.

Several educational and governmental projects had been emerging and are in various stages of development, encouraging multimedia development in the UK, particularly in schools. The UK Government Department for Education and Employment (DfEE) strategy aimed to pilot superhighway and multimedia technologies in schools, and to offer purchasing advice to schools. It also developed a National Education Multimedia Offer Scheme to encourage new proposals from industry to provide concessions for bulk purchases of educational technologies for schools. Education Online, in co-operation with other existing projects, offers schools technical capability, educational credibility, a marketing presence, and project management. The Office of Telecommunications (OFTEL) report also made a contribution to schools' internet access - Information Highways: improving access for schools, colleges and public access points. The report sought to ensure that educational institutions, particularly schools, were not deterred from connecting to networks through any high costs (Johnson 1998). Surveys of information technology in schools have also been ongoing from the mid to late 1990s - the most recent of which surveyed the numbers and types of information technology equipment, expenditure and sources of funding, location and maintenance, curriculum uses of and support for IT, electronic communications, and teacher training. Primary, middle, secondary, special needs and teacher education are focused on. These studies all indicated that the UK and Europe were certainly aiming to support and develop educational institutions throughout the UK and Europe. The uptake in schools and the impact of these initiatives on children's multimedia companies needed to be investigated.

The National Council for Educational Technology (NCET) was also developing their range of materials for teaching and learning with IT at the time of study. Their role is to identify the relevance of new technologies to education; evaluate the potential of new technologies to enhance learning and to raise standards; and promote, enhance and support the effective use of information technology across all sectors of education (Johnson 1998). The key aims of the European initiatives for multimedia development have been encouraged and applied in companies in the UK, through the use and development of ICT, focusing on key skills and areas of value, and support for online network development, access and support. The report of the European Commission's Educational Multimedia Task Force encouraged various projects for European multimedia development, including the establishment of the European Schoolnet. The Schoolnet was set up to produce a common European platform and framework for providing, developing and supporting internet and multimedia services with a European focus adding value, and supplementing services provided by national networks and other public organisations, as well as private companies (European Commission's Educational Multimedia Task Force 1998). An awareness of such initiatives and organisations would seemingly be of value to companies producing multimedia for children.

The PA's Task Force (directly representative of three PA divisions, EPC, and CAPP) and the Electronic Publisher's Forum (EPF)), has studied extensively the use and development of IT in Education, and the Teachers Evaluating Educational Multimedia (TEEM) project and its software evaluation studies were also reviewed and proving to be successful (mid 1990s on). TEEM reported (in May 2001) an average of 3500 teachers per day visiting their site teem.org.uk to evaluate new media.

The Parent's Information Network (PIN) also contributes to the development of multimedia in UK schools and impacts on the type of product UK companies produce for children. These studies and initiatives reviewed will ultimately impact on children's multimedia companies in the UK and the study needs to consider how companies in the UK collaborate or are influenced by governmental or educational projects and initiatives.

Other research by the British Educational Communications and Technology Agency's (BECTA) on the on-line learning resources market in 2001 estimated that the market for curriculum software and online content for the UK in 1999/2000 was approximately £36m. It has been reported that Government support for IT in schools has totalled £187m (GEST), and in March 2001, the UK Government was promising an increase of £700m a year into education. (Electronic Publisher's Bulletin 2001). In May 2001, it was also reported that the UK Minister for Education recognised the important contribution publishers make to education, including the provision of digital learning materials (PA educational and professional brief 2001). In June 2001, a BECTA conference held in London provided a forum to explore how research-based policy could enable ICT to play a part in creating schools of the future. These initiatives, projects and development factors make up a huge area influencing the development of educational products. The impact of these initiatives needs to be considered in this research but the study also considers those products being produced for the home sector of the children's multimedia market.

### 3.2.2.2 European Commission Projects

The European Commission's projects and initiatives (which are outlined in this section) potentially impacting on the development of UK companies in the children's multimedia sector in the UK were also reviewed. As the UK moved towards 'the Information Society', the European Commission stressed the importance of the development of a strong content industry which builds on the historical tradition of publishing in Europe. The Commission also noted that as it increasingly gains market share, the electronic publishing industry will be an important employment market for the future, with an estimated figure of over one million new multimedia-related jobs being created in the fifteen EU Member states over the next ten years. In this industry, they also noted that demand for content creators and developers is expected to show the highest growth rates (+95% by 2005). (EC 1996)

Various initiatives and projects were also set up and developed by the EC to promote multimedia development. From 1997, the IMPACT-2 programme in particular, made knowledge available about initiatives in electronic publishing and multimedia, IE214-SIMPLE studied the integrated multimedia electronic publishing environment. The IE443 studied dynamic publishing with multimedia: information engineering in risk communication. The Info2000 programme was one such project commissioned by the European Commission DGXIII/E and Andersen Consulting and aimed to stimulate the emerging multimedia content industry to recognise and exploit new business opportunities and to pursue initiatives that contribute to the advancement of the industry in view of the need to dispense content and services. The central strategic theme of INFO2000 was noted to be to

strengthen individual professional, social and cultural development, companies within the industry, and overall economic growth, competitiveness and employment in Europe.

Other related studies by the EC included the ADMEDIA project which investigated the future of advertising and new media and CONDRINET, a study looking at content and commerce-driven strategies in global networking. The Education and Training Sector study, part of the Telematics Applications programme, researched telematics applications for education and training, and the Educational Multimedia Task Force has been developing educational and cultural products and services accessed via televisions or computers at home or in educational or training institutions. ELPUB2 which studied 'Strategic Developments for the European Publishing Industry towards the year 2000', and MIDAS-NET, an initiative of the INFO2000 programme (which aimed to create new markets by stimulating the creation of high quality multimedia content and targeting user groups in business, industry and trade, in particular small and medium-sized enterprises) were also reviewed. Another report, Interactive Digital Media, is assessing the potential impact of technology on the development of interactive media up to 2003, analysing the technology gap between software currently available, and the requirements of media companies, distributors and their customers. The report identifies areas of unfulfilled demand and potential need, and also advises where the European Commission's Fifth Framework programme should concentrate its spending. These national and European initiatives suggest that a need exists to investigate areas such as new technologies and training gaps in the multimedia market. All these projects and initiatives highlighted the economic importance of multimedia development, and also indicated the importance of investing into researching and sharing best practice and training for multimedia. In response, this research is outlining factors contributing to the development or success of companies in the UK children's sector.

### 3.2.2.3 Training

Various courses and projects have also been established and reviewed during the period of study, which encouraged skills development and training for the UK multimedia market. A project, undertaken by the European Commission's Leonardo da Vinci programme, surveyed the training needs of publishers in the UK and four other European Union member states. The Leonardo da Vinci project which started in December 1998 was designed to 'train the trainers' for new media, and was intended to result in a 'snowball effect', disseminating best practice. The EPTNIS study by the Centre for Publishing Development pointed to the lack of knowledge and skills in current publishing staff as a barrier to their development of electronic publishing, and the need for staff to be re-skilled in sales and marketing, distribution, and customer servicing for the electronic environment. As part of the eEurope Action Plan, the EC launched a new initiative in May 2001 to encourage SMEs to GoDigital through co-ordinated networking activities for the exchange and knowledge of best practice, e-commerce readiness and benchmarking. The focus of this project is on practical guidance (not just general awareness) and funding is available for companies on a proposal basis. Alongside the Publishing Training Centre's training courses for publishers in the multimedia market, other courses and seminars

on web site management for example, were available to develop skills for the market by organisations such as AsLib, PIRA, the Association for Information Management and IEPRC. The Electronic Publishing International Conference in June 2001, which offered strategic debates for senior executives in electronic publishing, dealt, in a practical way, with the training issues concerning publishers practising or considering multiple media publishing and electronic commerce. This review helped the researcher develop an understanding about what types of training and courses are available to companies in the children's multimedia market. An in-depth investigation into which specific training would be most useful for children's multimedia production and development in the UK is required.

### 3.2.3 Children's Multimedia Companies

Over the past five years, much has been written in publishing and multimedia journals and directories about the company types involved in the generic multimedia market, their interaction, activity and success (or lack thereof) (Snyman, Kay, Feldman, Bide, Williams et al, mid 1990s on). After an analysis of the literature in the area, it emerged that a wider variety of players were competing with each other in the children's multimedia market than had been previously thought. In 1997, Kay noted, 'Electronic publishing, like other forms of publishing, will find plenty of room for both large and small companies.' There will be large companies with cross-media and international capabilities, and equally many smaller players whose strengths are based on understanding both the customers and the product in a particular niche (Kay 1997, 21). At the end of the 1990s, Piet Snyman (previously with Random House and then director for education at CUC Software) reported that Disney Interactive, the Learning Company, Europress, Dorling Kindersley, Microsoft and CUC Software controlled more than 60% of the market for children's CD-ROMs in the UK and that the remaining market was shared by 40 other publishers. He also noted that 'growth figures for companies in the UK children's multimedia market looked promising' at that time (Snyman 1997).

From this, the research started to identify a range of successful children's multimedia companies to target the questionnaire survey. Snyman noted that a handful of companies, among them Dorling Kindersley, OUP, the BBC, Helicon, Anglia Multimedia and YITM, had had success, but the majority of companies in this sector, typically very small, had struggled in a difficult and volatile market place (Snyman 1997). The obvious route to market for these products, through retail outlets, had proved to be congested, 'with too many titles chasing too little shelf space.' Even the biggest companies had failed to get all their product on to shelf or make an impact and there had been a number of high profile companies who had withdrawn from CD-ROM publishing (Williams 1998, 10). As the research set out to identify critical success factors for children's multimedia production, literature was reviewed which highlighted companies' features which contributed to competitive advantage or success in their multimedia production. Chandy and Tellis noted that many researchers suggest that company size is the key predictor of radical product innovation. However, they argued that one key variable that differentiates companies with strong innovation from others is the companies' 'willingness to cannibalise their own assets or investments' (Chandy and Tellis 1998, 474). Company size, structure,

culture, and areas of value or 'assets', critical for children's multimedia production, needed to be investigated. At the end of the same year, Cunningham and Smith reported that electronic publishing was very much a global market and the need for competitive advantage would fuel further consolidation within the sector (Cunningham and Smith 1998). Research into the globalisation and expansion of children's multimedia market, and the forces at work within it, was also required.

### 3.2.3.1 Publishing Companies

In the mid 1990s, there was a large amount of sceptism about the traditional book publisher's role, and writers in the industry such as Snyman (1995), Feldman (1996), Horn (1997), Negroponte and Bide (1997-1999) all commented on how traditional book publishing companies had been 'getting it wrong' in the multimedia market. Horn noted that from 1995 to 1996 'every publisher and his aunt jumped on to the multimedia bandwagon and the result was that a lot of material produced was not brilliant and did not have the investment required' (Horn 1997). The suggestion that the UK did not need publishers was becoming a more common and popular belief (Negroponte and Gates (1997-1999)). 'The people who really ought to be dis-intermediated are the publishers; traditional publishers will slowly but inevitably disappear.' Negroponte believed that they did not add enough value to the publishing process to survive the move from paper to the networks and felt that a coherent response to the question, 'Will we need publishers in the networked economy?' needed to be found (Negroponte 1997, 20). Interestingly, it was observed that this sceptism was reserved for this type of publisher only – and not the other types of companies in the market at this time.

Studies on the activity of small and medium sized companies who have achieved success in other industries such as the North Sea oil industry (Storey 1996), high-growth firms (Welbourne 1997), entrepreneurship in small firms (Deakins 1996) and the growth constraints on small and medium sized firms (Hughes 1998) have been reviewed throughout the period of study. This enabled the development of an understanding about the problems smaller companies have to face and overcome in the children's multimedia market. At the Third Electronic Publishing Conference, in Sweden it was highlighted that smaller publishers are struggling in this market but also that some countries have produced successful companies who have developed their operations from small scale to a significantly advanced stage (Linde 1999). The identification of ways in which smaller publishers can achieve success and develop strategy accordingly in the children's multimedia market required further examination.

However, in 1997, Rosenheim noted that a smaller group of committed traditional book publishers who were becoming more experienced and increasingly focused on their key assets existed. He commented that the majority of traditional book publishers entering into consumer multimedia had failed due to a lack of understanding of the computer industry and that 'those publishers that have done well in the multimedia market have done so because of their quite traditional copyright holdings and quite traditional brands' (Rosenheim 1997, 7). An analysis of children's multimedia companies' focus is also required in order to identify key areas of development in that sector. Snyman noted that many

traditional publishers initially used a book model to embrace a new technology which, in certain respects, conflicted with that model. Generalised, speculative evidence perceived that publishers were concentrating on content, whereas other entertainment sectors, which have progressed more successfully in the market, concentrated more on distribution. 'Books are about content in a fragmented global market; digital publishing is about global distribution' (Synman 1995, 24). A gap existed for empirical research to uncover models appropriate for children's multimedia production in the UK.

'Publishers will come under increasing pressure to adapt their business models to the new reality of a commercial environment ruled by the networks if they are to meet the requirements of tomorrow's consumers. Publishing companies must change to meet the changing demands of the marketplace or other businesses will take their place' (Bide 1997, 22).

However, Bide also noted that publishers (traditional or otherwise) who bring content to the marketplace via the network (regardless of its structure), will continue to serve a vital role. He felt that what would matter most would be that publishers should focus with absolute clarity on the real value that they bring to the publishing process and seek to understand how 'the value they add maps to the networked environment and its potential customers' (Bide 1997, 22). New, non-traditional competitors are entering the market and using the internet to bring together both old and new communities to create and use content. Online network operators, new online services including online booksellers, virtual libraries, large multinational media companies, libraries and learned societies, computer games companies, colleges and universities, the broadcast industry and many others are encroaching on traditional publishing territory. Bide's view is that publishers who are not ready to engage with the digital and networked community will lose market share to organisations that have adapted to the new web-based environment. A gap in research into the children's multimedia publisher's changing structure, influences, competitors and customers also exists.

### 3.2.3.2 New Media Companies

Feldman defined a company which he described as a 'new generation publisher', as a type of company described as being set up in the 1990s with the specific purpose of producing solely multimedia (not books). These companies, along with book publishers within the children's multimedia market, are the focus of this study, and are referred to as 'new media companies' in this research as the term has became increasingly used over the past two years (Feldman 1997). New media companies have been described as 'companies within the multimedia sector whose only experience is in electronic publishing' (Snyman 1995, 24). The relatively low barriers to entry meant companies from other sectors (for example software, broadcasting, film, music and other entertainment sectors) began to create extensive content in multimedia format, raising the competitive pressures in the UK generic multimedia market. For several decades, Feldman also noted that book publishers had 'swallowed each other' and in turn been acquired by multimedia companies dominated by broadcasting and film interests. For these organisations, books represent only another form of 'software', raw material for conversion into more lucrative audiovisual entertainment. Traditional publishers have not been the only

company type that have had a difficult relationship with emerging media and the research aimed to investigate the experience of new media companies at throughout the study period.

### 3.2.3.3 Mergers and Acquisitions

In 1998, market pressures (such as technological developments and increased and varied competition) forced a shakeout in the multimedia market, and survival depended on a company's ability to market their skills, develop partnerships with other larger players, exploit niche markets and control costs (Williams 1998). The ways in which new media and publishing companies in particular have achieved a competitive strategic position to remain competitive in a market with varying, developing players need to be investigated.

Traditional media (broadcast, film, television, books and magazines) and emerging media (on and offline, digital, cellular and fibre optic formats) are merging in many respects (Snyman 1995). Much of the literature reviewed about companies in the generic 'electronic' or 'multimedia' market noted that companies in the UK and US were merging or acquiring each other in order to achieve success or advantage in the market. In 2000, it was reported that 'high-profile link-ups in the telecommunications, media and technology sectors were set to make 2000 a record year for mergers and acquisitions' (Thomson Financial Securities Data 2000, 20). At a New Media Knowledge seminar, Barrington also outlined some guidelines for companies preparing to form a strategic alliance:

> 'The partnership must be valuable to both companies and their clients, each company should be prepared to share ideas, knowledge, skills and resources with each other, partners should have different (but complimentary) skill sets, partners should communicate regularly – preferably daily.' (Barrington 2000, 10)

An example of a successful multimedia publishing acquisition was highlighted by Bury in 2000. She noted since Pearson took over DK, the company has managed to hold on to the ownership of all its rights and has been able to develop products with a global bias, putting it in a good position to exploit new technologies using a strong brand (Bury 2000). Pearson offers the money and management expertise needed to do this. 'Penguin can develop DK and take it forward as a publisher,' said Penguin Chief Executive, Forbes Watson, and noted that Pearson plans to use DK content across the full range of media, including digital television (Watson 2000). Other examples of mergers within the children's multimedia market need to be investigated to evaluate the value of entering into partnerships with external organisations.

### 3.2.4 Technology and Product

The technological, communications and entertainment revolution is about the convergence of media as well as technological change, development and innovation (Snyman 1995, 30). Bide noted that it has been widely accepted that Moore's Law (which estimates that the performance of computer chips doubles every 18 months) will continue to occur for at least another fifteen to twenty years (at which point, Moore suggests, chip designers will face the unbeatable physical limits of current technology). The impact of another two decades of this exponential growth on computing capability is almost literally unimaginable (Bide, 1998). Much of the literature reviewed written in the early 1990s, encompassed industry and practitioner experiential reports and trade journal articles on CD-ROM development, and by the mid to late 1990s, the focus of industry commentators was on digital, hybrid and online developments. Cunningham and Smith reported at the end of 1998, that within the consumer market, CD-ROM had been the main delivery platform. (Cunningham and Smith 1998). In the past, CD-ROMs have been high risk as nobody really knew what the lifespan of the product would be or whether the growth in sales would be sustained. This situation throughout the period of research had changed considerably, and the same is now happening with DVD products. Foster recommended to companies in the market that online technology was 'a better bet' than CD-ROM while both technologies continue to develop, the technical limits of CD-ROM are likely to be reached substantially before the limits of online in terms of their ability to deliver the value which customers can identify. Foster suggested:

> 'The later you identify the new dominant technology in your core business, the more it is likely to cost you to catch up. Eventually, the cost of catching up becomes greater than the resources that are available to the business. Barriers to entry – branding, control of distribution channels – are too high to be overcome.' (Foster, 1996 in Bide 1998, 30)

Andersen's study recommended that publishers should use hybrid broadcasting and online systems to offer advanced electronic publishing services. Following on from this, the hybrid approaches of companies producing content for children need to be studied. In the same year, Cunningham and Smith noted that growth would be driven by convergence technologies, the opportunity to exploit new revenue streams and continued demand for information in a fast and flexible format. Factors they found to impact on multimedia publishing included:

- higher penetration of PCs into business and the home
- digital television and web TV
- a robust but flexible regulatory framework
- widespread adoption of e-commerce
- creation of strong brands, recognised and trusted by consumers

The resources that children's multimedia companies have in order to cope with developments and shifts in technology and products requires examination. Attwool noted in 1997 that hybrid products offer many advantages for both publisher and customer. 'The publisher has greater flexibility in the production and distribution of data, and the customer has greater choice in their preferred format of delivery.' (Attwool 1997, 9). The research considered these studies on technology and product

development in the UK, and a gap in research into the types of technology used, changed or developed by children's multimedia companies needed to be filled. Lakeman Fraser commented that with multimedia and broadband ADSL coming online, the consumer has been able to access a range of media with high quality multimedia elements (Lakeman Fraser 2000). At the time of study, publishing companies were reported to be considering: digital production, emerging technologies, online sales and marketing services, on-demand printing, product fragmentation (including chapters, images, audio, video) and the entire concept of customer self-service via the internet. Rittenberg and Rosen felt that although not comprehensive, this list represented important development factors for publishers that have rapidly evolved over the last five years. Publishers need to learn to recognise trends and react decisively and much more rapidly than even a decade ago (Rittenberg and Rosen 1999, 30). In 1997, it was noted that there was a potential strategic gain in taking early advantage of recent technological developments (Andersen Consulting and IENM 1997) and an investigation into the technology strategies or factors used by children's multimedia companies to enable them to achieve success in this volatile market is needed. A prediction at this stage of the study was that these were probably also the impacting factors on children's multimedia companies, although it was felt that the strength of impact would vary. It was also estimated that this list would not be exhaustive and that children's companies would undoubtably have other stronger impacting forces to add to this. This was also an area requiring investigation.

Within the first year of this study, Cunningham and Smith reported that internet use in the UK had doubled, and access to the internet was expected to become even more widespread through computers, televisions, and mobile phones. Information services traditionally focused on businesses, were increasing in demand in the consumer and education markets, driven by developments such as the plan to connect all schools to the Internet by 2000. The market for offline electronic information was predicted to be boosted by the digital versatile disc (DVD), ('a highly flexible format with vast capacity designed to cater for the converging computer and entertainment industries') (Cunningham and Smith 1998). Industry commentators and practitioners forecasted that the greatest majority of businesses and individuals in the developed world would have easy access to networks with inexpensive and, limitless bandwidth, for communication, education, entertainment, information, and commerce (Negroponte and Gates 1997-1999). The effects of improved multimedia access in homes and schools and how children's multimedia companies are achieving profit through their online activity needed to be examined.

In 1999, Bide noted that online publishing was about thirty years old and there was as much 'hype' in the publishing community in the early days of online publishing as there had been in the early days of the 'WWW'. In the ensuing decade, online has continued to grow strongly and has become a very successful sector, although in some respects this success is now being put to the test (Bide 1998). In the same year, Ward commented that the model for delivering content online was still under development and content providers were using the Internet in a variety of ways (Ward 1999). Ways in which children's multimedia companies were developing their online activity required investigation. Mike

Aston, chairman of the Educational Software Publishers Association at the time of study, thought that schools delivering content on the same network with software being stored on a central server was a good model to adopt:

> 'If you are going to receive a 'free' service it will probably involve some form of advertising and sponsorship. It could be the price schools pay for getting some online content for free. It's an issue that is going to have to be tackled.' (Aston 2000, 56)

New models developed by children's publishing and new media companies needed to be analysed, to uncover how traditional models had changed for both offline and online content being produced for children.

### 3.2.5 Training Needs and Skills

In January 1998, in response to reading the study aims for the research, Dag Smith (Chief Executive of the Publishing Training Centre at that time) noted a requirement for research into 'the current and future training needs/skills shortages of those responsible for the development of the multimedia product' (Smith, 1998). Foster, Bide et al. also noted the problems of bridging the skills gap for new technology in publishing companies. Foster puts it succinctly:

> 'People have a hard time changing and that's why companies have a hard time changing. People cannot be re-oriented overnight; developing the necessary skills base to manage the transition to a new technology is time consuming and expensive.' (Foster 1996, in Bide 1998, 38)

Investigating the ways in which children's multimedia companies acquire new skills for multimedia production (such as those highlighted by Foster: hiring, outsourcing, joint venture, acquisition) was thought to be important in this study. Foster also commented that bringing in new skills is not the only difficulty which an established business faces in dealing with discontinuous change. There is also the difficulty of dealing with skills that are no longer of value to an organisation and Foster felt that it was unsurprising that publishing companies had been resistant to recognising the need for fundamental change (Foster 1998). Whether or not this was the case for publishing and new media companies producing children's multimedia in the UK needed to be researched.

Foster did, however, outline some of the skills he felt publishers could bring to the multimedia market:

> 'select or recruit; review; evaluate; discriminate; act as gatekeeper; filter good from bad; broker partnerships; set up and manage teams; supervise a fragmented development process; underwrite the financial risk; market and distribute effectively; and handle back office procedures efficiently.' (Balkwill 1999, 30)

A gap in research existed looking into traditional publishing skills applicable to, and new skills required for, children's multimedia production. At a New Media Knowledge's seminar on 'From Old Media to New Media', Ball offered the following advice to anyone producing material for new media for the first time:

- learn how to produce content for a variety of platforms and distribution formats
- find partners that can compliment your own company's skill sets

- do not rely on traditional business models, as they will not produce optimal results in the new economy
- keep the intellectual rights to your material wherever possible (Ball 2000)

At the same seminar, Groves noted that publishers could expect to face a great deal more competition in the new media marketplace than in the specialised niche they already successfully occupied. Where gaps existed in skills and experience in his company, freelancers and outside partners were used, but always with a view to learn from them and take their skills in-house (Groves 2000). Some of the strategic issues that media companies should start considering and researching as they face new challenges were also outlined by Morrison:

> 'Producers need to learn new technical skills, and understand processes such as systems integration, database construction, bandwidth, and the latest server and browser technologies. Decision-makers at the highest level need to address the issues of training, outsourcing and securing the resources they need.' (Morrison 2000, 5)

He also considered the advances that had already been made by the IT sector, but remained optimistic that traditional media producers could still catch up:

> 'They possess the highly sought after communication skills that IT professionals lack, and can bring their flair for design and content to the new media. Provided media producers act fast enough and commit themselves strategically, exciting opportunities are still there.' (Morrison 2000, 6)

At the LIBF in 1999, the focus was centred more on the skills required for internet development. Kevin Allen, vice-president of Pearson Education noted that publishers were well placed to take advantage of the changes brought about by the rise of the Internet. He also noted that at the heart of the publishing value chain would always be these core editorial skills and people would always pay for them:

> 'If anyone understands how to generate growth in this emerging knowledge economy it ought to be publishers. For centuries we've been perfecting the art of managing human capital and with our authors creating intellectual properties. This legacy ought to provide publishers with a solid competitive advantage.' (Allen 1999, 11)

At the end of the 1990s, it was reported that opportunities existed for those with specialist IT skills, as the headhunting industry had been quick to appreciate. However, Merriden noted that there had been a trend towards outsourcing 'net-tastic nerds', and he felt it was the combination of IT skills with some sense of business strategy that is required, as opposed to single-dimensional technical management (Merriden 1999, 45). An investigation into the activities and skills of children's publishers and new media companies seemed to be required to discover if this combination was required for children's multimedia production.

### 3.2.6 Outsourcing

Outsourcing skills for multimedia was a topical area of discussion in the literature reviewed throughout the period of this study. Willcocks and Lacity (1999) and Lacity and Hirschheim (1999) looked at the perspectives and practices of outsourcing IT in new markets. 'The key question is not should IT be outsourced, but where and how can business leverage be achieved through utilising the rapidly

developing market for IT services.' (Willcocks and Lacity 1999, 40). Research is required *into the use of* IT skills in-house and externally for companies in the children's multimedia market. Lichtenberg referred to outsourcing as a 'Studio model' and argued:

> 'Publishing should follow Hollywood's approach to the creative process' by contracting out, rather than having on staff, the key creative players, 'producer, director, screenplay writer, art director, cinematographer.' (Lichtenberg 1999, 46)

Lichtenberg also observed that children's books, art books, and technology-rich products are instances where publishers regularly look outside for design, and other kinds of talent, and listed the possible advantages for publishers adopting the studio model to:

- improve the quality of the creative talent dedicated to a project

- choose exactly the talent needed

- increase flexibility of creative direction

- focus energy and talent with 100% dedication to a single project over the life

  of the project (as is the case with films)

- have the freedom to use ever-improving technology

- identify problem areas quickly as they arise

- change talent more easily than is the case with full-time employees

(Lichtenberg 1999, 46)

He also speculated that the 'Studio model' may be the only way to continue publishing in a world in which publishers are confronted by significant and continuing technological innovation, the need to create a greater set of formats through which to deliver intellectual property, quicker turn-around in pre-production and production, and the need for a higher return on investment to justify financing. Over the past two decades, Lichtenberg noted there had been an increasing amount of outsourcing in many aspects of publishing, with every indication that this would continue. He speculated, as publishing adopts a more flexible, contractually-bound approach to its creative talent: the 'Studio model', perhaps the industry will 'create its own prizes to acknowledge the best of these publishers, editors, designers, art directors, marketers, multimedia and other imaginative people' (Lichtenberg 1999, 47). Peters agreed:

> 'If you want efficiency and quality, you need markets within the corporation as much as you need them outside it. Who needs a corporation? Why not assemble your talent like a film crew and disband when you are finished?' (Peters 1999, in Lichtenberg 1999, 48)

There appears to be no literature or commentary on whether children's multimedia companies were using outsourcing or a form of 'studio model', as Lichtenberg and Peters recommended, or if these multimedia companies were investing in areas and skills of value in-house in order to produce successful children's multimedia products. Young noted that after research into the respective roles of author, publisher and authoring teams, there is logic and value in continuing to keep the functions

separate; also, that to a certain extent, creativity is actually improved by not merging the roles or talents as Merriden had suggested (Young 1999).

### 3.2.7 Functions and Areas of Value

Publishers must determine the products, services and prices they want to offer to achieve and fit the 'value-added' element. Stone noted that 'one of the major challenges facing the publishing industry is deciding where the value-added sits today and where it will change' (Stone 1999, 20). A model identifying areas of value that companies have invested in to produce successful children's multimedia had not previously been designed. Stone also felt that publishers must define and target markets and customers carefully and define the value that their companies add to processes. He noted that in deciding what value companies wish to add depends on the type of consumer they have chosen to serve, which in turn depends on what is unique about the companies, for example: skills, resources, existing customer base. 'In defining value-added, we often have recourse to those standard sales-training terms – features, advantages and benefits.' He noted that features are defined as the more technical elements of a service offering (functions or tasks), advantages are what the features enable the customer to do, and benefits are what the services give the customer, expressed in terms of the customer's own values like being able to meet customer's need to specified service standards. (Stone 1999, 20)

### 3.2.7.1 Branding

The research also considered the views of various writers who have emphasised the importance of in-house branding in a changing business or new product development (Hankinson and Cowking (1993), Rosenpan (1998) and Tilley (1999) et al). Peters wrote of new media markets, 'The market is hopelessly crowded. As a result, branding is more important than ever before' (Peters 1999, 49). The importance of branding in the children's multimedia market and how companies make effective use of online and offline branding of their companies and products (including books, CD-ROM, DVD, and online content) required investigation. Royle's study on how consumer publishers' use of websites affected their relationships with retailers noted:

> 'Publishing has been quite slow to embrace e-commerce and take advantage of the opportunities it offers, and successful branding in consumer publishing had not often been effectively transferred on to the web.' (Royle 1999, 5)

There appears to be no research into children's publishers' branding for multimedia and online content.

### 3.2.7.1.1 Company Branding

'Personal image and branding are the keys to success in business today. Any organisation can motivate its people to live the corporate brand values.' (Spillane 2000, 15).

She feels that publishers should focus on their staff and questioned how well they project their brands to their customers, suppliers, the media and the industry at large, nationally and internationally. If staff do not buy into the culture and what the company is trying to communicate to others, they are losing the company business:

> 'The corporate values – what they are and how to project them – should be as intrinsic to recruitment and training as they are to marketing and promotion. Good branding starts with values, and not only increases business and company loyalty, it also reduces attrition in a skills/employee-driven labour market.' (Spillane 2000, 15)

Tilley offered the view that storytelling creates an opportunity to engage and mobilise teams to engineer the brand from within and build commitment and understanding. 'Branding gives a unique opportunity to humanise organisational change. Great brands tell stories and create myths around themselves in one way or another' (Tilley 1999, 181). The storytelling process, as highlighted in Figure 3.1, also helps the company to plan interventions and support their approach:

Individual Steps Towards Implementing Branding

Hearing ⟶ Understanding ⟶ Believing ⟶ Acting

Management Steps to Support the Individual

| Communication | Clarification | Validation | Motivation |
| Training ⟶ | Relevance ⟶ | Example ⟶ | Measurement |

**Fig. 3.1 Tilley's Storytelling Process (Tilley, 1999)**

Young outlined her view on the fundamental principles for market-led services:

> 'Make the intangible tangible; turn the corporate name into a brand; manage the corporate brand as a tangible image strategy; embrace holistic service; segment customers by service preference and needs; manage the processes; and recognise that people are part of the offer.' (Young 1996, 20)

The way branding and company culture have been adapted and developed for children's multimedia companies changing products and company structures needs to be investigated. Branding material by adding value based on reliability, authenticity and accepted authority remains the publisher's key strength, along with a gateway or sieve mechanism to ensure a basic level of 'acceptable' quality. Sourcing through authors' knowledge and authority is equally vital – but each side needs the other to validate the process (Young 1996, 20). From the industry commentary on branding for the 'generic multimedia' market and the key steps involved in the process of implementing effective branding, an idea of what children's multimedia companies could be doing emerged. No research to uncover what brands companies in this market were developing appears to have been undertaken previously.

### 3.2.7.1.2 Product Branding

In reference to 'product branding', it was observed that 'variances in brand communications are substantially conditioned by product positioning, customer relations and sales incentives' (Philport 1997, 68). Traditional brands have long established entrenched formulae for developing media strategies. Very often the challenge of these brands is to break from the traditional mould and develop new ways to exploit both the traditional and new media. This is particularly important in a study investigating children's multimedia companies where branding of a mix of products, including children's books, television, CD-ROM, toy products and online content must be considered. Philport also noted, in his article on brand communication styles in established media and the internet:

> 'Changes to the communication of the brand can confuse and alienate consumers if they are not managed carefully. Leadership brands are effective in changing and developing but they are also clear about what not to change' (Philport 1997, 68).

Rosenpan agreed that brand-building is an effective technique for marketing products:

> 'The value of the brand is threefold: the extent to which your brand is recognised (and understood) will have a definite positive impact on sales; you can charge a premium price for it; and you can create loyal customers who will stick to your brand even if there is little perceivable difference.' (Rosenpan 1998, 50)

In order to understand markets where reputation is a significant source of added value, Kay classifies products as belonging to one of four classes, determined by the way in which they are selected for purchase, 'search goods, immediate experience, long-term experience, and those for which neither search nor experience is an adequate basis for selection' (Kay 1997, 21). An investigation into the use and changes (if any) to publishers' and new media companies' branding for children's multimedia appears to be pertinent to this study.

### 3.2.7.2 Rights

'If rights are central to the future of publishing then publishers will have to become much more sophisticated in managing them.' (Rust 1998, 70)

Publishers who responded to Bide's study on 'Managing Rights', felt that, 'Over the next 5 years, the publishing business will move from the creation, marketing and distribution of physical product towards the management of rights and royalties' (Bide 1999, 69).

The ways in which children's multimedia companies manage their rights in the UK is investigated and the part rights management plays in the new model developed for new media production is also analysed. The roles and rights of children's publishers, new media companies, authors, educationalists and the end users - children, are observed. A generic model for the management of online rights was developed by Rust who proposed:

'E-commerce offers the opportunity to integrate the functions of discovery, access, licensing and accounting (of intellectual property) into single point and click actions... What is sought in e-commerce by (rights) owners, producers and users alike is a situation where rights administration can be fully automated.' (Rust 1998, 70)

### 3.2.7.3 Content, Context and Access

Alongside the value of terms such as altered distribution models, branding and rights management, the value of effective 'content', 'context' and 'access management' for new media emerged in the literature reviewed, and the applicability of this focus for children's multimedia needs investigation. Dyson noted that there would be very important roles for publishers to perform in aggregating, filtering, assembling, and integrating 'free' content in a way which adds substantial value to the end user. 'These are the subscription-based products of the future.' (Dyson 1998, in Bide 2001, 44). She also felt that this may sound broadly similar to what publishers do now, although value will be created through process and service, not from the control of unique assets. The ability to define and certify quality and authenticity will be increasingly sought out. The research has taken a wider view, investigating processes, services and assets of children's multimedia companies, investigating which of these (or a combination of these) leads to development and success for children's multimedia. In the late 1990s, it was observed that content management had become 'fashionable', not only in the publishing world but across the 'content industries' as a whole (publishing, media, communications, and entertainment):

> 'the key to an individual publisher beating the competition would be good and efficient organisation of the publishing process and not through having the 'best' technology.' (Wright 1999, 84)

This study also considers the systems and processes children's multimedia companies have developed to ensure effective content management, on and offline, and also the importance of having that 'best technology'.

### 3.2.7.4 Online Value

Practitioner reports and articles in trade journals questioned where the value is added in the online model for generic print publishers. Dyson and Bide (1998) both agreed that 'content is king' but that it was also important to avoid delivering the same piece of information taken from multiple sources, and to ensure that there is value in content in its totality. This, they felt, can be achieved by being 'unique and compelling' and as such, the owners can command a high price for access. Bide noted that the value of online information lies primarily in its reputation, its brand identity, and it is essential for it to retain its separateness while becoming part of 'the greater whole, the content resource'. He also felt that access was a key area of value in the multimedia publishing industry, with one of the problems

facing generic multimedia publishers being access to the distribution channels and gaps in this area existed in relation to the children's publishing market. However, he also noted:

> 'More important than the content is the context in which that content is delivered. This is a particularly interesting phenomenon when the implications for the value of copyright are considered. Provide the right context, and content that is not protected by copyright may have equal value with content that is.' (Bide 1999, 70)

Studies looking at or commenting on key areas of value for online production indicated that effective content, access, and branding management in the appropriate context was key. In 2000, Sylge (in the Children's Bookseller trade magazine) seemed to be one of the few to highlight online features of value particular for children:

> 'It is not enough to give title and producer information and create a few graphics of key characters. The future is drawing the children in with fun, entertaining interactive sites that do not necessarily focus on the concept of the book.'(Sylge 2000, 16)

Other product assets and features which add value in children's multimedia and online products need more in-depth investigation.

### 3.2.7.5 Online Advertising and Subscription

As multimedia publishers leverage their brands to create focused online communities of high value to advertisers and users, an Andersen Consulting study predicted there would be a gradually increasing market share of multimedia advertising versus television advertising. Premium services for professional and special interest users would generate subscription fees, while services for leisure users would be financed by personalised advertising and commissions. The same study showed the majority of consumer respondents would not pay for basic content such as general news, local newsgroups, or classified services. It found that the majority of the services for the mass market would therefore need to be advertising-financed and that users accepted informative and attractive advertising as acceptable online content. Therefore, for the first time, publishers would be facing competition from their own customers. Threats confronting children's multimedia publishers on the internet and ways to overcome these threats need to be identified. Suggested ways included building customer loyalty and direct links to customers (Andersen Consulting and IENM 1997). Approaches adopted by children's companies also needed to be found. In 1998, it was noted that the creation and delivery of content through the internet also opened up new opportunities, but the difficulties of creating and collecting revenues from online operations remained. Various business models were being experimented with, including advertising, subscription, 'pay-per-view' and transaction charges. This was an area where many larger companies were seen to be operating, with substantial investments being made to create a strongly branded site with attractive content. Some of these companies had sufficient brand strength to attract consumers online, but they, as well as, smaller companies, may also position themselves within areas of high traffic and portal sites (Williams 1998, 9). Diebold's study (1999), which aimed to provide guidelines for publishing management on how to benefit from the internet's growth potential by

assessing its value within the overall company strategy, examined the 'inherent performance factors' in that strategy, using best practice examples. The study noted that new demands on information were:

- personalisation or individualisation of content
- more frequent updates, or on-demand information
- reduction in the total amount of information
- a switch from pull to push information

These factors were yet to be tested on the children's multimedia market.

Five basic hypotheses emerged from Diebold's study on the substantial influences that internet publishing would be subject to in the 21st century: 'aggregation, self-image, publication-cycle, value-added and network hypotheses.' Diebold's value-added hypothesis concerns how publishers have to replace their present value-added chains with new ones for online activity, a similar approach to the one adopted in this research. Diebold's study also developed certain hypotheses to aid successful implementation of an internet strategy, including a 'brand dilution hypothesis': 'At the lower network levels of online publishing in particular, there will be a dilution of classic brand-name publishing' (Diebold 1999, 30). Throughout the study, it also emerged that the internet demanded that publishers re-orient their existing models in the following areas:

1. **Organisation**: Commercial success on the internet cannot be achieved with existing or traditional publishing structures, the internet mandates different processes and different employee skills. For this reason, attempts to establish an online business 'on the side' within the existing organisational structure are doomed to failure. Investigation into children's companies' structures, departments, staff skills, functions and their relationships for new media production for children – online and offline.

2. **Marketing**: Diebold found that entering the virtual marketplace of the internet meant rebuilding the company marketing structure from 'the ground up'. Individualising content, managing interactivity, and introducing a flexible price structure were three of the important challenges highlighted. In order to better target readers/users, publishers must also concentrate on improving their marketing skills. Eierhoff also noted that one of the most promising ideas for generating direct revenue for children's multimedia companies is building co-branded sites on which the publisher is allowed to sell advertising space. The potential for advertising revenue is far greater than the potential sales from a website (Eierhoff 1999, 40). Marketing structures of children's multimedia companies needs to be analysed.

3. **Technology**: Innovative services and individualised information only become possible using the internet and related technology. However, it would be wrong to consider the internet primarily from a technological rather than a strategic perspective. With a systematic restructuring of these important areas of influence, publishers can succeed in integrating the

three basic components of online publishing into their websites; content, interaction and transaction. Technology strategies children's companies are developing in this area for online and offline media appears to require investigation.

4. **Content:** Providing content is actually a publisher's main business. That content must be adapted to fit the medium of the internet, and augmented with value-added online content and services. Children's multimedia companies' content features, development and management needs investigation.

5. **Interaction:** Like many other industries, the publishing industry is not used to the idea of direct contact with its customers. The internet opens up two-way communication, which publishers can use to involve readers/users in the production of the published product, and this research into the children's multimedia market needs to investigate ways in which companies build community platforms, and gather detailed information about individual readers or users.

6. **Transaction:** Publishing's greatest deficit is in the area of e-commerce. The service and transaction oriented business models based on publishing networks is the most frequent reason for the lack of subsequent transaction volume on the internet. The lack of online transaction is often also blamed on technological barriers and under-developed payment systems. Transaction models children's multimedia companies also appear to require investigation.

According to Diebold, the impact the internet continues to have on corporate self-image, business modelling, marketing, staffing and organisation can only be managed with a strategic orientation. It was predicted by Diebold that publishers who are unwilling or unable to effect the required changes would experience massive difficulties. The Diebold study is intended to provide an orientation guide for publishers who have not yet found established themselves in the generic online market (Diebold, 1999, 30). A gap into guidance for children's multimedia companies development within the online market also exists and this research aims to provide strategic guidelines for the online development of children's multimedia companies in the UK. Eierhoff noted, 'If we do not have the courage to open the way to new distribution channels for classic media, accepting the fact that there will be some substitution effect, competitors from other sectors will be the ones generating revenue with e-business' (Eierhoff 1999, 40). The ideas from these studies could be analysed in relation to the activities of UK children's multimedia companies, and their promotion, sales and content provision online.

## 3.3 Business Element

In order to cope with the continuous changes in the multimedia market, such as these new and developing technologies, products and competitors mentioned in section 3.2 for example, companies are needing to recognise how to manage change effectively. In order to do this, effective change management strategies need to be developed in publishing industries which have been used to the same

structures and process for decades. There appears to be no previous studies looking at change management in relation to the children's multimedia industry. The initial literature study on generic change management texts developed into one that became more focused on research into developing change and innovation strategy to ensure a company was competitive enough for markets heavily influenced by IT, new technologies and media. 'Today, all sectors of publishing are subject to fundamental changes. If addressed, they represent significant opportunities; equally, if ignored, sizeable threats' (Rittenberg and Rosen 1999, 30). It was noted that companies in the children's multimedia market, in particular publishers, were having to manage a great deal of change to adapt effectively to multimedia production. However, the majority of texts looking at change management in this area were again focused on the 'generic multimedia' market, for example Vista International's value chain studies. The research, therefore, reviewed these, and other change management theories in other industries, before gathering empirical research on the change processes occurring in the children's multimedia industry.

### 3.3.1 Change Management

'There is a relatively small amount of literature on the process of change and decision making in the publishing industry.' (Luey 1994, 31)

From the beginning to the end of the 1990s, various writers highlighted a need for research into change management issues in the publishing industry. Therefore, the area provides a sufficient amount of new ground for the research, especially given the changes in multimedia publishing for children. In March 1998, at the London International Book Fair (LIBF), it was reported that the economic cycle of change in the industry had shifted from 7 years to 12 months (Pethick and Yip, 1998). This shift in the industry had become prominent due to the emergence of the internet as a viable medium, increased accessibility of products and industries, and the globalisation of markets:

> 'Change is coming far greater than any of us can predict and far faster than ever before, and who
> will survive and what the electronic publishing marketplace will look like in five years time is a
> challenge.' (Balkwill 1999, 30)

The area of change management has been prominent in the analysis, as the study investigates children's book publishing and new media companies' operational and strategic developments in response to change. At the LIBF'98, publishers were advised to engage in change immediately. 'Those who occupy the place of conflict early, can face their opponents in comfort' (Yip 1998). Industry comment noted that companies taking this strategic stance include publishers such as Dorling Kindersley, BBC Multimedia, OUP and new media companies, and companies such as these needed to become part of the focus for this research. Scott Morton discussed the development of publishing companies in this changing industry and suggests that 'what is required is not so much a question of technology, as of change management and organisational issues.' (Scott Morton 1991, 50). The research needed to identify how children's publishers' business models were being re-engineered to achieve effective

business practice within the multimedia market. Grycz suggested that the questions faced by the traditional publishing industry in the generic multimedia industry included:

1. To what extent are changes going to be manifest in the industry itself?

2. What are the appropriate responses that can be made by publishers if they are going to remain active in contributing their skills and products to the 'information-age' customer?

3. What operational changes ought to be implemented within publishing companies to position them for this more competitive environment?

4. What investments in research or new products are most likely to yield competitive advantage as the changing relationships make new and different demands on the industry? (Grycz 1992, 30)

No previous studies seemed to investigate the operational changes, skills, products and strategies children's multimedia companies use to yield competitive advantage and/or value in an industry that is continually changing. Vista International advised companies to be 'change makers' if they are to succeed in the multimedia market. Tenner observed, 'Change in and around the publishing industry is accelerating (and its nature is changing) and we must learn to survive in an environment in which we may not have all the answers' (Tenner 1999, 20). He advised publishers to develop a rapid learning and unlearning curve in order to acquire new competencies:

> 'There is no better way to predict the future than to make it. Companies have been witnessing a change of change. Change is now promising to be always something else. Every time we will adapt to some newness, it will change again.' He proposed three strategies of change management, 'prepare against surprise; prepare for surprise; prepare the surprise.' (Tenner 1999, 20)

It appeared to be generally thought by the writers above that the publishing success stories of the 21st century would be those companies who are prepared for or creating the changes. Organisation transformation can occur in response to or in anticipation of major changes in the organisation's environment or technology. The change process is characterised by considerable innovation and learning and continues almost indefinitely as staff discover new ways of improving the organisation and adapting it to changing conditions. Some publishers have attempted to adapt to conditions by changing business strategy and moving into new, unfamiliar areas. Cummings and Worley noted that efforts to implement a new strategy can fail because a company's culture is unsuited to the new business. A corporate culture that was once a source of strength for a company can become a major liability in successfully implementing a new strategy (noted in the mistakes made by some small companies who entered the multimedia market in the late 1980s, mid 1990s). Cummings and Worley illustrate four types of change: large-scale, adaptation, fundamental, and re-orientation as shown in their diagram in Figure 3.2.

|  | **Degree of Change** | |
|  | Incremental | Quantum |
| Total System | Large-scale | Reorientation |
| Scope Of Change | Adaptation | Fundamental |
| Sub-system | | |

Fig. 3.2 Cumming and Worley's Types of Change (2001)

The theoretical thinking behind differing types of change management were considered in this study of the children's multimedia market. Adaptation, according to Cummings and Worley's definition, involves incremental changes in subsystems or parts of an organisation. They thought that organisational responses to environmental or strategic changes are limited to selected parts or features of the organisation and are intended to improve the alignment between the changed part and other organisational features (Cummings and Worley 2001, 522). The research considers this approach as it investigates the types of change undertaken by publishing and new media companies for multimedia production.

Burnes noted that the concept of 'strategic management' has developed considerably since the term began to be used in the 1950s and 1960s. No longer is strategy purely about the external world or seen as a rational, quantitative process. Writers and practitioners from different backgrounds, such as Ohmae (1986), Hamel and Prahalad (1989), Mintzberg and Quinn (1991), and Stacey (1993), have argued that it is not a process at all, but the outcome of a process: an outcome that is shaped not by financial models but by human creativity. This research adopts a similar approach in that it looks at strategic development from an external (market forces) and internal (company activity) perspective. In studying a large number of organisation transformations, Tushman, Newman, and Romanelli showed that change occurs in response to 3 types of disruption:

1. **Industry discontinuities** – sharp changes in legal, political, economic, and technological conditions that shift the basis for competition within industries;

2. **Product life cycle shifts** – changes in product life cycle that require different business strategies; and

3. **Internal company dynamics** – changes in size, corporate portfolio strategy, executive turnover, and other changes that trigger transformational change. These are disruptions which are noted to have affected multimedia companies and have pushed them to alter business strategy and, in turn, their mission, values, structure, systems, and procedures. (Tushman, Newman, and Romanelli 1988, 20)

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Lewin observed that change occurs at three different levels which each require different change strategies and techniques:

1. changing the **individuals** who work in the organisation;
2. changing various **organisational structures and systems**;
3. directly changing the **organisational climate or interpersonal style**

(Lewin 1995, 239).

From a combination of these ideas, the areas of questioning for the surveys were developed, including culture, structure, staff skills, relationships, products, training, and strategy for development, and external forces impacting on companies.

### 3.3.1.1 Cultural Change

Stamper analysed the cultural impact of a system and offered a method of analysing the impact of an innovation such as a new product, a change to an organisation, or more specifically, a new information system. He noted that in order to achieve effective cultural change there must be a willingness from management to communicate the core beliefs and values of the company through a variety of means. He stated that a culture has two basic components:

> 'a set of core beliefs and values, and certain identifiable characteristics of behaviour and style which distinguish one organisation from another. Together they make up the personality of the organisation and to achieve the vision companies must ensure that the group's vision, leadership style, management and staff commitment and cultural change are all interlinked.' (Stamper 1988, 107)

Fowler's study of cultural and structural change noted that the objective of many organisations is to move from a static or rigid culture to one that is flexible and adaptable. He also observes that new structures will not be effective until supporting procedures are in place. Any change in organisational culture must be well planned and comprehensive if it is to overcome the habits and attitudes that have developed over time (Fowler 1979). Even Kotter and Schlesinger's study on choosing strategies for change in 1979 observed that, in rapidly changing markets, managers need to increase their skills at diagnosing resistance to change and at choosing appropriate methods for overcoming it.

Commentary within the publishing and media industry trade press had suggested that many of the more traditional publishing companies showed a large degree of resistance to change. Methods suggested for dealing with resistance to change, in industries generally, which were reviewed included:

> 'Education and communication; participation and involvement; facilitation and support, negotiation and agreement; manipulation and co-optation; and explicit and implicit coercion' (Kotter and Schlesinger 1979, 106).

Methods suggested for effective cultural change have been reviewed and methods those adopted by children's multimedia companies themselves were yet to be studied.

### 3.3.1.2 Change Management Models

Change management models have already been created in response to the continuous developments in the information industry. Studies have been undertaken on developing a 'strategic fit' to cope with changes in corporate culture and strategy (Scholz 1987), and on creating a comprehensive model for measuring the potential impact of IT on organisational strategic variables (Mahmood and Soon 1991, 869-897). The research also recognises this requirement, but focuses specifically on the creation of a model for publishing companies entering the children's multimedia market. Key variables essential for the strategic development of companies adapting to change for children's multimedia production could be identified. Porter (1985), Ohmae (1986), Sproull and Kiesler (1991), Dyson (1993, 1998), Tushman and Anderson (1996), Lynch (1997), and Collis and Montgomery's (1998) studies have all been considered in this research. Their texts have focused on competitive advantage and strategic planning models and techniques for change in the 1980s, 1990s and onwards. However, as already stated, the research has found no business models to date which have been developed in the children's publishing field to support the changes in strategies and processes which have been required for multimedia production. Key ideas and models of change management and strategic processes have been identified and analysed from Mintzberg (1988), and Johnson and Scholes' (1997) studies to aid the development of models analysing the children's multimedia market.

Key elements from change management theories and models studied such as the Innovation Impact (Krell, 1992), Action Research (Galpin, 1996), Behavioural Change (Maybey, 1993) and Change Management Process (Galpin, 1996) models, have also been reviewed and inform this research. Galpin's study on the human side of change noted that in order for an organisational change effort to be successful, two levels of change must be addressed: the strategic level and the grass-roots level. He designed a model (see Figure 3.3) which displays the different types of change efforts and their stages within the change management process including: raising awareness; developing a desire to change; acquiring new skills; applying the skills; receiving feedback; and forming new habits (Galpin 1996, 51). These efforts or stages used by companies generally, can be identified from his model.

**Fig. 3.3 Galpin's Behavioural Change Model (1996)**

The Action Research Model (Galpin 1996) (an extension to the 3 step model which involves unfreezing, moving and then refreezing), was reviewed as being an effective approach to solving organisational change problems by way of a rational, systematic analysis of the issues. The model involves four different stages:

1. **Exploration**: exploring and deciding if change is necessary, becoming aware of the need for change, searching for outside assistance with planning and implementation

2. **Planning**: collecting information in order to establish/understand the organisation's problems/needs, information to establish diagnosis, establishing goals, designing appropriate action to achieve goals, and getting key decision makers to approve and support proposed changes

3. **Action**: company implements planned changes, change processes are designed to move the organisation from its current state to a new state, steps to manage the change, gain support for actions taken, evaluate and feedback, modify

4. **Integration**: commences once the changes have been successfully implemented, consolidating and stabilising changes, reinforcing new behaviours through feedback and reward systems, spreading the success of change across the organisation, training managers and employees to monitor changes and constantly improve them. (Galpin 1996, 51)

Pettigrew and Whipp also described their key factors for managing change for competitive success: 'environmental assessment, leading change, linking strategic and operational change, human resources as assets and liabilities, and coherence' (Pettigrew and Whipp 1993, 43). The various stages and factors involved in the change process highlighted by the writers above were reviewed and helped to inform models to outline success and development factors for companies in a market which continues to change.

### 3.3.2 Change Strategy for Innovation, IT and New Technologies

### 3.3.2.1 Information and Communication Technologies

Various industry commentators and researchers have highlighted general issues, changes, and impacts of using information and communication technologies (ICT) in various markets. Ang and Pavri have surveyed and formed a critique of the impacts of information technology at a societal, organisational and individual level. Their research concluded that, 'IT can often help companies produce at a lower cost, differentiate themselves from their competitors, identify and concentrate on particular market segments, and raise entry barriers' (Ang and Pavri 1994, 122). This need to consider the use and impact of ICT in children's multimedia companies has been identified, but this study focuses in the main, on the outcome of ICT's use, and the types of products developed and used through the use of IT. Li, in his research, looked at organisational re-design through information and communication technologies. He noted in the late 1990s that 'top management gurus' had argued that many conventional principles of organisational design are no longer valid, and to survive companies large and small must be 're-engineered, re-designed, re-structured or re-invented.' Li also noted that ICTs can be used to 'resolve' and 'centralise' compromises in changing organisations (Li 1997, 451). There appears to be no research to date investigating the impact of ICT in children's multimedia companies' structures, processes and departmental relationships.

With the aim of this study being to identify companies' development factors for the volatile children's multimedia market, it was important to consider studies such as those of Stuckley, Evans, Groth, Gallier, and Bate's looking at strategies aiding the development, implementation and use of new technologies in a company. Stuckley, a partner in KPMG in a presentation, Meeting Tomorrow's Challenges with Technology, noted:

> 'If the future will deliver surprise, then publishers must be armed with the technological tools which will allow their organisations to advance with speed and flexibility – embrace technology as an enabler to gain competitive advantage. IT can be a bridge or barrier, it is the people that make the difference. But remember, IT is only an enabling tool. A balance approach to change is necessary to take full advantage of IT potential.' (Stuckley 1998, 42)

Evan's surveys designed to look at strategies developed in the publishing industry to cope with technological change were also considered (Evans 1996). Evans felt that the transformation required in the publishing industry, in the long term, was essentially a change to flexible manufacturing and increased marketing orientation. Technology is the enabler both of the product and, in part, of

organisational change towards innovation cultures provided it is focused on the market and technology users, both within and outside the company. Evans argued that this awareness was a necessary adjunct to the formulation of corporate strategy in publishing companies as the electronic era gathered pace. In 1999, Groth, Galliers and Bate's studies on IT strategy and innovation highlighted the importance of linkages between effective organisational learning; knowledge management; IT and business strategy alignment; the management of change; and inter-organisational communications. Scholes also identified the main strategic issues where IT impacts, illustrated strategy frameworks to identify implications, and gave guidance on management priorities. He highlighted four key issues, 'IT and core competences, IT and the management of linkages, IT and structures, and IT and strategic management processes' (Scholes 2000). Cronin, Cavaye and Davenport interpreted and developed Porter's ideas on the role of information technology in conferring competitive advantage. They noted that the company and industry examples in their study suggested that IT is most potent where it acts as an agent of change. They also noted:

> 'The power of IT to add value increases as it moves along the five stages of the value chain: inbound logistics, operations, outbound logistics, marketing and sales and service.' (Cronin, Cavaye and Davenport 1988, 179)

The advantages of IT are often ephemeral and unless fresh opportunities can be identified, a company's competitive edge may be blunted. Expanding on these studies, this research needs to analyse how children's multimedia companies in the UK use and manage IT and identify opportunities in a changing market.

### 3.3.2.2 Innovation

Almost all value in publishing stems from a particular form of innovation, 'the continuing stream of new content', according to Bide. However, he felt, in general, it was authors rather than publishers who were the creators of that particular value. Although publishing has prided itself on being a creative industry, there has been little evidence that it has had much opportunity, until very recently, to be a genuinely innovative one (Bide 1999, 6).

This study aimed to look at the strategies children's multimedia companies in the UK were developing to achieve competitive advantage. Innovation was considered to be, in much of the literature read, a key factor in achieving competitive success in volatile markets. A wide range of literature was initially read on generic innovation, but the research later focused on the texts by Tushman, and O'Reilly (1997) who introduced the concept of ambidextrous organisations, and Burns and Stalker (1961), and Keys (in Bide 1999), who provided a method for examining management and organisational challenges to technology through use of the change management paradigm, the S-curve. Thakara noted 'innovation is no longer about boffins with brainwaves, but is more about the way relationships work within a company to move it forward' (Thakara 2001).

In studies of building creative culture for growing organisations, Drucker's definition of innovation is described: 'Innovation is the specific instrument of entrepreneurship...the act that endows resources with a new capacity to create wealth' (Drucker 1999, 61). Cuteis felt that an organisation that wishes to grow has to compete. This requires not just a single advantage over competitors, which would be identified and imitated, but layers of advantage in all areas of the organisation's activities. He also observed that many studies have been made on the process of innovation, from which three distinct phases have been identified: initiation of ideas, evaluation and implementation (Cuteis, in Drucker 1999). He noted:

> 'Today we make 50% of our current turnover with products which did not exist five years ago. Thus if we are not creative in time, we cannot employ 50% of our workforce within 5 years. This is the continuous burden of innovation for our company.' (Cuteis in Drucker 1999, 61)

The literature reviewed above suggests that companies should be looking at stimulating new product development, good relationships, and layers of advantage within sections of their companies in order to be innovative. An investigation into these areas, for a study which aims to identify value and development in companies, is necessary.

### 3.3.2.2.1 Innovation Impact

Krell's study offered the Innovation Impact Model as a tool to help companies visualise the effects of innovations on their performance and competitive situation in a period of technological change. As highlighted in Figure 3.4, the adoption of new technology takes place within the framework of 3 elements: attributes of new technology, external environment, and the organisational structure of the adopter. It is particularly well suited to demonstrate the interplay of these elements.



Fig. 3.4 Krell's Innovation Impact Model (1992)

The importance of successful linkages between external market forces (innovation and technological change) and companies' internal structures, processes or products is also highlighted by Bide:

'Although innovation can often create value, the ability to appropriate that value to an individual enterprise is indeed a distinctive capability. The history of technological innovation is frequently characterized by companies that have failed to appropriate the value that they have created.' (Bide 1995, 2)

Throughout the period of this study, Bide also noted that there was a continuing debate about the extent to which technological innovation and differentiation can create sustainable value for publishers as online developments in particular, are increasingly demanding open standards.' (Bide 1997)

He also commented that what has also been notable about innovation in publishing is that, when innovative products or technology have impacted on the industry, they have appeared typically not to have rendered obsolete what has gone before, as with other media, each new development tends to be additive. The study needs to investigate the ways in which children's multimedia companies encourage and promote innovation in their companies, and the role new media plays – for example, an added value role for traditional products/content? or a stand alone role?, and how the companies prepare for their next phases of development.

### 3.3.2.2.2 'S' Curve

The research also considers studies by Foster, Keys, Burns and Stalker et al. which helped to outline the factors of change, IT and new technology, innovation and time, and the relationships between them generally. Foster demonstrated the value of using the 'S' curve to describe the way in which new technologies substitute for old (see Figure 3.5). In the initial stages of a new technology, despite considerable effort, technical progress is slow and markets are similarly slow to respond. As cumulative effort grows, the speed of change in both technology and market accelerates rapidly; once it reaches a certain point, the new technology quickly displaces much of what has gone before.



Fig. 3.5 The 'S' Curve of innovation development and market penetration (Foster 1986)

Most publisher's products have been at or near the top of their 'S' curve for decades, in their ability to fulfil the perceived needs of their users. Until now, there have been no technological challenges which have, in the event, proved seriously to threaten their position. Foster noted:

> 'Television, for example, has not, as it was once feared it would, taken the place of books, because except to the extent that it competes with reading as a way of passing the time, television does not compete functionally.' (Foster 1986, in Bide 1998, 13)

The relative failure of 'multimedia CD-ROM' to make a significant market break-through, noted Foster, 'underlines the real importance of understanding users' value perceptions and publishing was facing the challenge of a technologically-based discontinuity' (see Figure 3.6). Each one of these technologies has its own potential 'S' curve, and potential discontinuities as one technology overtakes another. As technological advances continue, discontinuities follow each other at greater speed. 'Nowhere is this more true than in the convergent technologies which are changing the entire nature of what publishing is' (Foster 1986, in Bide 1998, 13).



Fig. 3.6 'S' Curve Discontinuities (Foster, 1986)

'S' curves almost always appear in pairs. Together they represent a discontinuity - when one technology replaces another.' (Foster 1986, in Bide 1998, 13)

Most publishers who have set out to exploit new technologies for the delivery of their products have uncovered for themselves what Foster demonstrated to be a common pattern, that the first steps towards the adoption of a new technology 'inevitably go astray or prove disappointing'. This is a key message as early experiments with new technologies have often proved to be expensive 'failures', as noted by industry commentators looking at the multimedia market at the beginning of the 1990s. He also observed that not only are different technologies on different parts of their development curves, so too are different markets. The research aimed to discover if children's multimedia companies were concentrating their efforts on those parts of their business which serve to differentiate them from their competitors and potential competitors and/or developing innovative products or technology strategies.

## 3.4 Model Development

'At best what we have from our research are disparate collections of ideas. The connection between theory, method and data must be a systematic one and models provide that system.' (Hughes 2000, 41)

Presenting ideas from literature theory and the research findings (new data) within a 'model' format was considered useful after reviewing ideas and theories on methodological approaches and model usage (Glaser and Strauss, 1967, Fielding, 1986, and Hughes, 1990), in that it could encapsulate both visually and concisely relevant factors, and the relationships between them. Key elements from models in the literature reviewed throughout this study have contributed to the development of models which aim to outline factors contributing to the development of publishers and new media companies in the children's multimedia market. Literature about related models was studied and it was considered how best to apply the research findings to assist companies in the market or those companies contemplating entering the market. The work of Porter (1980, 1885), Johnson and Scholes (1997), the European Commission (1996-on), and Vista International associated writers such as Bide, Shatzkin et al. (1996-on) was studied. Key ideas and models of change management and innovation for IT, strategic processes, external environments, and market forces, and the value chain were identified and analysed to aid the development of the models in this study, which aimed to outline success and development factors for children's multimedia companies in the UK.

Various models analysing external and internal activities of industries and companies have been identified throughout the period of research. Models displaying factors involved in the fields of change management, publishing (print, electronic and online publishing), communications, IT, innovation, and strategy for success and advantage have been reviewed). Elements of these models have been developed and applied to the research at varying stages of the analytic process. However, Porter's models were studied and identified as being most appropriate for application to the children's multimedia industry situation as he looked at external forces shaping industries (the Five Force model), and areas which add value internally within a company (the Value Chain). These models are described below.

### 3.4.1 Porter's Five Force Model

Porter's Five Force Model (Porter 1980) was studied and considered to be the most relevant model for aiding the analysis of external structural/shaping forces influencing companies in the children's multimedia market. There appeared to be no previous use of Porter's Five Force model in the context of the children's multimedia or publishing industries. The model helps display, pictorially, structural and shaping forces affecting an industry – providing an analysis of an overall industry situation at a particular point in time (see Figure 3.7). It is noted to provide a checklist for identifying opportunities and formulating strategy and Porter suggests five competitive forces exist affecting a market:

1. **Competition** – threats of existing competitors and new entrants
2. **Entry** – technological threats for example
3. **Substitution** – threats of new or substitute products or services
4. **Supplier** power – bargaining power of suppliers
5. **Customer/Buyer** power – bargaining power of buyers

These five forces are displayed, within a modelling context, to impact on 'companies jockeying for position' in a market. As this study into the UK children's multimedia market aimed to analyse critically external developments affecting publishing and new media companies (or divisions) in relation to their strategic development, Porter's Five Force model was to be developed further within the context of the children's multimedia market.

PAGE MISSING IN ORIGINAL

Fig.3.7 Porter's Five Force Model – Structural/Shaping Forces (1980)



**BUYER POWER**

**ENTRY**

**THREATS OF NEW ENTRANTS/ COMPETITORS**

**COMPANIES**

**MARKET**

**SUPPLIER POWER**

**THREATS OF NEW OR SUBSTITUTE PRODUCTS**

### 3.4.2 Competitive Success and Added Value

#### 3.4.2.1 Value Disciplines

The research considers the approach of Treacy and Wiersema who defined three value disciplines: 'operational excellence; product leadership; or customer intimacy', rather than generic strategies, as being key to success. The authors argue that it is essential to follow one of these value disciplines as 'the core discipline of a business; every decision, every action within the company should be shaped by that core value discipline' (Treacy and Wiersema 1995, in Bide 1998, 42). In this context, Bide also noted that publishers who seek to succeed in different sectors can only operate effectively under different disciplines, 'Understanding and following the appropriate value discipline will be essential to publishers' survival' (Bide 1998, 42). The research investigates the validity of these claims and whether the approach focusing on a particular value discipline is applicable to children's multimedia companies, or if indeed, areas of value in these companies contribute to a wider strategic approach.

#### 3.4.2.2 Development Factors

It was important to review studies looking at 'core resources', 'skills', 'competences', 'capabilities' and 'competitive advantage' (as described by the writers below) as the aim of this study is to identify and evaluate factors of internal value or development for publishing and new media companies in the children's multimedia market.

Lynch's study on core resources, skills and competences of companies was reviewed. Lynch noted that all products and services could be considered as a 'package of attributes' – attributes which may include physical qualities but also factors like price, access, availability and image. 'It is the creation of this package of attributes which lies at the heart of the value chain' (Lynch 1997, 33). The focus of both Kay and Porter is on the individual company, and how it gains competitive advantage within its own sector. Bide noted that there are several types of distinctive capability that a company may have which provides it with its particular ability to create value on a sustained basis. These are:

1. **Architecture:** 'the web of internal and external relationships a company establishes (including organisational knowledge)'

2. **Reputation:** 'differs for different markets, nature of product and assessment of product by long-term experience'

3. **Innovation**

4. **Exploitation of 'strategic assets'**

(Bide 1997, 42)

### 3.4.3 Porter's Generic Value Chain

The research also reviewed studies of Porter's Value Chain model, developed as a systematic business approach for examining the value which a company creates (Porter 1985). Porter noted that any company's activities can be divided between core or primary activities (those related directly to the

product) and support activities. Each of these classifications are broken down into certain generic classifications of business activity as is presented graphically in Figure 3.8. Porter's focus is on the individual company, but the supply chain within which the company operates is not ignored. The ultimate purchaser's value chain is also significant, because it is the value of the product within that chain which is the ultimate driver of the purchase decision.

Primary activities include the categories of:
- Inbound logistics (Supply)
- Operations (Production)
- Outbound logistics (Warehousing/distribution)
- Marketing
- Sales and service

Support activities include the categories of:
- Technology development
- Human resource development
- Company infrastructure.

This was found to be a helpful way of understanding which activities make a real contribution to adding value to the products and services which companies bring to a market. Furthermore, the Value Chain was considered to be the most relevant and useful modelling construction for this study which aimed to identify and evaluate factors of internal value or development (in relation to product, structural, procedural, and again strategic development) for companies to succeed in the children's multimedia market.



Fig. 3.8 Porter's Value Chain (Porter, 1985)

The Value Chain model does not break the business down functionally, but by business activity, with activities frequently crossing functional borders. Clearly, elements of each of the support activities are relevant within each of the core activities which is indicated in Porter's diagram by the dotted lines

which run through those support activities, linking them to the core. None of the activities within the organisation can be independent – but are interdependent, and competitive advantage often arises not from the activities themselves but from the linkages between them. It is interesting to note that Porter relates total quality management largely to the improvement of linkages within the value chain. He also uses the term 'margin' in his value chain to indicate what is defined as added value, 'Margin is the difference between the total value of performing the value chain activities.' (Porter 1985, 11)

### 3.4.4 Adaptations of Porter's Value Chain to the Publishing Industry

Various adaptations of Porter's Value Chain model by Vista International, Smith and Cunningham, and Diebold et al were studied and considered to be relevant to this study of factors contributing to the development of children's multimedia. These value chain adaptations are described in the following sections of this chapter

Bide noted:

> 'Understanding where and how publishers and new media companies create value in the publishing process today, and the extent to which these distinctive capabilities transfer to a multimedia environment, is critical in successfully negotiating this transition.' (Bide 1997, 10)

In 1997 Bide asked 'what will the impact really be and what should publishers be doing now to enable them to manage their businesses successfully in the future?' Vista International in its research program 'Publishing in the 21st Century', continued to focus on the publishing value chain and sought to answer some of the critical questions publishers face. With reference to current management thinking, Vista International sought to understand the sources of value which publishers add to the print-on-paper publishing process in the different market sectors, and the extent to which these transfer to the networked environment. Alongside Porter's original Value Chain model, the research analyses generic print, 'electronic' or 'multimedia' and online publishing adaptations of Porter's original Value Chain model carried out by Vista International, (including Shatzkin, Bide et al) (1997-2001). Other studies by Vista International which analysed change within the publishing industry in general; and change for electronic publishing, new media and online developments were also considered.

### 3.4.4.1 Print Publishing Value Chain Adaptation

Porter's original model has been adapted within the context of the publishing industry by Vista International, and a generic value chain for print publishing has been devised. Such an approach is encouraged by Porter, who discusses the need to 'disaggregate' activities in ways which are relevant to a particular company, separating particularly those which have either a high potential impact on differentiation or are responsible for a significant proportion of cost incurred. This is illustrated in Figure 3.9.

Fig.3.9 A Publishing Value Chain (Vista International, 1998)

The definitions of core activities which Vista International has used are expanded on below. Although Porter notes distinct areas in his value chain, Vista International have described these areas as functions with activities within these functions. The group note that an activity is not necessarily contained within the boundaries of a single functional department or division, and most of these activities are, to some extent, cross-functional. The different activities Vista International outlined in the Value Chain were described as:

1. **Content acquisition:** the process by which content for a publisher's products is acquired from its creator(s); this includes sourcing and selecting content, assessing its value and negotiating the rights to use it

2. **Content development:** the process by which content is enhanced through editing or other activities controlled by the publisher (including, for example, picture research)

3. **Product development and design:** the process through which the eventual form and appearance of the final product is conceptualised

4. **Project management:** activities relating to the control of cost, quality and time-to-market of product realisation

5. **Content formatting:** the preparation of content for publication (in the print world, defined as 'pre-press activities' (including, for example, illustration)) and was increasingly involving preparation of content for electronic delivery at the time of Vista International's study

6. **Marketing:** activities related to ensuring that the product is properly matched to market requirements, including pricing decisions ('much of the activity which would be defined as marketing is an editorial responsibility in most publishers')

7. **Promotion:** activities designed to stimulate sales: creation and dissemination of meta-information, advertising, leaflets, catalogues, point-of-sale, reviews, author appearances

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8. **Sales**: activities designed to convert promotional activities into sales transactions with either intermediaries or end customers

9. **Manufacturing**: activities which replicate the product for sale

10. **Fulfilment**: activities which administer the completed sale, delivering product to the customer and collecting payment from the customer

11. **Warehousing**: the management of the storage of replicated products prior to their sale

12. **Customer service**: activities which involve a direct interaction with the customer at any point during the pre-sale, sale or after-sale cycle (except for selling activities themselves)

13. **Other revenue sources**: activities which generate revenue from other sales than product sales, for example: rights sales or licensing; advertising sales; mailing list sales, developing service offerings which complement products (e.g. conference and seminar programs; product customisation; alerting services) (Bide 1998, 56)

These are the types of activities which are investigated within the children's multimedia market.

### 3.4.4.2 A Multimedia Publishing Value Chain

Research projects by the European Commission and the DTI amongst others were also reviewed which involved ongoing studies tracking market development for new media and on the activities and changing processes of companies in the publishing industry in response to multimedia developments (1997-2001). In December 1998, Smith and Cunningham in a report for the DTI also gave their interpretation on how they felt key areas were of value for multimedia or 'electronic' publishing, including editorial skills such as **'Origination of content, and Publishing: commissioning, acquisition, rights'. 'Electronic layout and design, access and delivery of online and offline content'** were also highlighted as important areas of value in their chain.

Bide also observed that multimedia activity has been driven by a number of factors, including developments in technology, globalisation of markets, benefits of economies of scale, opportunities offered by 'electronic' publishing and the formulation of alliances and partnerships to acquire new skills and market opportunities. Although these forces are impacting on the traditional supply chain, some publishers active in the publishing supply chain have continued to focus in one part: **'Origination, publishing, manufacturing, distribution or retail.'** These generic external forces and internal activities need to be analysed in the context of the children's publishing industry.

### 3.4.4.3 An Online Publishing Value Chain

Further studies looking at areas of value for multimedia or 'electronic' publishing highlighted that technological developments such as the internet – which is accessible and affordable – were changing the relationship between the supplier and the user of CD-ROM, DVD and other multimedia products. Consumers were beginning to order online, publishers were interacting directly with the consumer and were attempting to protect existing revenue streams and create new ones. Online communities were being developed to attract current and new readers and provide a range of value added services, supplementing the core print product. At the time of the studies noted above, changes in the UK multimedia market were still in their infancy and new business models were being tested and refined. The impact, at the time of the study, was described as 'minor' by publishing industry commentators, but it was anticipated that it would become a major growth area (Feldman 1997, 14).

A Vista International study included an analysis of the uptake and impact of online networks across publishing areas looking at: areas of greatest value, opportunities for adding value, areas undergoing significant change and future developments within the publishing industry (Bide 1995). In the past, definitions of the different sectors of the publishing industry have been straightforward, using physical dissemination of media to distinguish one form the other. 'As physical formats converge, business models in different market sectors are tending to diverge further' (Bide 1995, 2). Defining products, pricing, customers and ways to get to customers is now less straightforward. Bide recognised that as the current network environment continues to evolve, so does the value chain:

> 'It has now become necessary to look beyond publishing and at the information value chain to attain a well-rounded perspective of the value adding process between author and reader.' (Bide 1995, 2)

He again revisited and reconstructed the value chain to reflect the impact of new technologies such as the internet and digitisation on the value added process (see Figure 3.10) and to the 'perceived' value that a user places on a product: 'Value is only measurable from the perspective of the consumer. Ultimately only the consumer pays.' This is the fundamental concept underlying 'the (online) value that is added by the intermediaries in the process of taking the creator's content to its ultimate consumer.' (Bide 1995, 2)

Author →Selection →Access →Aggregation →Development →Navigation →Authority

**Fig. 3.10 Online Value Chain (Bide, 1995)**

Bide noted that while money is only part of the 'value exchange', the intermediaries or components 'add value' only to the extent that they form part of the consumer's experience; hence, the perceived value. To a greater or lesser degree, publishers, booksellers and libraries will have an effect on the above and on several other key elements that shape the value-adding process:

- the content that has been selected for publishing;
- the production and the logistics process;
- the relevant aggregation of works;
- how consumers can find the information they are looking for; and;
- that authority/brand is producing this information

The internet and other new technologies have impacted the majority of the publishing industry's standing processes. The industry has collectively began to analyse and understand the challenges and opportunities that these technologies present as they continue to evolve into the next generation of publishing. Bide identified five key tasks that appear to be integral parts of the process of publication and which make up the core of the business of publishing, the crucial added value:

1. **Selection**: it has been observed that publishers are better defined by what they do not publish rather than by what they do. A key part of what publishers do lies in the editorial process – selection, acquisition, commissioning.

2. **Finance**: publishers take the – sometimes considerable – financial risk in publishing, and can reasonably expect to make a return broadly commensurate with that risk.

3. **Organisation**: at the core of the publisher's role is the co-ordination of all the developmental processes that turn the author's raw material into a finished product for the market. This is an often-overlooked part of the publisher's art. It perhaps becomes most obvious only by its absence.

4. **Aggregation**: the book and journal publishing supply chains are focused on aggregating the works of individual authors – with the ultimate aggregators in the physical world being bookstores and libraries. It is typically to these points of aggregation that consumers go to purchase or to borrow the particular item to which they want access.

5. **Marketing**: self-evidently a crucial element of the publisher's role. Marketing - in its broadest sense – ensuring that products are appropriate to the markets for which they are published as well as promoting the products to the markets themselves. In this context, marketing is defined as including both customer service and distribution channel management.

He believes that all of these roles continue to be essential, some of them to an even greater extent than they were a few years ago and argues that although at a detailed level there are many differences between publishers who serve different market sectors, these core functions remain. The emphases may be different in different markets, but none of these functions can be ignored. The research looks at the areas of different emphasis specific to children's multimedia and investigates

any differences evident in the core functions for the production of children's products in the UK. It will be argued that some or all of the core functions that are identified are not uniquely reserved to 'publishers' (or at least to those who call themselves publishers today). This is in reference to the 'publishing process' not about the role currently played by publishing businesses. This is an important distinction to make and one that we will undoubtedly find ourselves making again. Bide also notes:

> 'It is only too easy to believe that what we know provides us with our core competitive advantage. In a time of change, it is all too possible that the opposite may be true. We should be particularly wary of those things we have always known.' (Bide 1999, 11)

The relatively low cost of entry into the market place, coupled with the growing influence of both creators and consumers in the supply chain, will continue to provide opportunities for new entrants alongside existing players (Bide 1999). The study of new media companies in this research analyses which functions are core to the nature of their business and results present interesting comparisons with children's publishers' core functions.


## 3.5 Summary


The review of literature has focused on studies (largely experiential publishing industry practitioner reporting and commentary) on the development of the multimedia market; companies; their skills; and functions which have been adding value for new media development. Although, some more specific sub-themes related to the area of 'multimedia' or to 'children's publishing', there were no specific studies analysing the children's multimedia industry. The business elements underpinning this study including change management issues for multimedia production, factors affecting publisher's corporate strategies and processes for this market, and new strategy development again tended to be of a more theoretical and generic theme but were found to be applicable to the research area. Literature on model building/development and various value chain adaptations which have been developed over the last few years were also reviewed. These studies, in the main, have focused on the generic publishing field as a whole, and the research proceeds to study a defined group of children's publishers and new media companies producing multimedia for children. The following Chapter 4 sets out the empirical results gathered from the research process involving the use of questionnaire surveys and interviews with publishing and new media companies producing children's multimedia in the UK.

# Chapter 4:  RESULTS

Results from various stages of data gathering in this study are described in this chapter. The stages included a questionnaire survey of multimedia division managers and directors employed within children's book publishing companies in 1998/99; a questionnaire survey of children's new media companies' directors and managers in 1999/2000; interviews with children's book publishing companies in 1999; and finally, in 2000, interviews with children's new media companies.

## 4.1 Children's Book Publishing Companies: Questionnaire Survey 1998/99

### 4.1.1 Response

Questionnaires were distributed to 50 managers and directors of multimedia within children's book publishing companies in the UK (See Appendix II for a list of the publishing companies targeted). An initial response of 32 (64%) was obtained. Following this, reminders were sent which elicited further responses, resulting in a 100% response being obtained.  This positive response enhanced the findings at this stage. Telephone interviews were then conducted with those publishers not producing children's multimedia with the aim being to uncover their reasons for choosing not to produce children's multimedia. The response was also positive (100%), again strengthening the research at this stage.

### 4.1.2  Characteristics of Respondents

An unexpected result emerged in that two types of publisher were identified from the questionnaire sample response, i) publishers *not producing* multimedia for children (31) and ii) publishers *producing* multimedia for children (19) (as shown in Figure 4.1 below).



Fig. 4.1 Book Publishers – Production for Children

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### 4.1.2.1 Publishers *Not Producing* Multimedia for Children

Most prominent was that 62% of the publishers sampled were not producing children's 'multimedia' (as defined in Chapter 1, page 3) (31/50) although had been listed as multimedia publishers in the Waterlow New Media CD-ROM 1999/2000 consulted. The reasons for this emerged from the questionnaire feedback and fell into three categories as highlighted in Figure 4.2.



**Fig. 4.2 Children's Book Publishers – Non - Multimedia Production**

1. As Figure 4.2 illustrates, 35% (11) of these non-multimedia publishers had been classified as 'multimedia' publishers in the directories consulted, but were in actual fact 'audio-visual' publishers. The directories' definition of the term 'multimedia' was a narrower definition than originally anticipated and defined.

2. Another reason for 'non-multimedia' publishers being included in the original sample was due to mis-information received from the directories consulted. 16% (5) of the non-multimedia publishers were simply not producing multimedia - for example, were producers of wall charts, picture and puzzle books.

3. Another significant result is the extent to which publishers had dropped out of the market (15). Just under one third of all publishers surveyed had dropped out of the market (49% of the non-multimedia publishers who responded). Telephone interviews were conducted with these publishers to uncover their reasons for stopping multimedia production. Figure 4.3 below highlights some of the problems these companies were having – the main being, financial.

financial problems

market familiarity & focus

skills gaps

technical base mis-judgements

small size of company

distribution problems

manufacturing problems

over-production

0    5    10    15

Fig. 4.3 Reasons for Publishers Stopping Multimedia Production

In the telephone interviews that followed, it was found that approximately 40% (12) of all the non-multimedia publishers mentioned, planned to produce multimedia in the future, while 55% (17) had no intention of producing multimedia in future. The telephone survey also found that a large amount of these publishers who were not producing children's multimedia (74%) were using multimedia for other purposes, i.e. using the Internet primarily to promote or sell products, and also for research purposes. When asked about their future intentions regarding multimedia production, publishers explained that they were being cautious in their approach. Although one publisher, who described itself as 'undergoing something of a shake-up', noted:

'We are considering the whole market and where we should aim to be within it, given the immaturity of the medium and the increasingly wide horizons offered by the Internet.'
With regard to their future, the same publisher noted:

'We are looking very closely at website publishing - we will certainly become involved - the only questions are those of time and extent. The whole area is potentially very exciting for us.'

The majority of traditional children's publishers who chose not to enter the multimedia market did not do so mainly due to the high investment costs involved, a lack of the appropriate skills (such as technical and marketing skills) required for multimedia production as shown in Figure 4.4. The small size of children's publishing companies in the UK was a reason given for publishers avoiding the multimedia market.

The initial telephone interview findings indicated that smaller publishers would be wise to consider partnership (43%: 13), licensing of material (35%: 11), and investment in research and development into children's multimedia (22%: 7).

### 4.1.2.2 Publishers *Producing* Multimedia for Children



**Fig 4.4 Reasons for Children's Publishers not Entering the Multimedia Market**

However, equally important was that 40% (19) of the publishers surveyed were producing children's multimedia with 20% of these publishers producing children's multimedia successfully. Those publishers producing multimedia for children fell into the categories in Figure 4.5. Of the book publishers who responded to the questionnaire survey, 79% (15) attributed only 5-10% of their overall turnover to multimedia publishing and half of these publishers attributed less than 10% of their multimedia production towards producing multimedia for children, while the other half stated that children's multimedia constituted a significant part of their multimedia publishing activity.

### 4.1.3 Company Culture

Of the 19 children's multimedia publishers in 1998 who responded to the questionnaire survey, it was found that a significant amount of the sample (37%: 7) were producing children's multimedia for both 'consumer' and 'non-consumer' markets although the distinction between the two is blurred. All publishers who responded defined 'non-consumer' as 'educational'. 'Consumer' was then taken to mean products to be used by children in the home or out of school other than educational products. There appeared to be an overlap between sectors for children's multimedia products. Interestingly, one publisher noted, 'the consumer potential has so far been unexploited'.

The majority of publishers (64/br 16) producing children's multimedia at the time of survey had started production in the 1980s and were, at that time, claiming that they were maintaining a reasonable figure of success/profit within the market. Some of these publishers researched the developing market during the 1990s rather than remaining in a niche share who had been forced to drop out of the market or had been taken over, for example Dorling Kindersley. The major publishers who did invest in children's multimedia in the 1980s and were still present in the market in 1998, claimed to have started production in the late 1980s.

Fig. 4.5 Types of Publishers in the Children's Multimedia Market – 1998/1999



Fig. 4.6 Reasons for Multimedia Surveys

In Figure 6.6 shows, most publishers felt that the reasons for children's multimedia production would be very much a progressive one, for their companies, with 55% (11) of publishers seeing their reason to start new product development demand. A figure of between 60% and was influenced by market research and said its interest in increasing media production in the future. The results, as shown in Figure 4.7, suggest that publishers had taken a cautious approach when entering/re-entering the market. The majority of publishers who responded (84%) at most, this figure being a start on facing children's multimedia as their original commercial objective when entering...

The majority of publishers (84%: 16) producing children's multimedia at the time of survey had started production in the 1990s and were, at that time, claiming that they were maintaining a reasonable degree of success/profit within the market. Some of these publishers researched the developing market during the 1980s rather than investing in it like others who had been forced to drop out of the market or had been taken over, for example Dorling Kindersley. The three publishers who *did* invest in children's multimedia in the 1980s and were still active in the market in 1998, claimed to have started production in the *late* 1980s.

n=19



Fig. 4.6 Reasons for Multimedia Start-up

As Figure 4.6 shows, most publishers felt that their move into multimedia production would be very much a progressive step for their companies, with 58% (11) of publishers giving their reason for start-up to be product development. A substantial amount (21%: 4) was influenced by market demand and had an interest in investing in digital products in the future. The results, as shown in Figure 4.7, suggest that publishers had taken a cautious approach towards the children's multimedia market. The majority of publishers who responded (84%: 16) stated, that after deciding to start producing children's multimedia, their original commercial objective when entering

the sector was to adopt a long-term view. However, a significant amount (37%: 7) only wanted to test the market, and interestingly, only one respondent aimed to become a strategic threat to an established business.

**Fig. 4.7 Commercial Objectives**

### 4.1.4 Company Procedures

The publishers sampled were producing multimedia for children in the age groups from pre-school, 5-8, 8-12 and teen. The largest amount of respondents (79%: 15) produced for the 8-12 and teen markets, and 53% of the sample produced for all age groups mentioned. The majority of respondents (89%: 17) commissioned specifically for book tie-in products with only two publishers commissioning specifically for multimedia products. This suggested that the UK publishers' use of multimedia at this time was still very much to compliment the printed product for children. All respondents produced books, CD-ROM and audio-visual material, and only three publishers also produced online and broadcast content for children. Although the majority (84%: 16) were not using the internet as a medium for delivering children's content, thirteen of them (81%) were planning to use it in the future for that purpose. In 1998, the concentration of new media for children produced by publishers was evidently on CD-ROM production, with the largest amount of respondents (74%: 14) noting their multimedia focus for children to be on 'offline' material (offline: audio, video and CD-ROM) rather than on 'online' material (online: internet, digital and broadcast media).

Fig. 4.8 Book Qualities for Children's Multimedia

Over half of the respondents (53%) felt that educational value was an important quality that would determine a children's book's suitability for multimedia production, as shown in Figure 4.8. One of them qualified this, commenting, 'Most sales are through schools so entertainment value may figure low in our priorities.'

Other qualities that were rated highly, by a significant amount of the sample (31%: 6), were established brands and creating stand-alone media products - rather than starting with the book. None of the respondents had highlighted that a suitable subject, reputable characters, entertainment value or suitable type (i.e. reference) were qualities they would look for in books to use in children's multimedia products.

### 4.1.5 Staff Structure



**Fig. 4.9 Structural Changes for New Media**

As shown in Figure 4.9, most publishers sampled (42%) had implemented their move into children's multimedia publishing by investing in contractual development. A significant amount (37%) had set up new divisions (one disbanded) and 32% had expanded their children's publishing divisions for multimedia production.



**Fig. 4.10 Value Chain Position**

The majority of respondents (68%: 13), as illustrated in Figure 4.10, considered their companies' role in the value chain to be as 'commissioners'. Over one third viewed themselves as 'publishers and commissioners' (7), and four as 'publishers' or 'distributors' alone. Notably, 95% felt that their role had not changed since their first launch of multimedia for children. Only one company (who had described their role as a 'publisher') said the company's role had changed, stating it had moved more towards distribution and less to development as this meant lower risk for them.

Half of the respondents stated that their retail channels and distribution methods remained the same for multimedia as for traditional publishing, while the other half stated that the channels used had changed, with one publisher saying, 'It's changing for each different customer relationships', while another stated, 'We are using more mail order for CD-ROM. Retail is dead.'



Fig. 4.11 Retail and Distribution

As can be seen from Figure 4.11, all respondents distributed their children's multimedia products to schools. A large amount had invested in online selling, used direct mail and distributed to book stores, while the least amount (3) were distributing to music, electrical, toy and super stores. Publishers' distribution was still very much focused on book-centred outlets in 1998/99.

When the book publishers were asked how they rated the importance of certain issues in the process of adapting to change for children's multimedia production, all publishers who responded found the development costs for the production of children's multimedia to be a *major issue of concern*. Product life cycles and over supply/competition in the market place were the next main issues of concern. The *least important* issue for the majority of publishers who responded to the survey (74%) was staff retention. Just under half of the sample that responded (47%) also considered redeployment of staff and communication between old and new staff to be of minor importance. Interestingly, using external expertise was considered to be more important by respondents than employing new staff with a different set of skills or training existing staff.

**Fig. 4.12 Staff Increases for New Media**

Figure 4.12 indicates that the majority of respondents (74%: 14) had *not* noted any staff increases in their companies' departments as a result of starting children's multimedia production. Of the companies who did have staff increases within their companies, the main changes were observed in creative/design and marketing departments.



**Fig. 4.13 Staff Task Redefinition for New Media**

When questioned, this time, about redefinition of staff tasks for multimedia, the majority of publishers who responded (63%: 12) stated that their company had not needed to redefine staff tasks. As Figure 4.13 highlights, of those who had redefined their staff's tasks, the majority had redefined tasks in promotion and marketing, only one company noted redefinition in editorial, sales and management. A significant amount of publishers who responded (58%: 11) felt it was most critical to establish good working relations between editorial and development in order to successfully publish in a multimedia

format. (Four publishers felt that relations within editorial itself were critical). Also of significant importance was the relationship between publisher and retailer and within marketing itself (26%: 5).

### 4.1.6 Staff Skills

In the main, staff responsible for starting up multimedia production for children included directors, editors and publishing managers with expertise in the areas of product development, commissioning, education and IT. Only one company's children's multimedia start-up was controlled by a multimedia designer. In 1998/1999, staff controlling multimedia had not changed greatly, with the majority of publishers using a mix of directors (business, product and technical development) to control their children's multimedia operations (77%). 22% opted for the more traditional staff to control their multimedia production, including head of publishing and commissioning editors.



Fig. 4.14 Book Publishing Skills for Multimedia Production

As Figure 4.14 shows, the greatest number of respondents (79%: 15) considered the creative or design skills that their existing children's book publishing staff had to be the most beneficial in the production of multimedia for children. A significant number of respondents considered editorial skills to be very useful (68%: 13) and rights and talent acquisition and marketing skills were also highlighted as useful. Interestingly, none of the companies mentioned in-house technical expertise and its importance in children's multimedia production.

When asked about skills outsourced, all respondents stated that they outsourced developing and manufacturing functions for children's multimedia, 68% (13) outsourced retailing, with one publisher stating, 'We act, as with book publishing, as editors/designers and distributors - not retailers - but the Internet will allow direct sales to an increasing extent.' Four respondents outsourced distributing operations and only one publisher outsourced commissioning or publishing.

The respondents who felt there were gaps in the skills required for multimedia production (6), noted that gaps existed in technical and interactive production in-house. The majority of publishers who responded (89%: 17) carried out their training in-house. Those who used external training had used it for IT, management and specialist skills training purposes.

### 4.1.7 Strategies for Future Development

All companies, excluding one, envisaged having additional qualities in future children's multimedia products. Just over 10% of these companies said they were looking towards a focus on international brands. Two of the respondents with broadcasting operations, stated that they were always looking to add new qualities to existing product ranges, and one expanded:

> 'We are aiming to produce new product ranges altogether, particularly with the advent of DVD-ROM which lends itself perfectly to the incorporation of large elements of our broadcasting content.'

The largest number of respondents (42%: 8), whose companies had been adapting to change for children's multimedia production, stated that the most important lesson they had learnt was that they had overspent at the development stage. Publishers, in the main, felt there was a requirement to be more specific in terms of market focus, and partnerships needed to be considered. As shown in Figure 4.15, a significant amount (26%: 5) had also learnt how important it was to focus on specific markets and products with one qualifying in 1998, 'there is no more money left for us to experiment with multimedia.'



Fig. 4.15 Lessons Learnt about Multimedia Production

Table 4.1 illustrates the response to the question, 'On a scale of 1-5, which of these issues matter most to you in relation to publishing children's multimedia products?'(where 1 is minor, and 5 is major). As shown, all of the publishers who responded considered visual impact, educational value and high quality to be the most important attributes in multimedia products for children. All companies, with the exception of one, felt that audience considerations in production were also crucial. A large amount of publishers agreed that media richness, international market focus and product interactivity were of major importance in children's multimedia production. Approximately half of the sample who

responded, considered the entertainment value and price of children's multimedia produced to be 'important' and just under half of the sample thought that a shift from selling products to licensing information and services was of minor importance.

**Table 4.1 Importance of Multimedia Product Assets**

n=19

| Level of Importance | Minor Importance | | Mid Importance | | Major Importance | |
|---|---|---|---|---|---|---|
| Response | % | Company Number | % | Company Number | % | Company Number |
| Educational content | | | | | 100 | 19 |
| Visual impact | | | | | 100 | 19 |
| High quality | | | | | 100 | 19 |
| Audience | | | | | 95 | 18 |
| Media richness | | | 26 | 5 | 63 | 12 |
| International market focus | 26 | 5 | | | 63 | 12 |
| Product interactivity | | | 42 | 8 | 47 | 9 |
| Usability on various hardware platforms | 16 | 3 | 16 | 3 | 58 | 11 |
| Local market focus | 16 | 3 | 32 | 6 | 42 | 8 |
| Price | | | 58 | 11 | 37 | 7 |
| Flexibility | | | 32 | 6 | 26 | 5 |
| Entertainment value | 11 | 2 | 47 | 9 | 32 | 6 |
| Modernity | 16 | 3 | 16 | 3 | 42 | 8 |
| Shift from selling products to licensing info/services | 47 | 9 | 11 | 2 | 16 | 3 |

Most of the survey respondents (68%: 13), as shown in Figure 4.16, carried out their market research in relation to new media products by obtaining company information from trade press and by using (63%: 12) questionnaires and surveys. Consumer focus groups and communication with retailers and distributors were also popular research techniques.



**Fig. 4.16 Market Research for New Media**

## 4.1.8 External Factors

The questionnaire response in 1998 showed that players in the children's multimedia market ranged from small, traditional book publishers to innovative book publishers investing in multimedia development, book/audio-visual publishers, large conglomerates with other operations, 'new generation' or 'new media' companies, and toy companies as highlighted below:

- **New Media Companies**

- **Software Companies**

- **Hardware Companies**

- **Games Companies**

- **Toy Companies**

- **Publishing Companies** - large: traditional/partnerships/other operations, or Small: traditional and innovative

Fig. 4.17 List of Company Types in UK Children's Multimedia Market– 1998/1999

Fig. 4.18 Future Position of Book Publishers in Multimedia Market

The majority of respondents had a positive outlook as to the future of book publishers in the children's multimedia market. As Figure 4.18 shows 63% (12) shared the view that book publishers will have a significant part to play. A substantial amount envisaged collaboration with other companies in the market such as software and production companies. For the majority of publishers that responded (89%: 17), other companies' activities did not affect their promotion of children's multimedia. However, there was also a degree of scepticism in the response (37%: 7), with book publishers feeling threatened by the presence of new media and software companies. One respondent felt that the products which children's multimedia book publishers were developing would be more suitable in an online format rather than CD-ROM:

'In the multimedia marketplace in general, book publishers will never have a significant part to play in delivery of traditional multimedia (CD-ROM delivery) because their linear content does not lend itself obviously to that delivery but does via the Internet.'



Fig. 4.19 Market Development

As shown in Figure 4.19, publishers felt that one of the important trends in the market's development was the evolution of the products publishers were required to supply to their market. It was predicted that CD-ROM would move into a hybrid product and publishers would witness growth of the Internet and a steady move towards television access to the internet – overall, a convergence of delivery mediums. Publishers also emphasised the need to secure key rights and to brand effectively for children's multimedia, 'In new markets, brands are king.'

Concern was evident also for the future costs of multimedia products for children and market demand, 'the educational market will only develop when the political commitment is there.' However, one respondent aired a concern from the supplier's point of view, 'downward price pressures on CD-ROMs would make margins too tight for quality production.' Two companies commented that the activity of their competitors forced them to strengthen their branding and promotion of products. All publishers who responded priced their children's multimedia products to be competitive with others in the market. Pricing was described by one company as being 'ever downward.'

### 4.2 Children's New Media Companies: Questionnaire Survey 1999/2000

#### 4.2.1 Response

In December 1999, questionnaires were distributed to 50 directors of children's multimedia within new media companies in the UK (See Appendix VII). An initial response of 19 (38%) was obtained. Returned questionnaires with 'no such address' notes were received from four of the targeted sample and two companies had 'no time to help'. It was later found that ten companies' contact telephone numbers, email and postal addresses had changed within a few months of publication of the CD-ROM ('Waterlow's Year 1999/2000 CD-ROM') consulted for the compilation of the research contact list. Following this, company contacts were relocated and reminders were sent to all non-respondents. This elicited eight further responses, resulting in a total of 27 (54%).

#### 4.2.2 Characteristics of Respondents

An appropriate and varied sample of new media companies had been identified from the sources mentioned above. When contacted, their company type was found to match the 'new media company' description as defined in Chapter 1. Two thirds of the companies who responded (66%) stated that the majority of their multimedia turnover was attributed to production for children.

#### 4.2.3 Company Culture

When asked about the services the companies were providing, all of the new media companies who responded (27) listed multimedia publishing as one of their services. Approximately 60% provided content development and software development, while approximately 30% also listed multimedia production services. The least amount of companies (15%) provided multimedia distribution and web

development services. Figure 4.20 summarises the services provided by the new media companies sampled:

- Content Development
- Web development
- Software development
- Hardware Production
- Multimedia distribution
- Multimedia production services

**Fig 4.20 Multimedia Services Provided by UK New Media Companies – 1999/2000**



**Fig. 4.21 Reasons for Multimedia Start-up**

A large percentage of new media companies started multimedia production for children in the mid-late 1990s (60%) and approximately 30% of companies started in the early 1990s. Only about 10% of respondents produced their first multimedia product in the late 1980s. As can be seen from Figure 4.21, over half of the companies who responded (56%) started producing multimedia for children due to market demand, while over a third of companies surveyed started up multimedia production due to competition, to achieve growth and had a focus on product development at that time (37%). None of the respondents gave financial imperatives, peer pressure or market testing as reasons for entering the market. The majority of respondents (92%) had an original commercial objective to break even in 1 or 2 years, while less than 10% aimed to break even in 5 years.

### 4.2.4 Company Procedures

The new media companies sampled were producing children's multimedia for all children's age groups from pre-school, 5-8, 8-12 and teen. Of the respondents, the largest amount (89%) were producing children's multimedia for 8-12 year olds.



**Fig. 4.22 Children's Multimedia Products**

Figure 4.22 shows that all companies that responded were producing CD-ROM for children, while 30% (8) of the sample produced both CD-ROM and online content. Only three produced audio/spoken word products and were involved in broadcasting operations and surprisingly, only one produced video.

At the time the survey was conducted, all respondents (27) stated that their main focus for children's multimedia was offline media (i.e. audio, video, CD-ROM) rather than online media. The respondents focused on both the school (21: 78%) and home markets (20: 74%) for children's multimedia, with slightly more producing for the school market. Only one company stated 'other', which was defined as being the health education market.

Table 4.2 outlines the sample's response to the question, 'On a scale of 1-4, which of these qualities matter most to you in children's multimedia products?' (where 1 is minor, and 4 major).

Table 4.2 Important Qualities in Children's Multimedia Products

n=27

| Level of Importance | Minor Importance | | Mid Importance | | Major Importance | |
|---|---|---|---|---|---|---|
| Response | % | Company Number | % | Company Number | % | Company Number |
| Educational content | | | 11 | 3 | 74 | 20 |
| Product interactivity | | | 11 | 3 | 74 | 20 |
| Audience | | | | | 74 | 20 |
| Established brands | 15 | 4 | 56 | 15 | 59 | 16 |
| High quality | | | 22 | 6 | 59 | 16 |
| Media richness | | | 22 | 6 | 59 | 16 |
| Reputable characters | | | 33 | 9 | 44 | 12 |
| Visual impact | | | 33 | 9 | 44 | 12 |
| Entertainment value | 11 | 3 | 56 | 15 | 15 | 4 |
| Price | 7 | 2 | 33 | 9 | 15 | 4 |
| Reputable writer/illustrator | 7 | 2 | 11 | 3 | | |
| Series publication | 4 | 1 | | | | |
| International market focus | 18 | 5 | 22 | 6 | 15 | 4 |
| Modernity | 22 | 6 | 33 | 9 | 7 | 2 |
| Local market focus | 22 | 6 | 11 | 3 | 15 | 4 |
| Usability on various hardware platforms | 33 | 9 | | | 7 | 2 |

Educational content, audience focus and product interactivity were considered to be the most important qualities for new media companies to have in their children's multimedia products (74%). Established brands, high quality, and media richness in their products were also noted as being high up on the scale of importance by respondents. Educational value was considered to be 'important' by 56% of respondents, whereas usability on various platforms was considered to be an 'unimportant' quality of a children's multimedia product by 33% of respondents.

In response to another question, branding of both the new media company and the children's multimedia product were considered important by all respondents (27). The highest number of respondents ticked 'very important' for the branding of children's multimedia products (85%: 23), with almost 30% more of the respondents sharing the view that product branding was more important than company branding. (Company branding was considered to be very important by 56% of the companies that responded).

As Figure 4.23 shows, most of the new media companies who responded (74%) were using the internet for children's multimedia product marketing/promotion and selling purposes in 1999/2000. 44% were using the internet for market research and development, and delivery of children's content. As shown in Figure 4.24, an equal amount of respondents stated they would consider using the internet for market research and development in the future, whereas fewer new media companies were considering using the internet for delivering children's content in the future (30%).

Fig. 4.23 Internet Use 1999/2000

n=27



Fig. 4.24 Future Internet Use

When the sample was asked, 'What features do you look for on a web site to strengthen the *promotion* of children's multimedia products and *sales* of children's multimedia products?', the response was as follows:

Table 4.3 Strong Promotional Features

n=27

| Promotion Features | % | Company Number | Comments |
|---|---|---|---|
| Visibility | 33 | 9 | Good links, use of short, sharp message, and visibility on search engines |
| Engagement | 18 | 5 | Enabling and ability to engage in site |
| Achievement | 15 | 4 | Achievement-based info and features required |
| Accessibility | 11 | 3 | Applicability of content |
| Applicability | 4 | 1 | Info must be easy to access |

**Table 4.4 Strong Sales**

n=27

| Sales Features | % | Co. No. | Comments |
|---|---|---|---|
| Visibility | 52 | 14 | Visually attractive, strong presence with good links and visibility on search engines |
| Playability | 22 | 6 | Playable materials |
| Informative | 15 | 4 | Clear attractive demonstration, information and support materials |
| Competitive | 7 | 2 | |

Companies highlighted certain common features as being important for both the promotion and sales of their children's multimedia. Visibility and usability seemed to be the key features for the majority of respondents.

### 4.2.5 Staff Structure

All new media companies who responded collaborated with other companies for the selling of rights for children's multimedia, 85% collaborated with others for buying rights and 92% for joint production. The 'other companies' new media companies noted that they worked with included broadcasters, overseas publishers, various software production companies, educational publishers and online companies. Almost all of the companies who responded (25) highlighted the relationship between artists, programmers and content suppliers as being critical in order to successfully produce children's multimedia. A significant number (30%: 8) felt the relationship between publishing and software development was also critical and three other companies noted the importance of effective relations between channel marketing, sales and product development for children's multimedia. One company commented, 'All departments have information to share amongst all departments.'



Legend:
- multimedia distribution
- software development
- web development
- manufacturing
- multimedia production
- multimedia retailing
- other functions
- hardware production
- content development

n=27

**Fig. 4.25 Functions Outsourced**

115

As shown in Figure 4.25, just under half of the respondents outsourced software and web development and multimedia distribution (48%: 13). One third of the respondents stated that they outsourced multimedia production services, retailing, content development and 'other' publishing functions such as animation, printing and duplication. A smaller amount (15%) outsourced hardware production and none of the companies who responded outsourced commissioning.

As Table 4.5 shows, direct mail and online selling were considered by the greatest number of respondents to be the most important method of retail and distribution for children's multimedia. Schools were considered to be 'important' outlets, whereas music stores, libraries and supermarkets were not considered useful by new media companies for sales of their children's multimedia products.

Table 4.5 Retail and Distribution - Importance of Outlets

n=27

| Level of Importance | Minor Importance | | Mid Importance | | Major Importance | |
|---|---|---|---|---|---|---|
| Response | % | Company number | % | Company number | % | Company number |
| Direct mail | | | 22 | 6 | 44 | 12 |
| Online selling | | | | | 44 | 12 |
| Schools | | | 44 | 12 | 30 | 8 |
| Book clubs | 26 | 7 | 4 | 1 | 30 | 8 |
| High street retailers | | | 33 | 9 | 18 | 5 |
| Games/computer | | | 33 | 9 | 15 | 4 |
| Book stores | | | 7 | 2 | 15 | 4 |
| Electrical | 18 | 5 | 4 | 1 | 18 | 5 |
| Toy | 22 | 6 | 22 | 6 | 11 | 3 |
| Libraries | 33 | 9 | 7 | 2 | | |
| Supermarkets | 33 | 9 | 4 | 1 | | |
| Music stores | 33 | 9 | | | | |

## 4.2.6 Staff Skills

Interestingly, 81% (22) of the respondents felt there were no gaps in the skills new media companies required for children's multimedia in 2000. Of the companies who said gaps existed (19%: 5), one noted that there was a requirement to 'put education into quality and creative programming.'

Quality programming and graphic artwork were highlighted as being the skills/areas in which 85% of respondents encountered the most difficulties in recruiting for children's multimedia. Three other companies noted that good ideas had been difficult to find. (One company felt that this was not applicable to them). The majority of respondents (81%: 22) carried out their staff training for children's multimedia production in-house. Companies who used external training (19%: 5) used it for various training purposes, including marketing, programming and other new technologies training purposes.

### 4.2.7 Strategies for Future Development



n=27

Fig. 4.26 Lessons Learnt

As highlighted in Figure 4.26, the greatest number of respondents had learnt the importance of branding in the children's multimedia market (44%: 12) – with one commenting, 'Product brands are crucial for parent' and another noted, 'Branding is extremely important for the young and old consumer.' Approximately one third of the respondents felt an important lesson learnt was the effect and influence of the US on products and markets:

> 'The US market isn't reflective in the UK market. Much content is derived from our US parent company and as such we are reasonably constricted in our content. Low-end cheap products are constantly being dumped in to the UK market from the USA.'

New media companies were also dissatisfied with the lack of specialist retailing of their children's multimedia products and felt the competition coming from the games market was difficult. Just over 10% (3) had learnt that in the children's multimedia market, companies also must be more focused, providing specialist products for parents and children, 'The best ideas are simple, address external needs and ensure that the product can be used by the same child for at least one year without coming to an end.' Two companies said they charged large consultancy fees for this type of information.

Fig. 4.27 Company Uniqueness

As shown in Figure 4.27, two factors were highlighted by respondents as the main factors used to make multimedia companies unique in the children's multimedia market (or giving them competitive edge over other companies). Approximately 70% emphasised the importance of branding, while almost half of the sample felt that content was a main factor contributing towards their company's uniqueness. A significant amount also felt that original creative ideas contributed to their uniqueness. Figure 4.27 also shows how branding is valued by companies in comparison to other factors involved in children's multimedia production.



Fig. 4.28 Success Factors for Children's Multimedia

When the sample was asked, 'What factors have you found appear to lead to success in children's multimedia production?', the response was comparable to previous comments, with again, the largest number of respondents emphasising the importance of branding (48%: 13). As can be seen in Figure 4.28, a significant number of respondents recognised the value of quality content and production value in children's multimedia products. One company also highlighted the importance of 'animated, interactive life in products.'

n=27



Fig. 4.29 Market Research

As highlighted in Figure 4.29, the largest number of respondents (74%: 20) noted that communication with retailers had been a market research technique they had used for children's multimedia. Company information from trade press and reply paid cards were also popular techniques (60%: 16) as were surveys, internet information and consumer focus groups. None of the respondents noted in-store merchandisers as being a tool they used for researching the market.

PAGE MISSING IN ORIGINAL

Pie chart legend:
- Hasbro
- BBC
- DK
- TLC
- Granada
- Havas
- Microsoft
- Anglia
- Europress

n=27

**Fig. 4.31 Competitive Threats**

As Figure 4.31 shows, BBC, Dorling Kindersley and Hasbro were highlighted by the respondents in the new media companies sampled as being their main threats or competitors in 1999/2000. Only one noted that US companies were its main competitors, and another noted, 'lack of visibility' as being their main threat.

Overall, the new media companies who responded felt threatened by funding and cost issues. Approximately 60% (16) were influenced by cost, including retail costs, and lack of government funding for education and investment in general. Others highlighted the problems of raising profile, profit and maintaining visibility when their company is small.



n=26

Bar chart categories: Lack of investment, SME problems, High costs, No response

**Fig. 4.32 Industrial Threats**

When the companies were questioned about how they felt the market would develop and the important future trends in the area, as highlighted in Figure 4.32, the majority of respondents (81%: 22) shared the view that new media companies would experience a growth in the online sector – with a move towards direct distribution, online learning (supported by CDs and other media initially), early learning,

revision and 'schools-tailored programming'. The rest (19%: 5) felt that there would be *no* major change in the forseeable future.

## 4.3 Interviews with Children's Book Publishing Companies: 1999

### 4.3.1 Characteristics of Respondents

Interviews were conducted with directors and senior managers of children's multimedia divisions, in six book publishing companies producing multimedia for children as listed below:

BBC Multimedia

Child's Play Interactive

Longman Logotron

Oxford University Press

Productive Play Company

Two Can Publishing

These companies had been identified from the questionnaire survey response in 1998/99 as being 'successful' in their production of children's multimedia and ranged from small to large, traditional to innovative companies, focusing on both the 'schools' and 'home' markets. The interviewees produced multimedia as part of a package complimenting their book or broadcasting operations. Three of the companies were part of large traditional book publishing operations, two were part of small book publishing operations and the other was set up to compliment the activities of a larger broadcasting operation. These companies were based in London, Oxford, Cambridge and Swindon. One noted that its children's multimedia division was part of a wider operation, but had an independent budget and could also rely on the parent company to boost activity. All profits would ultimately go back into the larger operation. Another company noted that it was unique in that it was a public service organisation (with licence fee funded by a broadcaster) so it claimed that production was always driven by market demand.

### 4.3.2 Company Culture

A number of questions were asked which gave an indication of how book publishing companies have developed and adapted a company culture suited to producing and developing multimedia for children. Their market focus remained unchanged for multimedia, with all catering for both the 'home' and 'schools' market. The interviewees' multimedia production for children, as a percentage of their overall publishing turnover, was generally quite small, with three attributing less than 10%, however two companies attributed 40% of their turnover to multimedia. The companies' interviewees started up their multimedia production for children from the mid 1980s-mid 1990s and all noted that they had to invest substantially in the adaptation of their companies' culture. Their focus on books and television had shifted and widened to include CD-ROM, DVD, and online development, but all companies viewed this move as providing a complimentary role to existing products (books, magazines and television

programmes). One company commented, 'It was tough as we had to build a market, brand and reputation.'

When the companies were asked why they started up multimedia production for children, three interviewees replied 'to keep up with the competition' but one also noted how it had been influenced by demand from the market, 'We had a belief that there was actually a gap in the market to do this and we had the characters to work from.' Two companies felt their move into multimedia was difficult, with one noting, '99% of our staff work to the book business model and the other 1% of us are working to a totally different one and trying to integrate those is quite interesting.' The other felt the way round this was 'to talk more and feed information off each other. It's all about trying to educate those in a more traditional publishing role about the other models for publishing information.'

### 4.3.3 Market Environment

Interviewees' definitions of sectors within the children's multimedia market, using terms such as 'CD-ROM' including 'children', 'education', 'utilities', 'games console', 'reference', 'home entertainment', 'schools', 'education', 'edutainment', and 'international'. However, for the purposes of this research, the market is divided into two sectors only – schools and home (not games).

### 4.3.3.1 External Factors

Certain external factors and their changes and development appeared to be affecting book publishers and their children's multimedia production in the schools and home markets in 1999 and the interviewees touched on the areas of influence outlined in Figure 4.33 below. One interviewee noted, 'Initially everyone entered the multimedia market as the barriers for entry were very low, yet 'oddly' the costs of production were quite high.'



Fig. 4.33 Market Influences and Developments

### 4.3.3.2 Market Development

All interviewees commented that a new market emerged for children's multimedia in the late 1990s, with a decrease in hardware costs resulting in an increase in PC home ownership. However, one company commented, 'the base case may rise too fast and there's a risk consumers will switch off because their hardware will not keep pace.'

Two interviewees also noted they had witnessed an increase in new technology, and observed how developments demanded a change in the way parents of this new generation of children were thinking about multimedia:

> 'There exists a fairly recent assumption that children and parents are going to be comfortable with young children using computers. There had been very few up until now. There has always been a requirement for a parental change as they are the buyers.'

### 4.3.3.3 User and Purchaser

All interviewees noted that the children's multimedia market was unique in that the user and purchaser were usually different people as shown in Figure 4.34 and one noted, 'the critical factor is making sure you have got the two levels of the market – the user and purchaser right.' Another observed, 'In almost any other area of publishing you are dealing with adults for adults (in terms of writing and developing).'



**Fig.4.34 UPP Triangle – User/Purchaser Triangle**

It was also noted by most of the interviewees (4) that the adult purchaser was either a parent or teacher/educator. One company noted that companies producing CD-ROMs or web sites for children needed to ensure that their products were acceptable for both, and noted that children had certain requirements which varied as the child got older:

- under 8 – fun, entertainment, non-adult requirements,
- 8-12 – degree of parental/educational influence, own ideas/likes/dislikes
- teen - main spend is on games, want to be very different from their parents, use their own money

Another interviewee commented, 'companies must follow the critical path for the parent/educator and the child to ensure clarity and accuracy of product information and price.' One interviewee noted that certain drivers for purchase existed in the children's multimedia maker:

> 'A key point is that our research shows we have two drivers for purchase; 'Parental Guilt/Support' and 'Pester Power' or 'Playground Word of Mouth' (Blue Peter falls in to the former, Live and Kicking falls in to the latter) and this differs for books.'

The same interviewee felt that when the parent does not have the knowledge or information required to make a DVD or CD-ROM purchase, then he/she is reliant on 'Pester Power', whereas the 'Parental Guilt/Support' driver is 'more about the product propositions which parent's prefer, such as value, quality and that 'fun through learning' factor again – which is slightly over-rated.'

The importance of good design and merchandising was noted by another interviewee:

> 'Books are often purchased by recommendation or by scanning in a shop. For multimedia, over 50% of purchase decisions are made within store and yet all the potential purchaser has to influence them is the box and box design. They cannot scan through the product.'

Another interviewee disagreed, stating that some retailers, such as Toys R Us, allow the consumer to sample CD-ROMs pre-purchase. Another felt that despite the current online gaming and web success, people were still buying CD-ROMs as 'they liked to feel they still had something to put on the shelf.'

### 4.3.3.4 Governmental/National Curriculum Influence

For all of the interviewees producing children's multimedia for the schools sector, the National Curriculum requirements, the National Grid for Learning initiatives, and schools purchasing were influencing the children's multimedia they produced.

Legend:
- CD-ROM evolvement
- Online gaming increase
- Digital developments
- CD-ROM = infant medium

n=5

**Fig. 4.35 Technology Development**

One company noted how the UK Labour government, in 1999, were 'committed to driving online education.' However, another interviewee was sceptical about the amount of investment and support the government was going to give to fulfil this commitment.

**4.3.3.5 New Technologies, Products and Platforms**

All book publishers interviewed in 1999 noted that their main multimedia focus at that time was on CD-ROM, but with a hybrid element in that they produced books, had web sites and were also developing content online. One interviewee felt:

'Making CD-ROMs is not any different from making books and television. It's like doing a bit of both. I think the characteristic of the medium is that it is evolving all the time, but then that's true of most media.'

Another interviewee commented that CD-ROM was an infant medium and was:

'nothing more than a stop-gap between conventional broadcast media and the realisation of on-line services, providing software, games, TV and films down a telephone line.'

However, another felt that the UK would not witness 'the fall of the CD-ROM' until 10 years time (2009). Another two companies noted that online gaming was becoming increasingly popular. Another two companies had also invested in digital development, however two others felt that it would be at least another two years until DVD establishes itself, and becomes mass market.

### 4.3.3.6 Online Considerations

#### 4.3.3.6.1 CD-ROM/Online Movement

Four of the interviewees felt that most book publishers' children's multimedia production at the time of interview were hybrid products, with one commenting:

> 'Use of the internet will continue to grow, but the money will be made from transactions. CD-ROM will evolve to DVD-ROM, DVD linear and consoles, and will increasingly contain a hybrid element with online updates.'

Another noted how many publishers had changed their names now to emphasise the online element of their products and the way they were moving as companies in the market. An example given was Dorling Kindersley, moving from DK Multimedia to DK Interactive (now taken over by Pearson). Two companies noted the similarities of online publishing to magazine publishing, with one stating that publishers would have to find new ways of keeping the online subscriber base (like magazines). Another interviewee discussed the different speed of pace in the CD-ROM and online markets: 'Online publishing is predicted on an evolving advertising market similar to magazine publishing. CD-ROM/offline publishing is more similar to book or audio publishing.'

#### 4.3.3.6.2 Online Development



Legend:
- Cultural change
- Quality improvements
- Advertising revenue
- funding
- additional online services
- premium online services

n=5

**Fig.4.36 Online Development Factors**

The majority of interviewees felt that the attitudes of parents, educators and the staff culture and attitudes in UK book publishing companies about using the internet had to change and the quality of the material

online had to be improved. Others noted the importance of creating revenue by providing additional and profitable online services, 'fresh marketing/promotion and advertising ideas' and direct sales to the user.

Interviewees felt that a number of threats existed for book publishers working online as shown in Figure 4.37.



Fig. 4.37 Online Threats

One of the major threats of going online for most of the book publishers interviewed was the issue of piracy. One company commented, 'We are sceptical about breaking existing agreements and territorial restrictions – they had been put in place for a purpose.' Others also noted that parents had concerns about the suitability of material online and the dangers of chat rooms. Two interviewees also felt bandwidth improvements were required and 'call charges needed to be non-existent for the internet to attain maximum users and be browsed to its full potential.' Three companies noted the importance of getting the financial model for the opportunities that existed online, 'The real issue is how does the publisher get paid for putting up so much on the web as it's all free. Publishing has been driven by retail and purchase.'

### 4.3.3.7 Competitor Influence

The book publishing companies interviewed noted their main competitors. For direct sales to schools, their main competitors included larger educational publishers and broadcasting companies such as Granada, Softkey, Research Machines, Nelson, Letts, and some smaller companies providing the child with an innovative range of educational products. In the home market, four of the interviewees noted the

BBC and Dorling Kindersley as their main competitors. Europress, TLC and Havas were also noted as being a threat in this area.

### 4.3.3.7.1 Book Publisher's Position

When the publishers were asked, how do you envisage book publishers faring in the children's multimedia sector by 2004, their comments varied as outlined in Figure 4.38.



Legend:
- Increasing mergers and acquisitions
- Book publishers have significant part to play
- market focus/niche
- book publishers' growing market share
- toy company threat
- book publishers' negative multimedia attitude
- software company threat
- toy mergers

n=5

Fig. 4.38 Book Publisher's Market Position

Three felt that book publishers would have a significant part to play, whilst another felt that they would fare 'substantially well' and noted that its share was small at the time of interview but predicted that it would 'grow and grow on a global scale'. Another noted that publishers were beginning to put more of their efforts and resources in to multimedia than they had done in the past. However, one interviewee felt that publishers may not have time to position themselves in a prominent market position as 'there are so many staff in publishing houses who think CD-ROMs are unimportant.'

It was also noted that toy companies such as Hasbro and Mattel took market share at a rapid rate, however another company did not view toy companies as a threat, noting that publishers and other companies had already acquired or merged with some of these toy companies in the market. Software companies were viewed as a threat by one interviewee, however another commented:

'I'm not sure if book publishers will ever be outnumbered by software publishers, as most software publishers are still not very good at getting quality content or knowing what to do with it when they do get it.'

#### 4.3.3.7.2 Mergers and Acquisitions

All companies interviewed felt the market (as highlighted in Figure 4.33) was consolidating with increasing mergers and acquisitions occurring with toy, software and character companies as suggested in Figure 4.39.

| Mergers | Acquisitions | Spin-offs |
|---|---|---|
| small company | *large company | originally small company |
| | | now = larger company |
| ↓ | ↓ | ↓ |
| merges with | acquires small | merges/acquires with |
| *large company | company | new small company |
| ↓ | ↓ | |
| spins off in form | small company spins | |
| of smaller company | off in form of larger | |
| | company | |

**Fig. 4.39 Mergers and Acquisitions**

One interviewee commented, 'It's healthy, but the big boys are getting bigger and they clog up everybody else at retail.' Another noted that there was beginning to be a constant flow of mergers and spin-offs, noting 'that's the equal and opposite effect of mergers.' Whilst another felt, 'It's a perpetual process. People get fed up of being in larger companies so they spin off and make smaller companies.'

Two companies also noted the advantages of being small companies in the children's multimedia market:

> 'In a market with larger companies, it actually gives smaller companies opportunities as the smaller companies can be more flexible and grow and manoeuvre more quickly than the larger companies that have more products to produce in the same area.'

One interviewee noted the importance of finding a focus/niche in the market and producing original, quality products if you are to survive as a publisher in the UK children's multimedia market today:

> 'When we came in, we knew we couldn't publish in certain areas as we wouldn't of been able to cope with the competition and the demand on our budget to promote, publicise and develop a recognised brand.'

#### 4.3.3.7.3 International Influence

All interviewees predicted that there would also be more mergers occurring with international companies. All also felt that their production was influenced by the USA as their market was ahead in terms of development and one interviewee's comparison of the USA and UK markets is outlined in Figure 4.40 (one noted that the US influence was not so strong in the schools market).

|  | UK Market | US Market |
|---|---|---|
| 1980 | dormant | buoyant |
| 1990 | developed | over-supplied |
|  | heavy investment | targeted UK market |
|  | collaboration with US | acquisitions + mergers |
|  | failed business plans | |
|  | + relationships | |
|  | small PC install base | large PC install base |
|  | call charges + | no call charges |
|  | bandwidth problems | minimal bandwidth problems |
|  | rethink | more defined, specialised |
|  | skills development | market sectors |
|  | + outsourcing | |
| 2000 | market consolidation | international relationships |
|  | US influence still there | |
|  | increase in international relationships | |

Example: DK + Microsoft partnership

      DK had – content / Microsoft had - skills/expertise, technology, assets

      Failed relationship as could only go as fast as UK market dictated

**Fig. 4.40 Chidren's Multimedia Publishers – UK/USA Market Comparison**

Three interviewees felt threatened by the US, with one noting that their marketing budget needed to be much larger to cope with the strength of marketing by US companies if it was to consider targeting the US market. Two others noted that book publishers needed to invest in mergers and acquisitions to cope with US competition:

> 'Our main problem with the US is Microsoft - and basically oversupply and price tumbling which is beginning to happen here, but consolidation – acquisitions and mergers should take at least some of the competition away.'

### 4.3.4 Company Procedures

### 4.3.4.1 Value Chain Position

When asked where the companies saw themselves in the value chain, the response was as outlined in Figure 4.41.

products for the pre-school, 5-8, 8-12 and teen age groups and one noted that the teen market was the most difficult area to produce multimedia for.



Legend:
- publishers
- primarily commissioners*
- licensors
- software developers
- manufacturers
- creative developers
- printers
- distributors
- retailers
- mix of functions

n=5

*also publishers, developers, manufacturers and distributors

**Fig. 4.41 Value Chain Position**

One interviewee commented, 'what we turn down as publishers on occasion, we'll licence if we don't think the properties are strong enough.' Two others noted that their role in the value chain had not changed from book to multimedia, with one noting the importance of the publisher/commissioner's role:

'We are still very much in the same position – primarily as the commissioner and publisher of a title. We bring material together, the right content with the right software, and deliver it to the right market. We sift and sieve to publish and produce quality products and filter out the material that is not worth publishing. That's what a publisher likes to feel he/she does.'

Content creativity and project management was stated as being the main function of two other interviewees, with one noting, 'What we do in-house is the creative control and the management of the process, so virtually all the physical functions are out of house.'

### 4.3.4.2 Products

All book publishers interviewed in 1999 noted that their main multimedia focus at that time was on CD-ROM, but with a hybrid element in that they produced books, had web sites and two were also developing content online. All interviewees, except one that stated it was 'moving away from this', described their multimedia for children as a multimedia package that included books and CD-ROMs which served a complimentary role to the book and subject area. All of the interviewees produced children's multimedia

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products for the pre-school, 5-8, 8-12 and teen age groups and two noted that the teen market was the most difficult area to produce multimedia for.



Legend:
- Branding
- Education
- Entertainment
- High quality
- Edutainment/cross-over
- Clarity, visuals
- Reputable writer/illustrator
- Reputable characters
- Interactivity
- International market focus
- Specific market focus
- Engagement
- Part of a series publication
- Logic element
- Breadth and depth
- Maximum use of software engine

n=5

**Fig. 4.42 CD-ROM/DVD Product Assets**

### 4.3.4.2.1 Product Assets

### 4.3.4.2.1.1 CD-ROM/DVD Product Assets

As shown in Figure 4.42, all of the interviewees felt that branding and a mix of educational content guided by NC requirements along with entertainment-based products to encourage the child's imagination were important assets in CD-ROM/DVD products for children:

> 'A good story combined with an excellent illustrator, with a familiar brand combined with a familiar style combined with our brand brings together a package that works.'

High standard or quality in multimedia products was also noted as being important, particularly for teachers and parents.

### 4.3.4.2.1.2 Online Assets

Three of the book publishers interviewed felt the main asset of their online content was its complimentary role. This building of online resources around existing books or other media resources was described by one interviewee as 'interconnected publishing' and complimented by offering down-loadable information such as activity sheets and resource packs to encourage teachers to subscribe to products/series and access related websites.Another noted that putting content online enabled teachers and children to access product and company information and to familiarise themselves with the products or features and characters online. Again, three interviewees noted that online content should be clearly structured and 'easily-navigatable', in coherent and relatively small-sized pieces. One interviewee noted, 'Knowing where the beginning, middle and end may come, and that they can come in different ways is very important.' Two others felt that publishers must ensure their websites are 'suitable' and 'comfortable' for parents and children to use. One company noted that publishers had to focus on the assets of magazine publishing rather than those of book products when producing online content. The interviewee commented on the similarities of online to magazine publishing:

> 'We often say the most interactive product outside of new media is a magazine. You read through an article, you get distracted in to an advertisement, you may use the index, you go to the page/features that you want – quite different to a book – a book is all linear – but they're quite different markets.'

### 4.3.4.3 Branding

### 4.3.4.3.1 Product branding

All interviewees noted that product brands or sub-brands within a company were 'extremely important' for new media, with one noting, 'volume is certainly driven on by brands in the children sector.' Three interviewees felt that the product brand was more important than the company brand. One company advised publishers to ensure brands are focused on the right types of markets, 'for example one company's brands may not appeal to a certain country in a particular year.' Two others had established brands and ensured good marketing and merchandising to carry the brand effectively to the consumer. One of the interviewee's comments are highlighted in Figure 4.43.

Parental purchase

↓

Education/added value elements

↓

Attractiveness of CD-ROM/DVD box

↓

Child's influence

↓

Personal choice - playground influence/character preference

**Fig.4.43 Brand merchandising Influence - CD-ROM Retail**

#### 4.3.4.3.1.1 Brand Creation and Acquisition

One company noted the difficulty of creating and developing a new brand and three noted the importance in acquiring brands/rights at an early stage and developing them cross-platform, 'Securing of key rights for all new media is the important trend. In new markets, brands are king.'

#### 4.3.4.3.1.2 Brand Development

Strength of brand, product proposition and critical mass were noted as being important throughout the development of a brand. One company commented:

> 'Publishers have a responsibility to their brand, to maintain reputation and qualities attached or associated to their brand. Quality is important to fight off competition and achieve success in a number of markets.'

Brand values, three interviewees noted, should be reinforced cross-platform and there should be consistency in the products on different platforms, for example, 'Tinky Winky shouldn't do something on CD-ROM or online that he wouldn't do on TV. Actions can not be altered in too much depth.' Another company also had a licensing policy to build and extend their brands into different channels, product categories and territories which they would not usually handle themselves. However, another warned that companies should not use old brands and try to make them work in the modern day, 'new media needs to have trendy brands.'

#### 4.3.4.3.2 Outsourcing Brands

Two of the interviewees outsourced their brands and ideas regularly, with one noting:

> 'We have a joint investment group where we outsource potential brands from our multimedia operation and then decide whether or not to invest in them with our parent company and broadcast company.'

#### 4.3.4.3.2 Company Branding

Interviewees also noted the importance of developing their company brand, particularly on an international scale. One interviewee would only choose to license his company's brands to those companies who would compliment his own company brand, ensuring the company would benefit from the relationship, for example, by entering into channels that can only be accessed by other companies. Two other interviewees noted that their international revenue built up as their international brand and reputation supported it. One company noted that Microsoft is a brand which carries with it certain perceived values which is why companies want to work with them, 'What it all comes back to is company brand equity and international brand equity.'

On an international scale, one interviewee noted that certain company brand values were promoted such as 'integrity, newsworthy, quality', while another emphasised the values associated with their company to

be, 'quality, education and Englishness' to their international buyers. Another noted that although these values should be maintained, adjustments may be required to cater for market likes, dislikes and requirements.

### 4.3.4.4 Pricing

Two interviewees noted the importance of matching price to the strength of product or brand produced by a company. One interviewee's comments are summarised in Table 4.6 below.

Table 4.6 Price/Brand/Purchase type

| Product | Price Bracket | Brand type | Purchase type |
|---|---|---|---|
| Teletubbies | £24.99 | very strong | non-impulse |
| Wallace & Gromit | £19.99 | strong | impulse |
| Comedy Fun Pack | £14.99 | medium | intense impulse |
| Inter-fact range | £9.99 | medium | impulse |

Where the brand or product is weaker the price value is heavily promoted to the potential consumer through strong in-store merchandising. Table 4.6 also shows the range of pricing of children's multimedia by book publishers in 1999. One interviewee also noted that it had a range of products priced at £25-£50 and some educational titles which were £50+. Another company which claimed to 'have a good understanding of where people are matched with the product and price they want', had designed a product ranged priced at under £10, 'to make a very easy purchase for the browser.'

The majority of respondents' products in 1999 tended to be around the £19.99 price point and one company predicted that this may come down slightly in the near future, but it was, at that time at the lowest limit of what companies could actually charge to compensate for the cost of production. One company which claimed to be 'competitive – not predatory' in their pricing, stated, 'Prices vary. We always try to adjust price for the proposition. We have an interest in driving prices down – not in building them up.'

Another interviewee noted that the pricing decision for children's multimedia products is usually a joint decision between editorial, sales and marketing staff and his comments on the company's decision process are summarised in Figure 4.44.

product proposal

↓

product valued

↓

price limit estimated

↓

production

↓

price challenged

↙ ↘

price    price

increase  decrease

**Fig. 4.44 Pricing Decision**

One interviewee noted that there was price sensitivity during sales when companies reduce their prices during promotion or sales. He noted that consumers were quite price-sensitive and were often scared to buy products as they see prices coming down:

> 'wondering if they are lacking in quality or questioning why there's not the demand for them – have they lost their appeal? Were they part of a craze that is no longer popular for children in UK?'

Three other interviewees noted how the time of year was critical for children's multimedia product sales. December and January were highlighted as the two key sales months for all new media and PCs as shown in Figure 4.45.

December   ⟶ new character products

⟶ new CD-ROMs, DVDs

January   ⟶ sales period

⟶ product sales

⟶ PC sales

⟶ knock-on effect on CD-ROM, DVD purchases

⟶ knock-on effect on internet use

**Fig. 4.45 Seasonality**

### 4.3.4.5 Marketing and Promotion

### 4.3.4.5.1 General promotion

### 4.3.4.5.1.1 Packaging

Three interviewees commented on the importance of good packaging and design, with one noting:

'Books are often purchased by recommendation or through scanning in shop. For multimedia (CD-ROM and DVD), over 50% of purchase decisions are made within the store, and yet all they often have to influence them is the box and box design. The potential buyer can't scan through the product in the shop.'

**4.3.4.5.1.2 Magazines**

Cross-promotion in magazines was also considered to be an important promotion and sales driver as it enabled children to access information about products.

**4.3.4.5.1.3 Awards**

Winning awards and prizes was also noted as being a promotional advantage for companies in the children's multimedia market. One company that had recently won The European Multimedia Award (EMA) and The Bologna Book Prize commented, 'We can promote the quality of our products as being of a high standard and back this up by promoting the fact that they are of an award-winning level.'

**4.3.4.5.2 Online Promotion**



Fig. 4.46 Online Promotional Features

All of the companies at the time of interview, were using the internet primarily for promotional purposes and to inform browsers about their companies, products or future products. One noted it was using the internet 'to promote other branded products, television programmes and related media' and also directed their televison viewers to their website by showing their web site address at the end of television programmes. Another interviewee however, warned 'it is hard to get the pay-back from TV advertising so don't invest in it.' Interviewees also recommended that companies using the internet for promotional purposes in the children's multimedia market, should use some of the promotional features outlined in Figure 4.46. One company had also started to produce content online and another noted, 'over the next 6-

9 months we'll begin to produce material which is delivered online.' Another interviewee noted that a company's online promotional assets and their emphasis were dependent on the overall purpose of a website and the variation of audience it had to cater for. The interviewee's own factors for online promotion and how they varied for differing target audiences are summarised in Table 4.7.

**Table 4.7 Online Promotional Assets for Differing Audiences**

| Child | Adult | School | Retailer | Wholesaler | Potential licensee or international partner |
|---|---|---|---|---|---|
| Current popular craze | Subliminal learning benefits | Educational community + teachers targeted | Strong or popular product assets + brands held by company | List of retailers/wholesalers in the market place that co have/have had relations with | Note that company's sales in the market are healthy |
| Game factors | Retention quality (child will want to play more than once) | Promote educational benefits of product | Effective + successful previous consumer relationships + healthy sales figures highlighted | Emphasise familiarity + popularity of company + products | Note that those sales could potentially happen in another market - note the characteristics of those sales |
| Excitement | Education benefit coming through unknown to child | Benefits in classroom situation – fit with traditional delivery of material i.e. NC, key stages | Clarity + boldness of promotional material + benefits of entering relationship | Note how they can make a profit from being involved | What would be involved in terms of production |

Overall, one company noted, publishers need to show features and provide information online about what their products actually do, with a clear statement of their benefits to potential consumers/users, show attractive visual aspects and ensure promotional material, testers or samples have short downloadable time.

### 4.3.4.6 Sales and Distribution

#### 4.3.4.6.1 General Methods

The majority of book publishers interviewed were using book, electrical, toy and high street stores and direct sales to schools as their main methods of selling an distributing multimedia to children as shown in Figure 4.47.



**Fig. 4.47 General Retail Methods**

Three companies noted that their retail channels and distribution methods were not the same for multimedia as those methods they used to sell books. One noted, 'the initial thought by many traditional publishers was that multimedia would be sold through book publishing outlets and this simply isn't the case.' One of the problems in retailing highlighted by three of the interviewees was that the retail market leader (Dixons Group), Electronic Boutique, Game and others did not sell traditional media (books, videos, magazines etc) and over 30% of the market for software for book publishers, at the time of interview, was retail:

> 'It's a problem as all our multimedia products are based on books and the whole package isn't wanted or required by certain retail outlets. This is a huge problem for book publishers who are delivering a more traditional package.'

### 4.3.4.6.2 Online Methods

In terms of selling online, three of the interviewees had developed a product information and credit payment system on the internet and one noted the advantages of doing so:

> 'We've always mailed a huge amount of direct mail in every subject area so instead our consumers can just visit our website for the information required and purchase there and then if desired. Alternatively they can join our mailing list and receive new product information via email.'

Another company that had not invested in online sales, directed people to Amazon.com to buy their products. They noted that their online catalogue was for promotional purposes only as they claimed 'the volume of their sales was likely to be too small for them to justify economically, the fulfilment of individual one-off orders.'

### 4.3.4.6.3 E-commerce

One company noted that 'the access model' had disappeared, as browsers were beginning to access information for free. Companies could also create profitable e-businesses through the development of effective advertising models, whereby they find their appropriate online reach and choose the relevant advertising channels to make revenue out of their association with that reach. This was noted to be 'growing steadily.' The interviewee's ideas are summarised in Table 4.8 below:

Table 4.8 E-commerce Models

|  | Access Model | Advertising Model |
|---|---|---|
| Past | pay for access to information | advertsing revenue = additional to profit made by product sales |
| Present | free access to information | solely dependent on advertising revenue to achieve profit online |

Another interviewee noted how the international focus of the internet offered widened up opportunities for book publishers:

> 'We are moving from a UK publishing mechanism with territorial restrictions which will disappear as we deal with other companies on an international scale through the worldwide mechanism of the internet.'

### 4.3.5 Staff Structure

### 4.3.5.1 Structural Change

All companies, except one, had set up on their own after being part of larger operations or their parent companies for the purpose of producing multimedia for children. Two companies noted that the two separate units (traditional and new media) come together for rights acquisitions and on joint promotions involving their book products, branding and use of logos. One of the interviewees noted that her

company, which had a structure dictated by academic level and then within that, subject area (ELT, academic and education), had a separate 'electronic publishing division' set up in the late 1980s as shown in Figure 4.47, but had since moved its 'children's electronic publishing operations' back in to the appropriate subject divisions in 1997/98 as shown in Figure 4.48:

'It was decided it was much better to publish for a subject area regardless of what platform a product was being produced on – that was the theory behind the reorganisation.'

Electronic Publishing department

Editors

Worked independently on the 3 different divisons of the company,

ELT, Education and Academic levels

marketing   sales   production   design   technical support   customer services

Fig. 4.48 Structural Change for Multimedia Operations – 1988

Managing Director

Management          Accounts

ELT          Education          Academic

E E E E          E E E E          E E E E

Primary   Secondary   Pre-school

History   Science   Art

Biology   Chemistry   Physics

Within each level i.e. pre-school, primary, secondary..

Sales   Marketing          Production          Design Personnel

On a general level, working across the whole company were the following divisions.. Legal

General Finance     IT/Technical Support     Customer Services

Warehousing     Distribution     Facilities     Health & Safety

E = subject editor

Fig. 4.49 Second Structural change for Multimedia operations – 1997/8

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### 4.3.5.2 Internal Critical Relationships



Fig 4.50 Internal Critical Relationships

Most of the internal relationships the interviewees noted as being critical in their production of children's multimedia involved relations with the creative department as illustrated in Figure 4.50. Two interviewees felt that the most important relationship to get right was that of the electronic publishing editor and the software developer, alongside the relationship between the electronic publishing editor and the book editor:

'This is important to ensure requirements about subject detail and the content requirements for a specific age group are adhered to, but also that the software is capable of achieving these requirements and the price is acceptable. This is certainly the most problematic and difficult relationship.'

Another noted that friction often occurred between sales/marketing and development as there was 'a weighty requirement to satisfy the demands of the market (where timing and reaching deadlines is critical) and allowing the creatives to see through their ideas in a realistic timescale.' The same company noted that sub-meetings, brand meetings and day-to-day meetings ensure problematic relationships are resolved and deadlines are met.

Bringing the programmer in to the creative team was noted by another interviewee as being critical to effective internal relations. 'We've had problems and mis-communication in the past as a result of not

doing this.' One interviewee stated the obvious in that 'everyone has a role to play, from the creative, marketing, sales, accounts to manufacturing departments.'

### 4.3.5.3 . External Collaboration

joint production

international rights sales

US partnerships

government-funded projects

media/production companies

creative suppliers

other publishers

hardware producers

n=5

**Fig. 4.51 External Collaboration**

As shown in Figure 4.51, all of the interviewees collaborated with companies outside their organisations. The majority of interviewees collaborated externally for joint production, with one noting, 'If you outsource, you can buy in innovation, new techniques, skills and flexibility - similar to a television broadcaster's use of a production company.'

Interviewees collaborated with companies such as creative suppliers, hardware producers, other publishers, media production companies and US companies for 'riskier', 'more technical' or 'creative' projects. Two others worked on government-funded projects, tied in with promoting new media in education.

### 4.3.6 Staff Skills

#### 4.3.6.1 Multimedia Start-up Skills

Most of the book publishers interviewed had to recruit new staff with the skills required for new media when their companies decided to start up multimedia production for children. One commented: 'We had to buy in to quality skills from day one so no one could take us for a ride and we took longer because we did that.' Two interviewees had used staff from existing magazines and technical development departments to set up multimedia operations, but development managers were also recruited externally as there was 'various skills gaps internally.' Their marketing department was not fully developed until much later as their only early marketing activity was market analysis and they did not feel that this 'justified setting up a department.' Another interviewee noted his company's commitment to developing skills for multimedia:

> 'We're in it for the marathon, not for the sprint. We've got a vested interest in developing skills in new media ready for a world where interactive media is at the forefront.'

Throughout the process of adaptation, one interviewee noted that their staff had been going through some 'fairly dramatic learning curves, learning and absorbing information about new media.' Another noted that some of its staff job descriptions had been reassessed and restructured 'to cope with the new departments and individual skills required for new media.'

#### 4.3.6.2 Skills Transfer

'The hardest thing, initially', for one book publisher interviewed was that some of his traditional staff thought the transfer to multimedia production would be straight- forward and he had to persuade his staff that they did not have the skills set, 'They wanted to learn but we didn't have the time to teach them so we had to bring in people to do the job.' Another interviewee noted:

> 'the actual transfer of skills or the flow of skills from traditional to interactive publishing has been very little - that wasn't a policy decision, our staff were just happier sticking to what they knew.'

It was also noted that there was a 'fear factor that traditional staff were going to be wiped out by new media but that didn't happen.' Another interviewee felt that it was much different with online publishing as there had been a 'perpetual transfer of skills between broadcasting, production and online web design and that's going on all the time – so that flow is far more healthier.' Two companies noted the importance of keeping skills for new media in-house.

#### 4.3.6.3 Book Publishing Skills Suited to Multimedia

One interviewee noted, 'Publishers have the inroads to the talent, so they know where brands work well and why and that all helps.' Skills held by children's book publishing staff noted as being particularly beneficial (or suitable) for the production of multimedia included

- commissioning/editorial
- rights and talent acquisition
- brand management
- marketing
- creativity

### 4.3.6.4 Key Skills

Editorial/content, creative/technical and marketing/branding skills were highlighted as being key skills for the production of children's multimedia.

### 4.3.6.4.1 Editorial/Content

Within the editorial/content department, having acquisition skills and the ability to recognise good ideas were noted as being important by all interviewees. Educational expertise and having editors with educational backgrounds who communicate well with teachers, schools, LEA advisors and their demands was also noted as being key. Two interviewees also felt the importance of subject knowledge and ensuring relationships with focus groups of parents and children were developed and nurtured should be highlighted. One company also noted script writing as a key skill.

### 4.3.6.4.2 Creative/Programming

Innovative ideas within the technology, time and financial limitations given was noted as being important. 'Anyone can take the most recent technology and do wonderful things with it, but if the install base isn't there, plans are useless.' Three interviewees noted that some technical skills had to be introduced to the publishing process for multimedia production. Two companies multimedia operations were set up by staff with software expertise – not necessarily publishing expertise. The importance of broadcast, digital, animation, interactive and web page design skills were also highlighted by the publishers interviewed, with one noting the importance of digital animation techniques – extends cross-platform to CD, DVD, TV and online products. One interviewee noted 'we've tended to work alongside the production companies who we collaborate with on our television programmes and have made the most of the digital skills they have for our new media.' Within a few months, another company aimed to have more internal creative direction rather than using 'a constant stream' of individual freelancers. Technical support and innovative illustration and design skills were also in demand.

Programming skills were noted as being particularly important for new media production and again had to be brought in to the publishing process. Market-aware programmers were sought after by some of the interviewees: 'They need to have a notion of key selling times, market trends, and the speed to develop the product.'

Three of the interviewees also felt that programmers with a publishing and creative sense were useful for multimedia. One company noted, 'I think programmers with an awareness of publishing requirements are rare. You get a lot of geeky people who program away but don't actually have any editorial sense.' Another noted that there were also very view designers and editors who knew how to program, 'The rarest animal is probably finding someone who has got a good creative sense as well as an ability to program.' He was optimistic as to the skills development in future, 'Those two sets of skills haven't started to merge well yet but as the industry matures, then there will be people who cross those barriers.' Another interviewee disagreed: '

> 'You may not need people to be completely bi-polar, but we do need people who've got a
> thorough awareness of the other part of the process and that's still quite early in its development.'

### 4.3.6.4.3 Marketing/Branding

Within marketing and branding, it was noted by two interviewees that publishers needed to improve their awareness of the market and 'focus more on brand development and the skills that go with that.' They also had to introduce new marketing and promotional channels, and one felt, 'at certain times of the year it is the marketing team who are the most important information source, particularly when a product is about to be targeted to the market.'

### 4.3.6.5 Staff Increases



Fig. 4.52 Staff Increases

As shown in Figure 4.52, all companies noted staff increases in research and development teams (testing and production). Three interviewees also noted that there had been an overall staff increase, but

numbers in design and marketing had increased substantially due to new products being produced to wider, international markets.

## 4.3.7 Strategies for Future Development

The book publishers interviewed gave an indication of the strategies they had formed to promote and develop future multimedia products for children.

### 4.3.7.1 Training and Recruitment

Interviewees used a mix of in-house and external training. Internal training was used for staff and their needs to keep up to pace with technology as it updated regularly. One company noted that this was done on an ad-hoc basis whereas two others noted that they had a 'major commitment to training for new media' and another noted that its individual staff put themselves on different courses to keep themselves up to speed with new media. That company was part of a larger organisation which had centrally-funded training programmes (their 2000 programme was called 'New Media – My Guide)' which helped their staff get the most out of new media, 'no matter what level of experience they have or where they work.' Part of this programme included an initiative called 'Future-cast' which was an event specifically tailored to children's staff and showcased the latest developments in new media technology directly relevant to the children's division, with presentations from people working on cutting edge projects and hands-on demonstrations of new technology i.e. interactive TV, online toys and stories, game-cams, WAP technology. The event aimed to bring people together to share knowledge and to generate new ideas and inspire creativity using new media. One company noted that it used external training companies to carry out training specifically for specialist areas such as web page and interactive design or video digitisation if the products were large scale.

### 4.3.7.2 Market Awareness

Various market research techniques were used by those interviewed to gain an awareness of the overall children's multimedia and are outlined in Figure 4.53.

Legend:
- Brand investment + development
- Focus groups
- US trends
- Competition
- Questionnaires / surveys
- Internationalisation
- Market relations
- Internet information
- Parallel development
- Experience
- Conferences
- Re-useable resources

n=5

**Fig. 4.53 General Market Research Techniques**

The most popular techniques used included branding investment and development. One interviewee noted that it was important to invest in brands that could be 'rolled out over the next two years', for example he noted the success of Teletubbies but, at the time of interview, his company was also investing in the Tweenies and Bob the Builder. Interviewees also noted that communicating well with licensees, manufacturing, distributors and retailers was also important:

'For future products, it's good to talk to receive their experience of the market, feedback about different price points, areas of security, marketing ideas and standard box designs for different areas. This is a two-way process.'

Four of the interviewees were expanding in to into international markets with their best selling products, but one noted that their main target area would still be the UK. Three others felt it was important to develop and maintain a relationship with your market to combat over-production, one noted, 'the relationship you need to get right is between price, content and distribution – ensuring the customer is happy.' Attending industry conferences to listen to ideas and market trends in different subject areas was considered a useful way of obtaining this knowledge. Three interviewees noted that there were numerous different things they were able to achieve through parallel development and one noted, 'Anything that is new media is of interest to our organisation.' Focus groups were also used by all interviewees to aid the development of future children's multimedia products. One interviewee noted:

'Basically we look at where we have competitive advantage and what we can do with it, work out concepts, product propositions and then test them on focus groups to find out if they would buy in to them.'

Another interviewee's comments which described his company's use of focus groups are summarised in Figure 4.54.

Company/Product

Schools          home

testing

questions

likes        dislikes        requirements

discussion

improvements        changes

**Fig. 4.54 Use of Focus Groups**

One interviewee also noted the importance of re-using resources:

> 'The biggest mistake we made was jumping in to a market before one had been established and certainly the level of investment that we made would never be considered again. We also did too much too soon.'

He described an important strategy for his company's future development, 'We are now following a model where we use the same software and don't have to re-engineer everything over and over again.'

**4.3.7.2  Consumer/Home Awareness**



Fig. 4.55 Home/Consumer Research

Certain market research techniques were used by interviewees to gain an awareness of consumers in the home market in particular, as shown in Figure 4.55. Communication with retailers and distributors were again noted as being effective in gathering information about requirements, ideas and plans for development and/or improvements. Reply paid cards attached to CD or DVD products were valuable in that the consumer often returned comments or suggestions on them to the companies. One noted:

'We have a database of people who have returned free cards and inform them of new products and put their comments in to practice. We have a very loyal trust and that's appreciated.'

Focus groups for home consumers, either parents and/or children were set up by all interviewees (organised by specific companies or professional research companies hired to organise such groups). One interviewee's method of organising a home consumer focus group is outlined in Figure 4.56.

Target audience is defined

↓

Specific target audience = group of parents + children in 3-6 years age group with a PC at home + have bought more than 5 CD-ROMs in past 5 years

↓

Employed fieldworkers form the group

↓

Meeting organised

Attraction for testers = paid £25 per night

↓

Testing

↓

Questions re likes/dislikes/requirements i.e.

What they want?

What CDs/sites they like?

Why they use/buy them?

What they need?

What company brand means to them?

Have they bought from that company before?

Have they focused on a particular product brand before?

Thoughts on product brand?

**Fig. 4.56 Home Consumers Testing**

### 4.3.7.3 Schools Market Awareness



**Fig. 4.57 School Market Research**

Various market research techniques were also used to gain an awareness of the schools' market and its requirements (Figure 4.57). Most interviewees used educationalist advisors for specialist advice, and communicated with government bodies to receive feedback about National Curriculum objectives and other initiatives. Three interviewees attended teachers' conferences, 'to listen to what teachers are complaining about and to pick up on their needs and ideas in various subject areas and for education market trends', and one noted its involvement in a parent/teachers support programme supported by the Family Numeracy Framework where schools had to encourage families to try out the software used in schools at home over a period of time. The company noted, 'This was a great way for teachers to educate parents on what their children were using at school and it also encouraged children to learn at home.' The company also felt it was a good position for producers to be in and such initiatives should be further encouraged by companies in the market. All interviewees also used focus groups to attain market information and one noted that they were not only used pre-production. Another noted:

> 'We need to focus on schools and IT in schools and where it's going in schools in a few years time, what resources schools will require, how our company can tie in with that, and which products or series we can add to or develop to help us maintain or increase our market share.'

Figure 4.58 summarises one interviewee's comments about testing to monitor multimedia usage in a classroom situation.

Target group = 5-8 year pupils

↓

How the classroom works?

↓

How does multimedia fit in to the current teaching method?

↓

How the teacher interacts with software/internet?

↓

How do 5-8 year olds use software/internet?

↓

Gain knowledge about how children + educator use/do not use products?

**Fig. 4.58 Schools Classroom Testing**

## 4.4 Interviews with Children's New Media Companies: 2000

### 4.4.1 Characteristics of Respondents

Interviews were conducted with directors and senior managers from seven new media companies producing children's multimedia. These companies had been identified as being 'successful' from the 1999 questionnaire survey response, were set up in the early 1990s with the specific purpose of producing multimedia for children, and were based mainly in London, with one in Cardiff and another in Wiltshire. Three of the companies interviewed were formed to produce CD-ROM and web media as part of larger broadcasting and production operations. A toy and games company that had decided to move on to new platforms for 'family entertainment purposes' and invested in some educational brand acquisitions was also interviewed. Two others included CD-ROM and web production companies - one of which had also acquired some educational brands and merged with a toy company to achieve success in both the home and schools sectors of the children's multimedia market.

### 4.4.2 Company Culture

A number of questions were asked which gave an indication of how these new media companies have achieved a company culture suited to producing and developing multimedia for children. The new media companies, unlike the book publishing companies interviewed one year previously, did not have to invest so much effort in to adapting or changing the cultural management of the company. All companies interviewed had been set up with the specific purpose of producing multimedia for children, primarily CD-ROM, digital and web content and website development. Three aimed to become market leader from the start up of their children's multimedia operations - with one noting that it had taken on board the mistakes that book publishers had made in the late 1980s. The same company, along with two others that had broadcasting operations noted their move in to multimedia for children had been a

natural extension to their company activity, 'making the most of existing assets' and 'a growth in the children's TV wing.' Three others described their new media production as a creative and profitable opportunity, and one noted that it had found a gap in the existing multimedia market for children – namely, in word-building applications.

Three companies described themselves as being young, creative companies with one noting that it had a 'young, fun feel to it'. In these companies, it was observed that all staff working on children's multimedia were in their 20-30s. One of these companies (which also produced toys) also emphasised how important it was to promote their company brand for children's multimedia as being:

> 'young, creative, innovative and an extension to the fun association of their toy brand reputation. We can carry that heritage in to our new media products and that provides parents with guidelines as to the quality and enjoyment to expect from our company's products. It's important for our company name to stand out on the boxes on the shelf.'

The market leader branded its company by its 'quality, trust and support, educationalist's approval, commitment to government initiative and large, wide-ranging catalogue.' Two others also noted the importance of quality and education in their children's multimedia products. The interviewees' main multimedia focus in April and May 2000 was still very much on CD-ROM production with online components, with all companies targeting the pre-school, 5-8, 8-12 and teen markets with the exception of one who produced for the primary school market alone.

They produced this mix of media products to both the 'home' and 'schools' markets on an increasingly international scale. Five of the companies interviewed produced children's multimedia for both the home and schools market, with two noting that they did not differentiate between the two markets and considered both home and schools to be 'learning' markets. Only one produced for the home market, and another for the schools market alone – in particular the primary school market, where it noted, 'we have 20, 000 customers which is enough to justify development for us in one market alone.' Two also produced multimedia for children with special needs and the majority also catered for the international market (5).

### 4.4.3 Market Environment

Similar to the publishing companies' interviewees, new media companies' interviewees' definitions of sectors within the children's multimedia market varied using terms such as 'consumer' including, 'entertainment', 'retail': 'games', 'home', and 'children's' markets, and 'non-consumer' including 'education', 'schools', and 'education' markets. However, again, for the purposes of this research the market is divided into two sectors only – 'schools' and 'home' (not games).

### 4.4.3.1 External Factors

Certain external factors and their changes and development were noted by the interviewees to be influencing children's multimedia production in the schools and home markets. Those factors

mentioned by the interviewees were the same as the factors mentioned by publishing company interviewees in 1999 (see Figure 4.33, section 4.3.3.1).

### 4.4.3.2 Market Development

Three interviewees commented that a new market emerged for children's multimedia in the 1990s (noting it had initially existed for the 'middle class' only), with a decrease in hardware costs resulting in an increase in PC home ownership and internet use. This increase in PC home ownership was noted by two other companies, to have had affected the younger members of the family (2-3year olds) as interfaces became more accessible, user-friendly and affordable. One commented:

> 'Before parents were scared to put their 2 or 3 year olds on a computer. We're shifting away from that now. The number of parents who've told me their 2 year old is a genius on the computer.'

It was also noted that most schools have PCs in every classroom and 60% of schools have internet access, although it was thought the number of schools actively using content online was debatable. Two interviewees also noted that nurseries were getting PCs at the time of the interview.

A 'new generation' that was more sophisticated and confident with new media was also thought to be emerging by several of the interviewees. One company also noted how this would affect the market in the future:

> 'Children are more computer literate and technology-driven at the moment than their parents who are scared of consoles and PCs. However, we're not very far off these attitudes disappearing for good because everybody is getting computer literate.'

As shown in Section 4.333, Figure 4.34 the UPP Triangle, there are two to three users and purchasers in the children's multimedia market. When the child is at a young age, the purchaser is either the parent or the educator and the child is obviously the user. As the child gets older he/she also becomes a purchaser. These three types of purchaser/user; the parent, teacher/educator and child, each had a varying influence on the purchase of a children's multimedia product, as the child's age increased as shown in Table 4.7.

**Table 4.9 Factors Affecting User/Purchaser**

| MARKET INFLUENCE | AGE GROUP | PRODUCT | PURCHASER/USER INFLUENCE PRIMARY | SECONDARY |
|---|---|---|---|---|
| Home | Pre-school | Puzzles, games, shape/colour recognition, stories/songs, sequences | Parent | PIN, parent groups |
| | | | | Parent press |
| | | | | Educational press |
| | | | Parent/ | NC/Govt |
| Nurseries | | | Educator | |
| Primary Schools | 5-8 | Stories, games, quizzes, tests, relation games, tests, key stages, games, edutainment, websites | Parent/ Educator | NC/Govt |
| | 8-12 | | Child | Word of Mouth |
| Secondary Schools | 12+ | Games, entertainment, websites, educational, GCSE/revision tests | Older Child/ Educator | NC/Govt |

All companies interviewed were in agreement that the key factor that distinguishes any product for a young child (pre-school) from a product that is aimed at an adult is that your audience is not the person who pays for it:

> 'that is critical in that you have to please two to three people, in terms of packaging, promotion, branding, because that's your chance to communicate with the person who's going to make the purchase.'

Three others noted the importance of effective character merchandising and branding to accommodate all variants, whereas another noted the importance of 'exciting' the parents, 'hit them with accessible information that says the product has value, education, entertainment and excitement rather than just pure game play.' All interviewees noted that the content always has to have an educational spin on it to get parents supporting the product. It is important if the companies require to get someone to pay for the product. At a young age, one noted:

> 'Children at that age only buy toys and sweets. You have pester power and that's saved by children for toys. They've obviously got a stock of what they can bargain for and they're going to save it for what they like - not something that's basically wordy.'

### 4.4.3.3 Governmental/National Curriculum Influence

For all of the interviewees producing children's multimedia for the schools sector, the National Curriculum was a large influence on their product design. One company noted how the UK Labour government, under The National Grid for Learning, had said all UK schools would have internet access in the year 2002. Another noted that online delivery for schools 'was going to be a must', but although

the government were quoting that around 60% of schools had internet access, it suspected that 'not many' of those schools were actually actively using the content online in the classroom due to teachers' attitudes, school purchasing capabilities and LEAs decisions. One company also observed that although, BECTA had invested in to UK schools' IT since 1987, 'Nobody's been able to turn round to any government – no matter which political persuasion – and say, it's made a difference.' It also expressed the government's concern that there had been virtually no evidence that technology was supporting learning on any scale at all and felt that attitudes had to change:

> 'Some teachers in local primary schools are still clueless as to how to log on to the internet. That's got to change because we are at the stage now where for the first time, a child needs to come out of school with specific IT skills. So as the producers, we have to provide the tools to allow them to acquire these skills, and the government supports that.'

### 4.4.3.4 New Technologies, Products and Platforms

The interviewees had been experimenting with new technology and developing new products and platforms for the changing market as shown in Figure 4.59.



**Fig.4.59 New Technology Issues**

One commented that new media companies were still being surprised at the speed at which the quality and quantity of materials were changing and being delivered to the home and another noted that speed of delivery and bandwidth was not going to be an issue in the future due to the capabilities of the new ISDN and ADL technology. In reference to children's multimedia in particular, another interviewee had observed, 'the more powerful computers get, the easier it is to do software which is not text-driven, more interactive, just what young kids need.'

All interviewees were experimenting with, expanding and developing their product and platform range, with the use of WAP technology, 'as more and more children are buying in to mobile technology', internet technology and gaming platforms such as Playstation 2, Dreamcast, and other consoles. Online gaming, digital and interactive TV, 'the full entertainment system', once improvements in broadband delivery have been made, was considered to be the next step for most of the interviewees. The commercial viability of these experiments however, companies noted was going to depend on the introduction of broadband services. One estimated:

> 'We are probably three years away from that in the UK market for that. It's where you place optical fibres and can find broadband. But it's a real market already in Singapore and Holland, where about 80% is covered by cable now.'

New creative complimentary products, such as play-sets and electronic microscopes, to enhance the multimedia experience were also being used by two interviewees.

### 4.4.3.5 Online Considerations

#### 4.4.3.5.1 CD-ROM/Online Movement

All new media companies interviewed were producing CD-ROM and developing online content at the time of interview. One company noted the importance of estimating when a company should start shifting the concentration from CD-ROM to online production:

> 'It's making sure your CD-ROM production, which is going down, and your online production, which is going up, cross at the right time. If they cross when demand for online is too low then you're in trouble. If they cross at the point when your online demand is sufficient, when the public stop buying CD-ROM then you'll be okay. My gut feeling is that in 5 years time, CD-ROMs will be a rarity.'

Figure 4.60 helps illustrate his comments



**Fig. 4.60 CD-ROM/Online Movement**

Another interviewee raised a concern about online development:

> 'Although lots of schools are online and the government are quoting that around 60% of schools have internet access. I suspect that none of those schools are actually actively using the content

online in the classroom. Therefore today in April 2000, I don't think there's a big market for online content to be sold.'

However the majority noted that this would change and there existed various initiatives to encourage this change, but the important point would be gauging when people were going to stop buying CD-ROMs.

### 4.4.3.5.2 Online Development Factors



**Fig. 4.61 Online Development Factors**

All interviewees claimed to be witnessing a growth in the online sector. One noted:

'People will still expect high quality content, because it's actually easier to make it now. There's a lot of expertise around in creating interactive websites, but, I think, if you're going to make your money, you've got to make your money out of excellence.'

Most of the interviewees also stressed the importance of having additional online services on subscription to combat competition, providing the user with added value, premium services online. These services would include for example, online tutors and free homework clubs with something extra. Along with the additional services the interviewees were providing, they were also ensuring quality and great levels of support were being provided for the user, because as one company noted, 'other companies will also be producing these high-value, premium services.' All interviewees commented that it was important to ensure these online services were going to be profitable as they would be expensive to deliver. Two of the interviewees had developed pocket money schemes, whereby children users had the ability to spend pocket money on their site, or for games and

competitions. Another was developing a site whereby children, parents and teachers could do their banking on the site and use their money to buy related branded products from the companies' web sites.

With regards to online development, five of the interviewees noted that online delivery for schools was going to be a must. Three companies noted that the whole of multimedia was moving against the idea of charging, 'Multimedia - particularly the internet is becoming free-er. We'll be paying the user to go online soon.' Another noted that the aesthetics were also changing:

'We're moving from stuff you buy to stuff you don't buy. We're moving from something you hold to something you don't hold. To me anyone who brings out anything you need to pay for after 2000, can just forget about it!'

All interviewees were concerned about ways of making their online activity profitable and added value, increased and focused advertising and sponsorship deals for specific age groups or subject sites were noted as being the way forward for the majority of interviewees. One company talked about how their website was a great opportunity for sponsorship. The company had attracted a major sponsor, a UK bank who had noted that the website targeted the 11-16 age group and saw this as a way of attracting children as they were growing up and when they were post-16 perhaps they would open up their first account with the bank online, and the company noted that statistics show most people never change their banks.

The interviewee concluded:

'Companies are genuinely going to have to look for sponsors. That's the model isn't it? It's sponsorship, added value, because people will not pay to come on your website.'

Advertising and promotional deals with other related companies such as toy, bike and skateboard manufacturers and retailers had been set up by three of the interviewees.

One interviewee noted the importance of doing this:

'as they (other companies) will have products that we want like toys and we've got something they want, such as access to this huge audience but also in a media that is the most exciting way of communicating.'

Three companies had also noted that there had been an increasing move towards home/distance learning. One company had recently acquired a brand that allowed them to access the online distance learning market and in a couple of years, hoped to go much further in to this field, to develop online distance learning for a range of learning and training purposes. Three companies also noted the importance of internationalisation, with one stating, 'internationalisation is key.' Two suggested not to invest in the local market alone as this in itself could cause problems, but to invest heavily in localisation of products in order to achieve a substantial return. One company was developing in 5-6 other countries and languages and had local agents in each place to localise their UK products. They had started expanding in to Hebrew and Polish because the markets there were beginning to get to an interesting size where given the company's base software engine, the cost of localisation in to Hebrew or Polish could be cost-justified. Another interviewee had sales in Singapore, Australia, New Zealand and South Africa where there was no need to localise its English language products.

### 4.4.3.5.3 Online Threats

Companies noted the issues outlined in Table 4.10 as being the major threats to their development in the UK children's multimedia market.

**Table 4.10 Online threats**

| Online Threats | Number of Companies |
|---|---|
| Costs v profit | 2 |
| Pricing v quality | 1 |
| Lack of government funding | 1 |
| Free online delivery | 1 |
| Acquisition of popular brands/licenses | 1 |
| Bandwidth | 1 |
| Call charges | 1 |
| Piracy | 1 |
| Unsuitable material | 1 |

Coping with the costs of development and trying to achieve a decent return on investment was noted by two of the interviewees as being a constant threat in a market as changeable as multimedia:

'The money is in hardcore gaming - not in children's. With gaming you are getting 100, 000 units a year, whereas with children's products, you could be talking about 10 - 25,000 units. That's a huge difference.'

Another commented that pricing of products is very much driven by the trade, the market and its conditions and that quality has to be as good or better than the competition's. One noted, 'Companies are cutting each other's throats in terms of pricing and development.' Another interviewee's worry was that because the internet gives people such a choice, the user/browser may sacrifice quality for something they do not have to pay for, and another noted its concern regarding free internet access for schools that have tight budgets:

'The whole crux of the internet is free delivery and online delivery for schools is going to be a must, but potentially dangerous in terms of how financial model will work.'

The same interviewee also noted that lack of money in schools is 'perennial' and an area that the government should be giving an increasing share of its attention:

'Brands and licences, particularly in the children market, are very strong', another company noted, '...if you've got the top one then you're going to well. If you don't, there's no way to compete when say something as strong as Pokemon takes over the market.'

Bandwidth problems prevented one interviewee from delivering their full application online in 2000 as they felt with narrow bands it would be take about two hours to download their content. BT call charges were the main fear for the companies interviewed, however one company noted at the time of interview that they did not have that worry any more. 'The move now is for free internet access. I can't believe that

in 6 months time any body will be paying for internet access.' One company thought that there was still a lot of suspicion about the information children could access on the internet:

> 'Parents and teachers are concerned about the vast amount of unsuitable material but it is not going to go away so we have to learn to live with it and make the most of the positive potential of the internet.'

Another noted its concern about piracy issues online.

### 4.4.3.6 Competitor Influence

### 4.4.3.6.1 Company Types

The interviewees referred to the following company types being present in the UK market at the time of interview:

- New media
- Book publishing
- Broadcast
- Games
- Hardware
- Digital
- Telecommunications
- Online
- Music
- Toy
- Confectionary

### 4.4.3.6.2 Company Activity

All companies as expected, said that new media companies would have a significant part to play in the future children's multimedia market in the UK, and would not be outnumbered by other companies. One interviewee's analysis of the market, showed that there were ten key players, and new media companies were going to see some good growth over the next three years and an increase in market share.

Legend:
- significant part to play
- international mergers
- acquisition of small creatives
- development of small creatives
- market consolidation
- cross-platform
- toy development
- software +production mergers
- benefits of larger operations

Pie chart values: 3, 3, 7, 7, 4, 4, 6, 6, n=7

**Fig. 4.62 New Media Companies' Activity**

The interviewees were also interested in the progression of toy companies that had entered the market over the past two years. One company felt that there 'probably would be' more mergers with toy companies with pressures and opportunities for creative companies to go online but toy companies do not have any content apart from images. Another commented that toy companies are coming up with some very innovative products in the market but it did not consider them to be a major threat. Four of those interviewed felt that because the market was so fast changing, new media companies must consider strategy on every platform and every product that is released and decide what works best for that company. One emphasised how these companies also needed to grow and create a presence in other markets as, and noted 'development is actually a mechanism for support.' Another also commented:

'It will be interesting to see what other players will come in to the mix, be it music companies, who are turning to other media. I think a lot will happen in the next few years because there is so much new technology.'

Others hoped to grow through acquisition in other areas such as confectionery and theme parks.

### 4.4.3.6.3 Market Consolidation

Mergers and acquisitions and pooling content in huge organisations had occurred over previous years and it was thought by one interviewee that it was 'definitely going to continue.' A view shared by most interviewees was that the pattern of small creative teams breaking off from larger companies and forming their own smaller companies was very common and this cycle appeared to be recurrent. One company also noted that larger traditional publishing companies had made had 'made serious mistakes' earlier on, were not willing to invest online, and that smaller creatives were spending money, taking risks and progressing. However, three others noted the benefits of being part of a larger broadcasting or communications operation:

'We are unique in that we are owned by a large corporate (UNM). We don't need to merge with anybody. We will grow year on year and gradually move in to other 'learning' markets.'

They noted how they could diversify, experiment, take risks and ultimately cultivate innovation and stimulate creativity in more than one market was also discussed:

> 'With interactive TV, we will go from strength to strength as we're part of a media group (which is a broadcasting company, which also owns 50% of a digital network, which is the only competitor to SKY Digital in this country). We've got the experience, expertise, assets and technology in delivering digital channels, and with the right partnerships lower down the line with book publishers for content, we'll be a major force in the next few years.'

Two of the interviewees felt that more mergers and acquisitions would occur with book publishers, however one noted that publishers would always be third party. Three companies also felt that more mergers would occur with software and production companies, and ISP content providers. One company predicted that the industry may witness similar scenarios like the AOL & Warner merger, but perhaps on a smaller scale.

### 4.4.3.6.4 Main Competitors

The main competitors or successful companies in the UK children's multimedia market in the year 2000 mentioned by the interviewees included:

- Microsoft, Granada and Anglia in secondary schools
- Longman Logotron (Pearson) and Sherston in primary schools
- Espresso and Research Machines were becoming stronger in the schools sector
- BBC in both sectors
- DK in the home sector
- The Learning Company, Disney, Lego and Mattel were becoming stronger in the home sector

### 4.4.3.6.5 International Activity

There also appeared to be an international influence within the UK children's multimedia market with six of the interviewees noting that more mergers would occur with international companies. Two of the interviewees defined as successful new media companies were actually US owned and one interviewee noted that the USA was ahead of the UK in terms of web development. Other European companies such as Ovendi and Uvisoft were noted as having a strong presence in the UK market at the time of interviewing. One interviewee stated, 'you have to be a worldwide publisher these days. I'd be hard pushed to put together a business plan which would show a return on investment if I focused on the UK market alone.' As shown in Figure 4.58, one interviewee's analysis carried out in 2000 compared the USA situation to the UK children's multimedia market at the time of interview, and noted 'as a rule of thumb the UK lag behind the US by about 3 years.'

| US | UK |
|---|---|
| full maturity | market = half size of US |
| 50% PC penetration in to households | 22% PC penetration in to households |
| | |
| 50% = games | 70% = games |
| 50% = non-games | 30% = non-games |
| | 2 areas of highest growth = |
| | education + children's software |

Fig. 4.63 UK/USA Market Comparison

The same company then estimated that in the UK, PC household penetration would increase by approximately 35% until there is about 50% growth, and the product/genre mix would probably increase to 50% games and 50% non-games.

### 4.4.4  Company Activity

For all of the companies visited it was possible to derive a basic picture of the companies' procedures for successful children's multimedia production. Their services, products and product assets were discussed in interview.

### 4.4.4.1  Services

### 4.4.4.1.1  Multimedia Production and Development

The interviewees provided a mix of services involved in multimedia publishing. All seven companies provided content, software and web development – with one localising its company's US parent company products, and another noting that it occasionally used external programmers.

### 4.4.4.1.2  LEA Intranets

Two of the companies interviewed also worked closely with LEA intranets, selling interactive activities from their CD-ROMS at competitive prices to certain areas of the intranets without any distribution cost:

> 'The only cost involved was the development cost of setting up content, and indexing it with appropriate software so each asset would be easy for the child to pull out, with a meaningful name.'

They also emphasised that their products online had to be competitively priced in order to compete with other internet links on similar subjects. One company also provided in-service training for teachers, and another provided online subscription services for schools however, it later emerged in response to further questions, that all of the companies provided this service or one similar.

### 4.4.4.1.3 Special Needs

One interviewee provided a special needs consultancy service (SEMERC) providing training and advice via CD-ROM and online mediums. Their specialised team included a full-time educational site developer who carried out educational assessments and helped children with various skills.

### 4.4.4.1.4 Distribution

All companies interviewed distributed their own multimedia, and three also distributed third party's multimedia products – with one describing its company's role as being, 'rather like a traditional children's book packager as, alongside our own range, we also produce and package multimedia for others.' Another felt that distributing for a third party could help fill the gaps in its own portfolio/catalogue:

> 'It's an operational advantage for us, the customer and the hardware company. Customers will come to us to do their purchasing instead of going to separate places. Many hardware companies come to us and ask us to put together an educational bundle. It's important to get the full range to hardware companies.'

None of the companies interviewed produced hardware production.

### 4.4.4.2 Products

Six of the companies attributed all of their multimedia production to CD-ROM production and web development for children, while only one attributed 50% of their turnover to multimedia production for teachers and carers. All companies had been developing their digital, web content and website development over the last five years. Any other products for children such as books, magazines or video were described as supporting, adding value or serving a complimentary role to the CD-ROM or website on a particular subject or story range for all of the companies interviewed i.e. offering additional modules or other teaching support material. Only one company was providing stand alone online content for children in April and May 2000 and another had made a conscious decision approximately nine months before the time of interview to ensure that all their new media development would be browser-based. Additional media produced, other than CD-ROM and online development, included broadcast and video (3), DVD (2), audio-visual (1), Playstation and Playstation 2 (1) and CD-ROM play-sets (a combination of CD-ROM and toy attachable to a keyboard) (1).

### 4.4.4.2.1 General Product Assets

Several assets were noted as being crucial in the development of both children's CD-ROM and online media being produced by the companies interviewed and are highlighted in Figure 4.64 below.

Legend:
- Branding
- Added value
- Education focus
- Interactivity
- Quality
- Rights
- Complimentary products
- Entertainment focus
- Breadth and depth
- Intuitive/Simple
- Speed of use
- Modernity
- Market-focused

n=7

**Fig. 4.64 General Multimedia Product Assets**

#### 4.4.4.2.1.1 Branding and Added Value

All companies noted the importance of developing and promoting the product brand for all their children's multimedia. Quality content with added value was also noted by most of the interviewees as being an important asset in their products. One interviewee commented:

> 'Sound content is better than content dressed up with meaningless animations introduced by stars etc. The user needs to be able to do something with the software, not merely to look at text and pictures as can be done by picking up a book.'

#### 4.4.4.2.1.2 Education

A focus on education in children's multimedia was considered to be equally as important, 'The main thing is getting the educational content right. If you get the education bit right, you can get away with being less glitzy on your media content.'

And another noted:

> 'It's not sufficient just to entertain children. Some computers in classrooms are still used as a 10-minute reward for the kids who've finished their work on and, we've got to get away from that.'

The companies noted that although it was important for their products to have an educational spin, based on National Curriculum (NC) requirements to receive parental approval and support, they should also be fun to use and learn.

#### 4.4.4.2.1.3 Interactivity and Quality

Three companies also noted that a combination of media richness; high quality of graphics and audio content should exist, but not detract from the learning process. One commented:

> 'Children are used to sophisticated imagery from TV and other computer applications. We should provide what they are used to – stimulating the creativity of the children is paramount of course.'

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Another agreed, 'Now, you've got to have production value as good as an arcade game.' It was also noted that children's multimedia had to be off a certain quality or standard and that securing rights of strong or popular brands and producing co-editions could be useful:

'Multimedia is absolutely fantastic for co-editions (and that's a really important part I think you'll find when you talk to people in the business) as basically we make you a disk, the graphics are international - all you have to do is change the language. It's much easier than doing a book.'

### 4.4.4.2.1.4 Additional and Complimentary Products

New media companies were also starting to produce additional and complimentary products alongside their multimedia. Two interviewees emphasised the importance of CD-ROM 'play-sets' and 'key top toys' – a combination of CD-ROM and toy which sits on top of a standard key board making the computer software more fun, for example with a plastic hammer and tools. One company also noted that it had been involved in hardware development arrangements with Intel producing an electronic microscope to attach to the PC, making it possible for the child to zoom in on objects on screen – increasing interactivity. Others noted the importance of having a wide range of products in their catalogues, catering for a wide age group, with a balance of education and entertainment, and also having a large geographical exposure.

Multimedia, it was added, should also be intuitive, 'young children won't read instructions', and producers must account for the fact that the child's attention span is shorter than that of an adult, 'ensure that the game play offers short, sharp results.'

### 4.4.4.2.1.5 Market Focus

One company noted the importance of market focus, stating that if a company was moving in to the educational market and they had been producers of other products, it may be difficult to start up or get a culture of people keen on education. 'They need to be focused on the market - willing recruits who all share a common aim.'

### 4.4.4.2.2 CD-ROM Assets

As illustrated in Figure 4.65, certain assets were highlighted by the interviewees as being particularly useful in CD-ROM products.

Fig. 4.65 CD-ROM Product Assets

### 4.4.4.2.2.1 Branding

All companies again noted the importance of branding in reference to assets particular to CD-ROM.

### 4.4.4.2.2.2 Spin-offs

Some products for the home market, it was noted, were also used in the classroom as a recreational aid and some educational products were used at home - for example one disk may be used at home and there will also be a 'school's spin-off' available where you get one disk and ten books for example. Instead of the 'one and one.' 'Multimedia is absolutely fantastic for doing that kind of stuff.'

### 4.4.4.2.2.3 Price Perception

Competitive pricing had proven to be inevitable for companies producing in the same subject areas and innovative budget lines had also proven to be a useful tool for one company in the reinforcement of their children's multimedia product brands. Their average product price for a CD-ROM was £25.00, but budget line products at £9.99 were designed to encourage impulse purchases. The company noted:

> 'Retailers seemed to like them because they made a decent profit out of them and for the company, there were two advantages: 1) they're good value and quality in terms of production and, 2) they help reinforce the brand, for example, a parent may buy the cheaper Reader Rabbit product and then discover there's another new Reader Rabbit product in the series with new features at full price and will then be encouraged to buy at full price. That's a typical spinner and it's an important strategy for us.'

#### 4.4.4.2.2.4 Adaptability and Added value

The adaptability of multimedia was considered to be another useful asset. It offered the capability for teachers to configure software to suit their learner's needs – altering interactivities and levels for children for example. One company also felt that multimedia was an 'absolute ideal environment for learning by doing.' Added value is another important asset particular to the CD-ROM product. One company felt that the CD-ROM should offer something over the book and compliment the web site:

> 'A important principle that we've stuck to is the ethos of 'genuine multimedia' – where the consumer gets a disk, book, magazine and web link, allowing the user to follow a line of enquiry, to move freely between media'

#### 4.4.4.2.3 Online Content Assets

A number of assets were also noted as working well in the online content the interviewees had been producing as highlighted in Fig * below. Some of the assets in general multimedia products were again emphasised as being important by interviewees when they were asked about those assets particular to online content.



Legend:
- Premium services
- Ease of Navigation
- Entertainment focus
- Simple/Intuitive
- Speed of use
- Branding
- Usefulness
- Education focus
- Free
- Protection from unsuitables
- Interactivity
- Complimentary products
- Regular updates
- Archives

n=7

**Fig. 4.66 Online Content Assets**

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#### 4.4.4.2.3.1 Ease of Navigation

All interviewees considered ease of navigation to be an important asset online. One noted:

'Multimedia is all about making intuitive connections and about being able to follow a line of inquiry freely – not having to test and swim across an un-navigatable ocean of tonnes of information.'

One company which was developing its online content substantially more than most other children's multimedia companies at the time felt that within a web site, there should firstly, be a prompt to ask you

- how old you/your child is?
- Subject interest?
- Provision of links to suitable info, sections and sites

The same company noted that only links of five of the 'best of the web' should be provided rather than a long list of fifty which are vaguely related – and quality should be ensured. Another company felt there should also be

- subject categories (to choose for example, the subject 'history')
- further subject categories (to narrow down a search to 'Vikings' or 'Egyptians' or 'WW1' – or a search could be widened)

Two companies also noted the importance of developing a subject resource database in-house - building fact files using in-house subject resources and best of web links. Another interviewee claimed to have 'the biggest and best web site for children in the UK'. The web site contained five key areas and Figures 4.67 and 4.68 give some indication of the planning behind a children's web site's structure. The company claimed that these five areas contained information and links to the best of internet's resources, and had been rationalised, organised and updated on a daily basis to ensure maximum effective use.

5 Key areas

| Magazine Section | Interviews Section | Discover Section | Homework Section | Communicate Section |
|---|---|---|---|---|

| interviews competitions polls | TV Celebrities from 'Pop to politicians' | fun info *web trail | busting homework online dictionaries encyclopaedias | chatrooms noticeboards webmail Q&As |

Fig. 4.67 A UK Children's Multimedia Web Site - Example of Structure

```
┌─────────────────────────────────────┐
│   Question   │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│   Web to find answer   │
└─────────────────────────────────────┘
                  │
                  │
                  ▼
┌─────────────────────────────────────┐
│   Return to site/Answer in to web trail   │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│   Repeat for another 5 questions   │
└─────────────────────────────────────┘
                  │
                  │
                  ▼
┌──┐
│ Volcano erupts/enter competition to win prize i.e. │
│   skateboard/downloadable item/screensaver   │
└──┘
```

**Fig. 4.68 Web Trail**

### 4.4.4.2.3.2 Premium Services

All companies expressed the importance of premium online services such as offering the user 'downloadables', for example games and activities free to sample, hints and tips from the screen shots, workbooks/sheets and activities which can be undertaken away from the PC. Entertainment in children's web sites was also noted as being critical by the majority of interviewees (not noted as being so important for CD-ROM or other media).

### 4.4.4.2.3.1 Entertainment Focus

Companies felt that children's web sites should be bright, colourful, intuitive and fun:

> 'On the web, there must be that wonderful comedy element that goes with the learning process i.e. you're sitting on top of a volcano and the volcano will blow if you don't answer your 5 questions correctly. Web sites need that kind of incentive. I don't see any reason why anyone would want to learn about volcanoes unless there's this comedy element! It's got to be funny, fast and a bit cheeky.'

### 4.4.4.2.3.2 Simple/Intuitive

Keeping the web site simple and intuitive was also considered to be important. A lot of time has to be spent on interface development at the testing phase to ensure the site is easy to follow, not too text heavy, with clear and precise messages and needs to have a demonstration arrangement with moving activities for the child user. One noted:

'Interfaces can be confusing and annoying for users. Less is more. You can turn off children by flooding them with too much stuff on the web. Also, remember even parents are not very web aware.'

### 4.4.4.2.3.3 Speed of Use

Again, the companies commented that speed of use was important - game play online should be short and fun, with quick results as children's attention spans are shorter than adults. When compiling the child's games, companies also considered building the user's confidence.

### 4.4.4.2.3.4 Brand Development

Developing the company or product brand on the web site was considered important, 'get surfers used to using your site and then they progress and discover some of your other or new material of interest.'

### 4.4.4.2.3.5 User Return

The companies also felt they had to create an enjoyable experience so users return, 'there needs to be a reason for them to come back time and time again.' Also one company noted the importance of getting it right first time due to the unforgiving nature of the internet:

'One of the weird things that's yet to be really understood about the internet is if you make a mistake the first time with your content, will the user ever come back? How do you get them back? I think people are terribly unforgiving. They'll never give your web site a second chance simply because of the volume of similar other stuff they can go to. That's something that the marketing people really need to take on board - that it's terribly unforgiving.'

### 4.4.4.2.3.6 Educational Focus

The educational element (in line with NC requirements) in online products was considered to be important by all of the interviewees, although 'not as important' as an entertainment focus.

### 4.4.4.2.3 Free Culture

Another asset of online material was that it was free, with one company commenting, 'It's got to be free.'

### 4.4.4.2.3 Protection from Un-suitable Material

The interviewees also stressed the importance of protecting their online users from unsuitable material, one interviewee noted:

'We become an ISP, we screen the child from seeing sites with unsuitable material - too much flesh tone or bad language. We actually positively vet sites - hundreds and thousands of sites so you can only see things that are informative, or fun or kid friendly.'

### 4.4.4.2.3 Interactivity and Added Value

Interactivity and added value or the complimentary role of the web site were again stressed as being key assets, for example links to CD-ROM – additional material, added value coming off website – downloadables including templates, clipart, updates, modules, revision series, other levels of games and puzzles for example. The user can also revise directly from the web.

### 4.4.4.2.3 Updates and Archives

Current information and regular updates on children's web sites were also noted as being useful. Archives were also considered to be 'key'- one company felt that the user should be able to go backward by nine weeks or longer.

### 4.4.4.3 Branding

All companies interviewed felt effective brand management and its development was critical to achieving success in the children's multimedia market, in particular, TV extensions and character sites had been profitable. One company commented on its use at the time of interview:

> 'The branding issue wasn't so important probably back in the early 90s, however, moving forward now, kids are very much brand-orientated and very media-aware therefore brands are becoming more and more important. There's a larger quantity and quality of competition on the shelf now (i.e. Barbie, Disney, Lego with strong branding). So it's a learning lesson as we come forward and it may be that that turns around again. We may find in the future that it won't be possible to profit from branding, but right now, it really is.'

Adult purchase decision

↓

Identification

↓

Association

↓

Preferred choice ⟶ Child Influence

↓

Yearly hypes/crazes/characters

↓

Playground/word of mouth

↓

Company/Character knowledge

**Fig. 4.69 Brand Influence on Purchaser/User**

Three of the interviewees noted that the 'identification and association' of a brand, illustrated in Figure 4.69, by both parents and children is important. One company emphasised how branding differs for the two different markets in the children's multimedia industry. The company found that branding of their children's multimedia product was more important in the home market, but not so important in schools where 'there's no need to license characters like they do in the home market.' They felt, however, that branding of their children's multimedia company - the company brand - was hugely important in both markets.

### 4.4.4.3.1 Company Branding

Another company noted that acquisition of educational brands in the past has meant the company could widen its market focus:

> 'With the combination of the educational brand we acquired from a book publisher with a strong educational reputation, and our own strong brand in family entertainment, we can cater for both markets effectively.'

Other companies discussed the importance of the 'heritage' in a company brand:

'I think branding is critical. If you look at our multimedia/boxes I think it's pretty obvious that we made it and you can always see something about us with it. It's not that it all looks the same because obviously that would be a disaster but it all feels like it comes from the same place - and it does, conceptually.'

Another agreed:

'I'd say that our company is also quite an important brand as people associate it with our toy company. It's a bonus that we actually have that heritage which provides the parent with a guideline.'

### 4.4.4.3.2 Product Branding

As shown in Figure 4.70, in reference to product branding, interviewees emphasised the importance of developing existing properties and heritage or acquiring new stronger properties or licences to popular characters, tuning in to yearly hypes/crazes which are usually specific to individual countries (with Pokemon, being an exception to that rule).

One interviewee noted:

'I think product branding is probably the most important factor for any title because you're carefully targeting a specific market who knows that character and brand so you have to make sure that you fulfil their expectations.'

Acquire brand           or           develop brand

↓       based on       ↓

Hype/popular craze/character       heritage/success of previous characters etc

↓

changes - reaction to latest market developments

↓

changes - latest consumer likes/dislikes/requirements

↓

continuity/clarity of brand design on box or web site

**Fig. 4.70 Product Brand Development**

Companies had tried to develop clarity and consistency of their company, product or site brand, for example, with bold, attractive, colourful, recognisable designs on their CD-ROM boxes and sites and bold, 'catchy' domain names. One company commented on the issue of 'brand dependency':

'Multimedia is very defying. Our largest target age group, 5-8 years is the hardest to make money and produce product for because the users know what they want and if you don't have that license

they won't buy from you. Whereas, for pre-school, parents are looking for brands that they know and what they rely on in other areas and which is slightly easier.'

### 4.4.4.4 Marketing/Promotion

The interviewees mentioned a number of ways in which they achieved effective promotion and marketing of children's multimedia.

Children's and parenting press, dependant on the age group targeted, are used by all of the interviewees to promote and advertise children's multimedia products – both CD-ROM and web sites. For example, with pre-school products, women and parenting press is used and educational press is used for schools' products. All companies also promoted their products in other women's magazines, computer sections of national newspapers, educational press and in-store retail promotion.
One company noted that it used TV advertising to launch large brands, 'Certainly only TV companies and production companies could promote our play-sets that were launched just last year.'

Three companies attended and promoted at brand-related events, including joint activity/promotion with their related toy or book group at any major events that they were doing, 'We'll also support other things that are going on such as the events and things that are connected to the brand, such as Spot. There's a play going on at Oxford and we supported that.'

Another commented:

> 'We also have demonstrations of the CD-ROM available, displays, posters and make sure we're present at characters' special away days, for example, Thomas the Tank Engine's special trips at Train stations country-wide.'

All companies also attended industry and education fairs and conferences i.e. educational, teachers' conferences, educational authorities and governmental education and NC related events, such as BETT, The Education Show, and teacher's unions and clubs. Toy, games and book product-related events were also useful for promotional purposes, such as the London toy and hobby fair (January), international toy fairs and E3 - the major US trade fair (May). Other conferences which were attended for promotional purposes included computer and multimedia fairs and conferences such as the European Computer Trade Show (ECTS).

All of the companies at the time of interview were using the internet for promotional purposes. The companies' use of online promotion had increased over the past three years and a mix of certain features listed below were noted as being important for online promotional purposes:

- clarity of brand
- clarity of online catalogue and links
- breakdown of all products
- quality info and visuals of products
- promoting authors, series
- sample product, or various games
  and activities free to sample

- downloadable demos and screensavers
- competitions/prizes
- 'tasters', e-commerce events and
  creating a community of users
- targeting teachers or parents or children
- wish lists - user/s information
- mailing lists – input contact details
- mail shots
- links to related and quality sites of interest
- links to company's other branded products
  i.e. toys, books, videos, sweets
- added value to the CD-ROM/book
- integrity of offer
- ease of navigation


### 4.4.4.5 Sales and Distribution

One of the new media companies interviewed criticised book publishers that had tried to sell their software to book retailers, 'There was definitely a lack of imagination and determination, and a tendency to use existing channels.' As highlighted in the list of sales features below, all of the companies interviewed were selling online and had online catalogues at the time of interview. One interviewee noted that it was no longer selling to 'shops' and another specified that its web site was used for 'sales, advertising, information and promotion purposes.' The companies' use of online sales had also increased over the past three years and a mix of certain features noted below were highlighted as being important for online selling purposes:

- online catalogue
- clarity of brand
- clarity of online catalogue links
- breakdown of all products
- price info and visuals of products
- ease of navigation
- ease of subscription
- ability to test and engage in S/W at no charge
- downloadable demos and screensavers
- ease of ordering
- transaction payment security
- general security
- offers – bulk buys, budget lines
- competitions – prizes/ freebies/quizzes
- other products – toys
- wish lists - user/s information
- mailing lists – input contact details

One company noted the advantage of using sites such as Amazon to sell their products:

> 'If you go on a site that covers a whole load of publishers then you've got a much more diverse choice. It covers such a vast range, in comparison to say, Foyles or the standard WH Smiths. We think that that model is going to happen, as you probably know from searching the web, there are a number of UK sites specific to selling educational software by mail order and I think that's the way it's going.'

Legend:
- online sales
- direct sales
- high street stores
- book stores
- book clubs (occasionally)
- games/computer
- electrical
- toy
- supermarkets
- libraries

**Fig. 4.71 General Sales Methods**

Bookstores were still being used for educational products sales only or for CD-ROMs that were attached to books. High street stores such as Woolworths and electrical stores such as Dixons, Currys, Comet and PC World were used and one company noted the importance of training staff to give consumers quality advice about children's multimedia when visiting these outlets. Another company noted that new channels such as the Early Learning Centre and Mothercare had been used to cater for new users who were as young as 2 years old. Toy outlets such as Toys R Us, Hamleys and independent stores and Tesco and Asda supermarkets were also being used.

### 4.4.5 Staff Structure

Unlike children's book publishers who previously had to adapt their structures in order to produce multimedia, new media companies did not have to invest as extensively into structural change management. Only one noted it had a slight structural change and was in the process of trying to formulate exactly what their staff's new roles were going to entail, 'Over the past year, design teams, editorial teams and in-house production has been broken up - but that wasn't too difficult. We also had to employ more staff as we grew.' Internal critical relationships, external collaboration, and outsourcing involved in the new media companies' production of children's multimedia are noted in this section.

### 4.4.5.1 Internal Critical Relationships

Within the majority of the companies interviewed (5), their organisations were divided into small project teams working on different CD-ROM or web site projects, using staff from testing/

development, programming, design, marketing/branding, and editorial/content all working together (as highlighted in Figure 4.72).



Fig. 4.72 In-house Project Teams

The importance of keeping small project teams and their skills in-house and the relationship between editorial/content, creatives and programmers were highlighted by six companies as being critical to allow for successful children's multimedia. One interviewee noted:

'Some companies had made a huge investment into external companies to reuse their material or for creative ideas or programming purposes and they had very little in-house real development which turned out to be a failing.'

Table 4.11 Internal Critical Relationships

| Internal relationships | Number of Companies |
|---|---|
| editorial/content and creative and programmers | 6 |
| commissioning and creatives/artists | 2 |
| programming, PR and marketing | 2 |
| product development and marketing/sales | 2 |
| all functions | 2 |

Another noted:

'The relationship between creative/publishing and programming/technical is where it all can go wrong as programming is so ferociously complicated, companies have often sought the expertise externally. Project times and costs have been exaggerated. The important thing is to employ programmers internally so you don't have to understand external programmers' language.'

It was thought that tight briefings between commissioning, in particular, and creatives/artists and the co-ordination control between programming, PR and marketing helped 'create effective relationships to

push development, ensuring maintenance of standard and branding the whole way through.' The importance of the relationship between product development and marketing was also noted.

### 4.4.5.2 External Collaboration



**Fig. 4.73 External Collaboration**

Most of the interviewees collaborated externally with educationalists and children involved in focus group testing for market research. Networks of publishers, agents, distributors, developers or licensors were developed world-wide for most of the interviewees' rights sales activity. One company noted the advantage of collaboration with a book publisher, 'the relationship has worked well for over 8 years as we share development and copyright costs and then bring the product to the market together.' Another noted the importance of company branding while collaborating externally:

'Company branding is important, on a corporate level, when you're negotiating partnerships with publishers. There it's not down to product level. But for your customers, it's product level that's important.'

Others collaborated externally to buy music, graphics, video or TV programme rights, occasionally for joint production if they did not have the relevant expertise in-house. Another used product development companies (with strengths in the children's area), and localisation companies, while two others used programming freelancers for specialised web projects. One company noted the difficulties in setting up the 'more technical back-end programming' for a web site and the requirement to do this 'out of house'. Two companies noted that their base products were produced in the US by internal programming teams. One had a software development team in the US but used external programming teams in the UK, with '80% internally developed, and 20%, outsourced'. Others also occasionally outsourced sales/distribution and advertising/PR teams for international sales.

### 4.4.6 Staff Skills

When specifically asked about what skills they felt were key for children's multimedia production, as for all publishing companies, new media company interviewees noted a mix of skills in the following areas; editorial/ content, marketing/ branding, creative, programming and testing and development

### 4.4.6.1 Editorial/Content

Five of the interviewees highlighted the importance of having educational expertise and a knowledge of children's learning needs in-house as shown in Figure 4.74. (One started up multimedia company with a head teacher and a programmer). All felt they had to address National Curriculum requirements and the changes in those requirements, and all used 'educationalists' or 'educational advisors' as part of their multimedia production teams. One company also noted that they used practising teachers either as consultants or module/activity designers.



Fig. 4.74 Content/Editorial Skills

Three companies emphasised the importance of quality scriptwriting, with one commenting, 'As always the main area is in script writing for multimedia. Very few people can do this well.' Another noted that although the company would occasionally call on specialist consultants but are aiming to build on their content resources and subject knowledge in-house:

'Obviously people leave, but you get this critical mass in-house. It's about having not just a finished product at the end, but also an intellectual resource so you can make another one.'

Acquisition skills and recognising good ideas were also thought to be key.

### 4.4.6.2 Creative

Interviewees noted that creativity resides with a mix of people with varying skills in-house; illustrators, interactive designers, graphics people, programmers, writers and teachers who use the material. One noted, 'Stimulating the creativity of the children is paramount, of course. Creativity is easy to manage, 'uncreativity' presents far more challenges.' Another noted that all creative commissioning involves an enormous amount of very tight briefing.



Fig. 4.75 Creative Skills

The largest number in the sample noted that the creatives/designers producing children's multimedia should be innovative, creative and new technology-aware. Another noted the importance of developing creativity in-house for children's multimedia:

> 'Creativity is built on, rather than using a high turnover and mix of staff. Everything from the basic concept to what you see on screen should be done in-house - art, graphic, concept, interface, the interaction, the everything.'

Another interviewee also noted that creative people are often not commercially aware, and it was the producer's job to emphasise that the products are ultimately made to make a profit. One company noted it required the skills of 'talented interactive designers who do not run on clichés but realistic deadlines.'

When the interviewees were asked where their companies' creativity resided and how it was managed and controlled, the response was varied. Most developed creativity in-house (5), others worked closely with their US creative base (3), toy group, brand group and creative groups (3). Another commented on how it developed its creativity using different methods:

> 'We've got about 80 full time developers within the company and they work in teams, which include a producer, a content co-ordinator, a graphic designer, and a programmer. We also have a few externals who work both on our ideas, and on their own ideas and submit the products for us to publish. So we've got every conceivable combination.'

### 4.4.6.3 Programming

Two interviewees noted the importance of keeping programming resources in-house as they found it to be cheaper and less time-consuming than using external companies. One noted the mistakes publishers had made in the market, in terms of programming:

> 'The temptation for publishers was to say well we have content, but we don't have programmers, and they saw programming as an outside job. We consider programming to be part of the creative resource.'



Legend:
- flash programming
- in-house programming
- creative programming
- new techno aware
- web development skills
- education-aware
- max-usability of hardware

n=7

**Fig. 4.76 Programming Skills**

Figure 4.76 highlights that the largest number of interviewees noted that a knowledge or awareness of new technology, such as WAP and other new platforms, and web development skills were also considered important. Three interviewees had noted the immediate requirement for more flash programmers and designers who can prepare artwork in flash (flash being a relatively new type of software designed for increased animation of the internet at the time of interviews) as although it is not a complicated role, there were aware of few about at the time of interviews.

Two companies emphasised how the programmer was such an integral part of the multimedia team and has such creative possibilities to contribute in-house. There is a real creative imperative to bring the programming in-house. One commented:

> 'Programming, now more than ever, is becoming so sophisticated that frankly, only the specialist skills and knowledge of the programmers, can guide others (i.e. writers, designers) in a creative meeting as to what their creative possibilities and capabilities are.'

It was also thought that in-house programmers needed to be educationally-aware, have a knowledge of new distribution and promotion channels, and ensure they were achieving maximum usability of hardware purchased, creating deals to acquire appropriate and cost-effective hardware.

**4.4.6.4 Marketing/ branding**



Fig. 4.77 Marketing/Branding Skills

In terms of marketing/branding skills for children's multimedia production, three interviewees felt it important to recognise crazes and key licenses thought to be popular and might perhaps grow to become 'the next big thing.' Two others felt it was just as critical to be competitor aware and remain one step ahead of others in the area of children's multimedia, whilst others felt a knowledge of the market was important – keeping abreast of consumer likes, dislikes, requirements and investing in research and development in the market was noted as being key. Developing and managing brands cross-platform effectively was also considered to be a key skill. Finding new marketing, promotion and sales channels to target and inform specific markets about products was considered a challenge and necessity by three of the interviewees.

**4.4.6.5 Training and Recruitment**

The majority of interviewees (5) noted that they used a mix of in-house and external training methods. External training consultants or organisations tended to be used for more technical skills or management training, while internal training was mainly used for project and time management and presentation skills. One company noted that they trained up people in-house who started as testers to become programmers. Programmers, in particular creative programmers, were the most difficult people to recruit. One interviewee felt that there was always skills shortages because there were so many ways of making multimedia and so many different languages to master:

> 'There are never enough people to do cope with this and programmers and designers seem to be getting more expensive. The most expensive person you work with charges £400 a day.'

Another felt that the best of the programmers in the UK would be more interested in large-scale projects: 'It's not as exciting to work on a children's educational product as it is to say work on something like Lara Croft and so it is harder to get programmers.' The costs involved in employing decent programmers were also a concern for two of the interviewees, with one noting that for good programmers now, you have to compete against 'games industry wages' which is not ideal. The other noted, 'Because we are a smaller company we may find the right person but we may not be able to satisfy their required/entitled salary.'

### 4.4.7 Strategies for Future Development

There were various strategies adopted by the interviewees to cope with future developments. Market research techniques were used by the interviewees to gain an understanding of the overall children's multimedia market, home and schools' needs, competitor's activity, new technology, products and platforms - and management systems were set up to control this information.

### 4.4.7.1 Market Awareness

A general awareness of the overall market was noted as being critical for development in the children's multimedia market by all interviewees. Interviewees noted that it was important to:
- estimate your market size correctly
- know what the return on investment should be
- market needs, likes, dislikes
- use market knowledge and company's focus to then determine focus

The research techniques used by the interviewees to gain this market awareness are outlined in Figure 4.78.

**Communication with retailers**
**Questionnaires / surveys**
**Internet information**
**In-store merchandisers**
**Reply-paid cards**
**Chart Track subscription**
**Electronic registration**
**Before + after sales purchase focus groups**
**Membership of related organisations + suppliers**

n=7

**Fig. 4.78 Market Research Techniques**

One interviewee noted that it was talking all the time to retailers' chief buyers about current ranges and the potential of future product ranges and noted, 'It works both ways - we're giving them volume to sell, they're giving us shelf space.' Another noted its use of questionnaires and surveys was mainly to analyse schools, their needs, their perception of where the company was at, and what the company needed to work on for the schools, and others noted they usually responded to questionnaires from governmental reports. Internet information, in particular, Department of Education and competitor's websites and research reports such as those compiled by Chart Track were used by some of the interviewees. (One interviewee noted that most of its competitors subscribed to Chart Track). In order to remain 'competitor aware', three of the interviewees obtained company information from trade fairs, trade magazines and competitors' websites.

### 4.4.7.2 Home Market Awareness

In order to develop an awareness of the home consumer for future product development, the majority of interviewees (6) noted they used testing methods on children and parents. One commented, 'the most important thing you can do with any product for children is to give it to them and they'll tear it apart.'

Two interviewees noted that they often used information from PIN (the Parent's Information Network), as did most of their competitors. One noted:

> 'Our only problem with PIN is that they want to charge us as publishers for them to evaluate our products. We don't do that on principle. So the only products they promote are the ones where the publishers have paid them to evaluate them.'

Other interviewees attended child-related shows, for example 'The Under12s' and read parenting and child development press as part of the research and development of new products.

### 4.4.7.3 Schools Market Awareness

The majority of those interviewed (6) also tested their products and ideas on teachers, educationalists and LEA advisors. One noted:

> 'We hold a lot of focus groups during development and post-development. So, we receive feedback in a focus group and the lessons we learn from that we can incorporate in to the next product within the series. So we can improve that. We can improve development.'

Three others used educational cluster groups or had education officers who made twice a term visits to schools or Local Education Authorities. Another offered discounts, training days, and free product demonstrations in return for information. Another attended industry and education fairs and conferences i.e. educational, teachers conferences, educational authorities and governmental education, NC related events - BETT, The Education Show, conferences, teacher's unions, panels, clubs, another read the educational press, for example The Times ED. One interviewee also noted the importance of having contacts in government areas:

> 'We have meetings with the DTI and Department of Education regularly, finding out what the government's view is, and see if there's any way we can advise them, or get involved.'

Another agreed, 'As a new media company, you've got to look ahead to see that initiative coming from the government or NC and maximise the publishing and ensure it dovetails with that initiative.' For example, in the early 1990s it was focusing on products of a geography nature, but at the time of interview, it had changed to focus on numeracy and literacy in tune with the NC and governmental initiatives for UK education.

### 4.4.7.4 Information Management for Development

Two of the interviewees noted the importance of developing research management systems (one of their systems is illustrated in Figure 4.79) and another felt that regular updating of consumer information management systems and the use of electronic registration was critical.

```
                    R&D/Sales Team
                          |
                          v
        Schools/Consumers (UK & International)
                          |
                          v
                      Feedback
                    /          \
                   v            v
               Likes          Dislikes
                /                 \
               v                   v
        Requirements          Improvements
```

Fig. 4.79 Research Management System

4.4.7.5 New Technology/ Product/Platforms Awareness

In order to gain an awareness of new technology, products and platforms for children's multimedia, the majority of interviewees attended computer, multimedia fairs and conferences, for example the ECTS (European Computer Trade Show), and also toy, game and book product-related events, for example the London toy and hobby fair (in January), and international toy fairs such as E3 - the major US trade fair (in May).

Chapter 5: MODEL DEVELOPMENT

5.1 Introduction

Key factors which emerged from the results noted to be contributing to companies' development in the UK children's multimedia market have been outlined in a Children's Multimedia Market Five Force model and a Children's Multimedia Company Value Chain model (developed from Porter, 1980 and 1985 and Vista International, 1996-on) which were designed throughout the period of this study. The development of these models, and the linkages between external market forces and companies' internal areas of value and development are described in this chapter.

5.2 Children's Multimedia Five Force Model (market analysis)

Throughout the period of research, external factors or forces affecting companies in the children's multimedia market in the UK have been identified and analysed. An analysis of the market developed from questionnaire survey responses from book publishers in 1998/1999, new media companies in 2000 and some of the literature reviewed throughout the period of research. Questionnaire research was very much exploratory, set within the initial process of identifying development factors or areas of value for companies in the UK children's multimedia market. Specific categories of questions uncovered information about external factors and important information also emerged within other categories such as sectors involved in the market, influences/changes, products, processes and relationships, variation of company types involved, activity, structure, culture, competitors, and other forces and developments. After researching various ways in which to analyse the market effectively, it was decided that using Porter's Five Force Model (1980) (see Figure 3.4.1, 82) would be the most appropriate and comprehensive method for the analysis of structural, shaping or external forces influencing the children's multimedia market. This more detailed model has been developed with empirical evidence from a sample of successful children's multimedia companies. This seems to be the first study involving the development of a model grounded in the reality of the developing and changing market of multimedia. The Children's Multimedia Market Five Force model (Figure 5.1) has been developed to display pictorally the children's multimedia market situation and the shaping forces affecting this industry and is discussed in the following sections of this thesis. The market's structural and shaping forces include competitor and entry threats; supplier and buyer power; new or substitute products; and technological threats. Once background data was gathered from the questionnaire surveys of publishing and new media companies, key external forces or factors affecting children's multimedia companies were outlined in the five force model which aided the analysis of the overall children's multimedia industry situation at that time. The model was (and could continue to be) adapted as more data was gathered from both publishers and new media companies in the interviews which followed.

The research findings are discussed below in further detail within the categories or forces adapted from the original model created by Porter who suggests the model can be used 'for identifying opportunities,

and formulating strategy.' In this study, specific market shaping forces have been considered by the companies surveyed and interviewed in order to identify development factors contributing to success in the UK children's multimedia market. Porter suggested that five market forces exist affecting a company in general terms including competition, entry, substitution, suppliers and customers. Key factors or forces at work within the children's multimedia market are analysed within these generic themes.

5.2.1 Competition

'Competition' is referred to by Porter as 'threats of new entrants or competitors'. In reference to the children's multimedia market, a wide range of competitors have been identified by the companies studied as software, broadcast, games, hardware, digital, telecommunications, online, production and support services, music, toy, confectionary, UK, US, and European companies.

5.2.2 Entry

'Entry', described by Porter as the threats affecting entry activity, were found to include governmental and EC initiatives, educational influences such as the National Curriculum, HMIE's developing pre-school curriculum, the National Grid for Learning, and parental groups such as PIN, CHIP etc. in the children's multimedia market.

5.2.3 Substitution

'Substitution' refers to threats of 'new' or 'substitute' products according to Porter. In the children's multimedia market, products being used or developed by companies in the market include hybrid products, DVD, digital, online content, 'web tv', WAP technology, handsets, e-books, play station developments, X box and general games market developments. 'Traditional' media products include books, audio-visual and CD-ROM products.

5.2.4 Suppliers

'Suppliers' are referred to by Porter as those companies supplying the market with products. Within the children's multimedia market, these suppliers are multimedia publishers, software and hardware producers, CD, DVD manufacturers, web and content developers, production and support services and distributors.

5.2.5 Customer/buyer power

The fifth market force is described by Porter as 'customer or buyer power'. These forces in the children's multimedia market refer to children, parents and educators in the home and schools sectors.

Other customers include direct sales, online content and database providers, advertisers and specialist site providers such as special needs sites. A key issue with regard to customers in the children's multimedia market is the role of the 'middle market' and that parental and child carers' or educationalists' attitudes about PC, multimedia and online use needs to change if multimedia is to become fully utilised at home and in the classrooms. Schools must also ensure that they have trained IT support staff in place.

All external factors or forces shaping the development of companies' activity in the children's multimedia market are outlined in the Children's Multimedia Market Five Force model as shown in Figure 5.1. This model is more detailed than Porter's original Five Force model which does not outline specific factors or shaping forces as is the case in this 'children's multimedia version'. The Five Force model designed for the purposes of this research, could be adapted further to aid the analysis of external factors affecting other sectors of the publishing, multimedia, information and communications industries.

Fig. 5.1 Children's Multimedia Market Five Force Model – Shaping Forces (An adaptation of Porter's Five Force Model 1980)

Porter suggests 5 competitive forces exist affecting a market:

5.2.1 Competition

5.2.2 Entry

5.3.3 Substitution

5.3.4 Suppliers

5.3.5 Customers

Buyer Power

Schools, pre-& out- of- school groups – Children, educators, child carers, playground-word of-mouth

Home - Children, parents, family members, friends

Retailers

Direct sales

Online content providers, databases, specialist sites such as Special needs

Advertisers

Entry

Governmental effects

EC initiatives

Educational factors such as National Curriculum, Pre-school Curriculum, National Grid for Learning Parents' Information Network (PIN) & other parent groups

Threats of new entrants/competitors

Software, broadcast, games, hardware, digital, telecomms, online, production & support services, music, toy, confectionary, UK, US & European companies

Supplier Power

Multimedia publishers, Software and hardware producers, CD, DVD manufacturers, web & content developers, production & support services & distributors

Threats of new or substitute products

Hybrid products, DVD, online, digital, webTV, WAP technology, handsets, e-books, playstation, X-box & other gaming developments, Flash programming and other new programming software, other innovative new technologies & market crazes

MULTIMEDIA MARKET

CHILDREN'S

Publishers & New Media Companies jockeying for position

5.3 External forces and Internal Force's Linkages

Various studies had been carried out prior to this research linking relationships between industries and the companies at work and products being produced within them. No such study had previously been carried out within the children's multimedia market.

Krell's study offered the Innovation Impact Model as a tool to help companies visualise the effects of the market force of innovation and new technology on their performance and competitive situation in a period of technological change (Krell 1992). In the volatile market of children's multimedia, the research findings indicate that companies' distinct capabilities, technology, staff, skills, relationships, and values need to be invested in, in order for children's multimedia companies to achieve effective innovation strategy. Key generic elements from Krell's Innovation Impact model were considered in relation to the children's multimedia market or company before a more detailed analysis of key areas of companies' internal value were identified and is explained further in this thesis.

Fig. 5.2 Children's Multimedia Innovation Impact Model (adaptation of Krell's model, 1992)

Krell noted that where the adoption of new technology takes place within the framework of 3 elements: attributes of new technology, external environment, and the organisational structure of the adopter. It is particularly well suited to demonstrate the interplay of these elements within the context of the changes occurring in the children's market in the UK. Findings indicated that companies studied in the children's multimedia market had particular characteristics or attributes which enabled them to not only adopt change, but also promote change. Lynch's idea that while identifying the key factors for success in an industry, not only the competitive environment in which companies operate need to be studied,

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but also the resources of a company need to be studied is adhered to in this study of the children's multimedia industry. The three principal areas which Lynch (1997) and others such as Tushman, Newman and Romanelli (1988) noted should be analysed; customer, competition and company – including defining the resources the company has; how they compare with competitors; how the company compares with its rivals on technology, skills, organisational ability and marketing. Key results indicated external factors or market forces affecting and shaping new media and publishing companies'; and also internal company factors such as structure and processes, strategic management, core activities, skills and relationships; and product assets. These areas of analyses were found to all inter-relate and are highlighted in Figure 5.3.

Fig. 5.3 Market, Product, Company - Analytical Linkages

Certain external market factors more specific to the development of children's multimedia have been found and are highlighted in Figure 5.4. Internal areas of activity which have been analysed are also placed in context.

Educationalists
Teachers

CHILD

Focus Groups

Parent/
Families

Govt/NC

Strategic
Management

Retailers
Online

Subject
Gaps

Core
Content/Editorial
Creativity
Technical/Programming
Testing/Development
Rights/licensing
Branding
Promotion
Pricing
Sales and Distribution

Drivers
for
Purchase

Market
Crazes

Competition

New technology

New Entrants

Support
Human Resource
Management,
Process and Structure

International
markets

Fig. 5.4 Internal Factors and External Influences

In summary, this section has outlined the external forces at work in the children's multimedia market within the framework of a Five Force model and then continued to analyse how external forces, internal company factors, and product factors interlink with the external environment. Again, this approach could be adopted by other publishing industry sectors.

5.4 Children's Multimedia Value Chain Model (Company analysis)

This chapter proceeds to discuss the development of a Children's Multimedia Value Chain model (developed from Porter 1985, and Vista International's models 1998) which outlines companies' internal activities and areas of value in the children's multimedia market. This section explains how internal factors initially analysed (such as company culture, structure, staff skills, staff procedures and relationships, and the areas of value present in each of these, which prepare children's multimedia companies for success in their market) developed into the adapted categories or 'activities' of value described in the resulting children's multimedia value chains.

5.4.1 Value Chain Studies

In 1997 and 1998, various writers identified a need for new business models in the multimedia market generally (Bide, Negroponte and Feldman 1997, and Pethick 1998). Others such as Kay, Stone, Treacy, Wiersema and Bide in the mid-late 1990s understood the importance of identifying companies' core resources, skills, competences and capabilities. Key findings in this study are described as 'development factors' or 'areas of value' for the children's multimedia market. Lynch noted that, internally, every company consists of activities that link together to develop the value of the business and that a 'package of attributes…lies at the heart of the value chain'. He also described the key strategic principle involved in this research:

> 'For commercial organisations, adding value is essential for their future development. All organisations need to ensure that they do not consistently lose value in the long term or they will not survive.' (Lynch 1997, 246)

Others such as Vista International (Bide et al), the DTI and Diebold set about attempting to create or adapt existing models highlighting areas of value or development in the print, multimedia and online publishing industries. These adapted value chains were considered alongside Porter's original Value Chain. Porter, whose focus in the value chain was very much of a quantitative nature, aiming to measure financial output for companies in industry generally. However, Porter also noted that resources are distinct to each company type and contribute to competitive advantage and success within a sector. His resource analysis relates particularly to research undertaken in the 1980s that sought to explore and expand on a basic strategic question:

> 'How is it possible for companies with a small market share to gain a significant share of an industry? Part of the answer lies with their resources and how to use them competitively.' (Porter 1985)

This study also expands on Kay and Bide's theories which describe the three types of distinctive capability that a company may have to provide it with a particular ability to create value on a sustained basis:

'Architecture – Reputation – Innovation – allowing a company to exploit their strategic assets, in terms of its employees, suppliers, distributors, customers and competitors.' (Bide 1997)

These generic areas are examined in this thesis but are described in this instance as - structure, culture/branding and innovation, based on the descriptions given by successful children's multimedia companies in the UK. Other key factors particular to children's multimedia companies' development are also identified and outlined within the framework of a Value Chain model (developed from Porter 1985, and Vista International 1998).

5.4.1.1 Porter's Value Chain

The value chain model as described by Porter (Figure 5.5) is developed to incorporate children's multimedia factors, displaying pictorially elements which add value. Essentially, Porter links two areas together: the added value that each part of the organisation contributes to the whole organisation, and the contribution to the competitive advantage of the whole organisation that each of these parts might then make. The value chain model does not break the business down functionally, but by business activity – with activities frequently crossing functional borders. Clearly, elements of each of the support activities are relevant within each of the core activities. This is indicated in Porter's diagram by the lines which run through those support activities, linking them to the core. Children's multimedia companies' activities identified in this study are outlined and analysed within the context of different value chain model categories which developed to include strategic, core and support activities. None of the activities within a children's multimedia company can be independent – but are interdependent, and competitive advantage and quality management arises not only from the activities themselves but from the linkages between them.

Fig. 5.5 The Value Chain (Porter 1985)

Porter argued that any company's activities can be divided between core or primary activities (those related directly to the product) and support activities. Each of these classifications can be further broken down into certain generic classifications of activity and this systematic approach to business activity is presented graphically in Figure 5.5. **Support activities** include the categories of **firm infrastructure** - encompassing corporate strategy, background, planning, finance and control systems; **human resource management** - involving the study of factors of value within recruitment, training

management and development, and reward structures, **technology development** (an important area for a company producing new products) - looking at areas such as existing technology training and knowledge for efficiency, competitiveness and procurement – the commissioning and purchasing of ideas and products as described by Porter. **Primary activities** include the categories defined by Porter as:

- **inbound logistics/supply** – receiving, storing, handling and transporting of content and products from suppliers
- **operations/production** – product development
- **outbound logistics** - warehousing/distribution which is selecting and wrapping of multi-products
- **marketing** - analysing customers' wants and needs, and notifying customers which products and services the company has for sale. Advertising and promotion also falls within this area
- **sales and service** - before or after sales; installation; after sales service; training; answering customer queries.

The activities, noted above were adapted, deleted, and extended within a 'Children's Multimedia Value Chain' in order to illustrate which activities add value or development to the products and services which publishing and new media companies bring to the children's multimedia market. Elements of the support and core activities Porter described have been adapted to fit the activities of value described by the children's new media and publishing companies studied. Other 'strategic activities', as defined by Vista International (described in section 5.4.1.2), were also described by the children's multimedia companies studied and added to the children's multimedia value chain model developed.

The research focuses on a more qualitative approach to the Value Chain in comparison to Porter's original quantitative mechanism which examines the value a company creates against costs involved – ultimately identifying the marginal result. Instead, a children's multimedia value chain has been developed in this study, based on both quantitative and qualitative results which indicate key areas or activities, skills, resources and relationships of value developed by children's publishing and new media companies.

5.4.1.2 Publishing Industry Value Chains

The research recognised the importance of understanding where and how publishers and new media companies create value in the publishing process today to support their development, and the extent to which these 'distinctive capabilities' transfer to a multimedia environment. The results from the children's multimedia market sample find answers to Bide's question 'what should publishers (children's multimedia publishers and new media companies) be doing to enable them to manage their businesses successfully in the future?.' More than a decade on from Porter's value chain design, Vista International also sought to understand the sources of value which publishers add to the print-on-paper publishing process in the different market sectors, and the extent to which these transfer to an online

environment by means of a value chain model. Alongside Porter's original value chain model, the research compares, builds and adapts elements of previous value chain models which were adapted to fit the generic print, 'electronic' or 'multimedia' and online publishing company by Vista International, (including Shatzkin, Bide et al) (1998-2001) and the DTI (1998). Such an approach is encouraged by Porter, who discussed the need to:

> 'disaggregate' activities in ways which are relevant to a particular company type, separating particularly those which have either a high potential impact on differentiation or are responsible for a significant proportion of cost incurred.' (Porter 1985)

Vista International's adaptation of Porter's value chain to fit a publishing company's 'functions' is illustrated in Figure 5.6.

Fig. 5.6 A Publishing Value Chain (Vista International 1998)

The definitions of 'core functions' such as content, product development and marketing for example, which Vista International have used are also expanded on and adapted for the children's multimedia market. Although, this study supports Porter's view that these are distinctly 'activities', and not 'functions', and that an activity is not necessarily contained within the boundaries of a single functional department or division: indeed, most of these activities or 'functions' (as Bide describes) are, to some extent, cross-functional:

> 'Content acquisition - Content development - Product development and design - Project management - Content formatting – Marketing – Promotion – Sales – Manufacturing – Fulfilment – Warehousing - Customer service - Other revenue sources.'

These activities are described more fully within the context of the children's multimedia industry further in this chapter. This study focuses, in more detail, on activities including content development/editorial, product development (including creative, technical/ programming, testing and development, and product assets), branding/marketing, promotion, pricing, sales and distribution and other services. Within each of these areas of activity, factors contributing to the development and value in companies' *offline* and *online* activities are outlined in the children's multimedia value chain. The strategic, core and support activities found to add value in the children's multimedia publishing and

new media companies studied are discussed in detail within the individual categories below. These categories, which include key development or value factors, contribute to the development and completion of the children's multimedia value chain drawn further in this chapter.

5.4.2 Children's Multimedia Value Chain

Three key generic areas or activities of value have been identified for the children's multimedia market including areas of strategic activity, core activity and support activity. Within these areas, publishing and new media companies' offline and online activities are outlined in the model developed.

5.4.2.1 Strategic Activities

'Strategic activities' which is a category described by Vista as comprising the areas of firm infrastructure and business strategy and planning has been considered in the analysis of the children's multimedia market to include the categories of company strategy/background (looking at company focus, culture and branding), change management (organisation, behavioural change and adaptation), and planning and development strategy (research management and techniques for future development, and innovation strategies). The term 'firm infrastructure' which Vista described within their 'strategic activities', has been moved in this study to the 'analytical category' of company 'business support activities'. Key factors promoting value and contributing to the development of children's multimedia products have been outlined and analysed within the strategic activities identified and analysed within the areas of company strategy and background, change management, and planning and development (as are discussed in more depth in Chapter 6).

5.4.2.2 Core Activities

Factors contributing to the development of children's multimedia products have also been outlined within the core activities of content/editorial; product development including creative, technical/programming, testing and development, and product assets; marketing/branding, promotion, sales and distribution, and other services. These 'core activities' are substantially different from Porter's 'primary activities' and Vista International's 'core functions'.

5.4.5.2.2.1 Content/Editorial

Content acquisition was described by Bide as, 'the process by which content for a publisher's products is acquired from its creator(s)' (Bide 1999, 7). This includes sourcing and selecting content, assessing its value and negotiating the rights to use it. Content development was also defined by Bide as, 'the process by which content is enhanced through editing or other activities controlled by the publisher.' He also identified five key tasks that appear to be integral parts of the process of publication and which make up the core of the business of publishing, the crucial added value: 'Selection – Finance – Organisation – Aggregation – Marketing.' In 'selection', he observed that publishers are better

defined by what they do not publish rather than by what they do and that 'a key part of what publishers do lies in the editorial process – selection, acquisition, and commissioning'. The children's multimedia value chain also focuses on the content development category Bide at Vista International describes, but merges the key factors found within one category of 'content/editorial' - including factors or areas of value relevant to both 'content development and acquisition' or 'editorial activity'.

Smith, Cunningham, Allen and Dyson in the late 1990s and 2000 also commented about the values of 'traditional' editorial skills/activity for multimedia production. At the LIBF in 1999, Allen noted that at the heart of the publishing value chain will always be these core 'editorial skills'. Smith and Cunningham in 1998 also identified value for multimedia or 'electronic' publishing, in editorial skills such as **'Origination of content and publishing: commissioning, acquisition, and rights'.** Throughout the analysis of questionnaire and interview results, it was found that the publishers and new media companies sampled were involved in a range of content development services. Some of their key content or editorial activities match those mentioned in previous studies but also expand on these. They are summarised as being commissioning of ideas/products/brands, licensing and negotiating rights, sourcing, assessing value, selecting, sifting, filtering, acquiring, outsourcing, editing, localising, translating, organising and co-ordinating the developmental process (of books, television, audio, software, digital and online development), and effective market communication, for example, relations with/feedback from parents, teachers and children, and subject knowledge. These are all outlined in the Children's Multimedia Value Chain model created (Figure 5.8).

5.4.2.2.2 Product Development

Product development and design was defined by Bide and Vista International as the process through which the eventual form and appearance of the final product is conceptualised (Bide 1999, 10). Another category 'content formatting' was included by Vista International in their value chain model and was defined as, 'the preparation of content for publication in the print world, or pre-press activities and content preparation for electronic delivery.' These activities defined in Vista International's category of content formatting are included in the discussion of key results about children's multimedia product design and development. However, product development activities in children's multimedia companies are described in different terms from those of Porter and Vista International based on the response from those companies sampled in this study. The analysis is also more in-depth within the context of the children's multimedia value chain developed, split into four categories including creativity, technical/ programming, testing/development, and product assets. These are the key areas of value in the process of product design and development which new media and publishing company interviewees highlighted in their response. No specific empirical research has been carried out previously in these areas of investigation. Commentary on these areas of product development and design activities, and product assets discussed here has previously only been speculative and described in the context of generic publishing or multimedia industries. Research into the specific departments or areas discussed in this research, and particularly with a focus on children's multimedia, has been lacking.

5.4.2.2.3 Product Assets

Within the category of 'product development' in the children's multimedia value chain, the areas of creativity, technical/programming, and testing and development have been discussed. Good descriptions of assets or values in children's multimedia products were given by the companies surveyed and interviewed. Product assets or values were considered key to the 'product development' element of the children's value chain model. No previous studies had investigated assets or values specific to multimedia products or content for children – including those value chain studies by Porter and Vista International discussed in this section. The product values or assets discussed above were found to be applicable to both offline and online multimedia products for children and are outlined in the Children's Multimedia Value Chain in this chapter.

5.4.2.2.4 Branding/Marketing

'Marketing' was described by Vista International as an activity related to 'ensuring that the product is properly matched to market requirements, including pricing decisions (much of the activity which is defined as marketing is an editorial responsibility in most publishers)'. In this research, it is described more appropriately as 'branding/marketing' to reflect the findings in the analysis of the children's multimedia market where there is a strong focus by companies on brand development. This study also distinguishes between marketing, promotion, pricing and editorial activities, which had been merged into the one 'functional' area by Vista International. A summary of the key areas of activity in 'marketing' (more commonly referred to as 'branding' in the children's multimedia sector) highlighted by the sample of publishing and new media companies in 1999 and 2000 include:

1. **Market Awareness** - Changes in reaction to the market – schools and home market customers, crazes, key/popular licences, promotion and sales/retail channels
2. **Brand Creation and Acquisition** - Creation, acquisition, management, development
3. **Brand development – cross-platform**
4. **Brand identification and association – promotional development**
5. **Brand Assets/Value** – developing brands which are reputable, reliability, authenticity, accepted authority and quality, continuity of design, clarity, recognisable, adaptable for other media, for example, 'attractive, bright, colourful, catchy, modern, fun'

Detailed information was not available prior to this research into the types of research techniques publishers and new media companies were using to investigate and develop their understanding of the children's multimedia market. These 'testing and development' techniques were also noted in section 5.4.2.2.2.

5.4.2.2.5 Promotion

Key findings relating to a category of 'promotion' were applied to the children's multimedia value chain developed. Bide categorised promotion and advertising under marketing activities in his value chain adaptation, defining promotional activities as 'increasing sales, creation and dissemination of meta-information, advertising, leaflets, catalogues, point-of-sale, reviews, author appearances, linked products events.' This study also highlights key promotional activities of publishing and new media companies contributing to the development of their multimedia for children. However, responses indicated that most development in terms of companies' promotional activity had been occurring in the online medium. Key promotional features used by the companies studied are discussed later in this thesis, providing new knowledge over previous studies. The research distinguishes between online and offline promotional activities by children's multimedia companies and also distinguishes between the categories of 'marketing' or 'branding' and 'promotion', as branding was found be an area which had a unique focus in the children's multimedia sector. Interviewees noted a number of ways in which they achieved effective promotion and advertising of their children's multimedia products – both online and offline, which are outlined in the value chain developed.

5.4.2.2.6 Pricing

The category of finance studied by Porter and Bide et al in their value chain studies was not analysed in-depth in this research. The study adopted a more qualitative approach in that it analyses children's multimedia companies' core skills, resources, activities, services, capabilities, and relationships – key areas of value a company has from within. This was a more appropriate analytical approach in a study investigating the activities of companies (which are often quite small in size) focusing on their strengths in a volatile market such as the children's multimedia market (as recommended by Lynch 1997). This was preferable to Porter's more quantitative approach which measures the financial output resulting from a company's activity and financial input.

However, questioning and discussion did focus on pricing, sales, online advertising and subscription-based models (and results particular to these activities were highlighted as 'value' activities). Pricing, as defined by Bide, is the activity designed to convert promotional activities into sales transactions with either intermediaries or end customers. Findings indicated that there are major differences in the pricing of offline and online products and content and these are described in the Children's Multimedia Value Chain analysis.

5.4.2.2.7 Sales and Distribution

The Children's Multimedia Value Chain expands on the 'sales' category outlined in Vista International's value chain which describes activities designed to convert promotional activities into sales transactions with either intermediaries or end customers. The category developed in this research is defined as 'Sales and Distribution'. This category is more suited to reflect the findings in

this children's multimedia market study which again focuses more on online sales development in comparison to previous studies.

5.4.2.2.8 Other Services

Other services including manufacturing, fulfilment, warehousing, and customer service activities which were highlighted in Porter and Vista International's value chain studies are not analysed in this study in the same depth as in the previous studies mentioned above. These other services, which included manufacturing (defined as activities which replicate the product for sale) are discussed briefly throughout. Warehouse and distribution are also discussed briefly under 'Sales and Distribution'. Aggregation is discussed under various previous categories, and customer service is also discussed under other categories - but the particular focus of analysis in this research is on pre-sales. Fulfilment and market research/customer services are again discussed in other core activities including testing and development and strategic activities in the value chain developed for children's multimedia.

5.4.2.3 Support activities

Support activities for children's multimedia development were identified by the publishing and new media companies studied and have been outlined in the areas of human resource management, and business process and structure. The third and final area of activity in the children's multimedia value chain developed is business process and structural (support) activities which involves factors of value related to the development of the human resource management of the companies studied (including new skill requirements, skills transfer and training and recruitment). It also involves an analysis of the factors which are key to the development of business processes, structural changes, and key departmental/functional relationships which add value in the children's multimedia companies studied. These factors are discussed in the following sections and are outlined in the children's multimedia value chain. This research does not discuss reward structures as noted in Porter's original value chain but discusses the types of training publishers and new media companies sampled were offering their staff.

5.5 Summary

These key strategic, core, and support activities discussed throughout Chapter 5 are highlighted in a Children's Multimedia Value Chain model 1 (Figure 5.7). These activities are differentiated by colour coding. The value chain has developed from an analysis of the response from publishers and new media companies in the children's multimedia market sampled - an analysis of the external market and internal company activity, an analysis of others' value chain studies and development, and literature on change management and innovation strategy theory.

A more in depth children's multimedia value chain model has also been developed (Figure 5.8) outlining more specific details within the strategic, core and support activities particular to the children's multimedia companies studied and individual activities are broken down into key factors

affecting offline and online activity. The information outlined in this model is based on some of the key results outlined in Chapter 4 and discussed in Chapter 6. Section numbering has been noted in each category of the value chain (Figure 5.8) if the reader wishes to refer to the discussion centred around the factors outlined in the model in Chapter 6. The Children's Multimedia Value Chain models and Five Force model developed in this study of the children's multimedia market could be adopted in other sectors of the publishing, information and communications industries. These models could serve as an aid to companies in their analysis and development of their 'businesses' for new or volatile markets such as multimedia.

Fig. 5.7 Children's Multimedia Value Chain 1 (based on Discussion of Key Results)

COMPANY STRATEGY/BACKGROUND

CHANGE MANAGEMENT

PLANNING AND DEVELOPMENT STRATEGY

CREATIVE

CONTENT EDITORIAL

TECHNICAL/ PROGRAMMING

TESTING & DEVELOPMENT

PRODUCT ASSETS

MARKET/ BRANDING

PROMOTION

PRICING

SALES & DISTRIBUTION

OTHER SERVICES

HUMAN RESOURCE MANAGEMENT

BUSINESS PROCESS & STRUCTURAL SUPPORT

Strategic activities   Core activities   Support activities

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6.3.1.1 COMPANY STRATEGY & BACKGROUND – company branding, culture, values & value shifts

6.3.1.2 CHANGE MANAGEMENT – organisation and types of change in adaptation of process and behaviour

6.3.1.3 PLANNING AND DEVELOPMENT STRATEGY – research management & techniques, innovation strategy

6.3.2.1 CONTENT/ EDITORIAL

Off/Online
- Education & subject expertise
- Good market relationships & feedback (from educators, parents, family, & children)
- Commissioning of ideas/products/ brands
- Acquiring & negotiating licences, rights & talent
- Sourcing
- Assessing value
- Selecting
- Sifting
- Filtering
- Editing
- Localising
- Translating
- Outsourcing
- Organising & co-ordinating development process
- Content development

6.3.2.2.1 CREATIVE

Off/Online
- Innovative
- Technology-aware
- Technological capabilities v creative ideas balance
- Realism re time/finance considerations v creative ideas balance
- Commercially-aware
- External collaboration or in-house teams preference or combination
- Effective, open relationships with other departments
- Developing in-house visual resources

6.3.2.2.2 TECHNICAL/ PROGRAMMING

Off/Online
- Commercially- aware
- Innovative
- New technology-aware
- Realism re time/finance considerations v technical capabilities and creative ideas balance
- Maximum use of software engine & digital capabilities
- Need for 'awareness' of creative, editorial, educational considerations rather than 'cross-over' skills
- Developing in-house resources and teams
- In-house programming development
- Effective, open relationships with other departments

6.3.2.2.3 TESTING/ DEVELOPMENT

Off/Online
- All products targeting teachers, parents & children
- Testing groups
  - testing managers
  - internal & external teams for information re:
  - market crazes/subject preferences
  - technical knowledge
- Home/consumer testing
- Children & parent groups
- School classroom testing
- Children & teacher groups
- Research management systems

6.3.2.3 PRODUCT ASSETS

Off/Online
- Educational/ NC requirements
- Entertainment/ edutainment focus
- Strong/popular/ reputable/ familiar brand, rights, series, writer, illustrator, narrator, story- teller, characters
- Quality, creative, modern visuals
- Clear, logical, interactive, engaging structure
- Adaptability
- Complimentary values & products
- International focus
- Subject-specific niche

Online
- Premium services i.e. downloadables, hints & tips, homework help, worksheets
- Suitable, comfortable, & accessible product, brand & co info
- 'Free info' culture
- Magazine publishing cycle similarities
- Updates & archives
- Simple, intuitive sites
- Ease of navigation - effective prompts, category searches
- User return
- In-house subject database development

6.3.2.4 MARKET/ BRANDING

Off/Online
- Market awareness
  - Home
  - Schools
  - New technology, platforms, programming, online developments
  - New offline products and online content
- Creation
- Acquisition
- Development
- Cross-platform
- Outsourcing
- Identification
- Association
- Influence on User/ Purchaser
- Features/Values
- Reputable
- Reliability
- Authenticity
- Accepted authority and quality
- Continuity & clarity of design
- Adaptable for new media
- Attractive
- Recognisable
- Bright & colourful
- Modern, fun
- Appropriate for retail or online

6.3.2.5 PROMOTION

Offline
- Packaging design
- Childcare, parenting, women's magazines
- Computer & educational press
- TV adverts for larger brands
- Awards & prizes
- Brand-related events & merchandise
- Industry fairs & conferences
- In-store retail
- Website

Online
- Creation of community of user
- Wish lists/ user info
- Mailing lists/shots
- Product breakdown
- Ease of navigation
- Quality info & visuals
- Promoting authors, series, sample product, 'tasters', free games & activities
- Testers/samples
- Security & integrity of offer
- Links to related & quality sites of interest
- Links to company's other branded products i.e. toys, books, videos, sweets

6.3.2.6 PRICING

Offline
- Spin-off/price perception schemes
- Price/brand/ purchase link
- Product/price dependent
- Pricing decisions

Online
- 'Free' information culture
- Advertising-based models
- Subscription-based models
- Sponsorship arrangements
- E-commerce model

6.3.2.7 SALES & DISTRIBUTION

Offline
- Seasonality-affected
- Book
- Electrical
- Toy & high street retailers
- Games/ computer
- Music stores
- Libraries
- Supermarkets
- Direct sales to schools
- Online sales
- Traditional package problems

Online
- Online catalogue
- Clarity of brand
- Clarity of online catalogue links
- Breakdown of all products
- Price & visual info about products
- Ease of navigation
- Secure & effective ordering, payment & general security mechanisms
- Offers – bulk buys, extras, budget lines, competitions prizes
- Wish lists/user info
- Mailing lists/shots

6.3.2.8 OTHER SERVICES

Off/Online
- Manufacturing
- Fulfilment
- Supply
- Warehousing
- Customer service

5.4.4.1 HUMAN RESOURCE MANAGEMENT – new skills requirement, staff increases, start-up skills, skills transfer & training

5.4.4.2 BUSINESS PROCESS & STRUCTURE SUPPORT – structural changes, internal critical relationships, external collaboration/outsourcing

Legend: ☐ Support activities ☐ Strategic activities ☐ Core activities

Fig. 5.8 Children's Multimedia Value Chain 2 (based on Discussion of Key Results)

Chapter 6: DISCUSSION OF KEY RESULTS

6.1 Introduction

In this chapter, the key results which emerged from the questionnaire surveys and interviews undertaken throughout the study period are discussed and some broad conclusions are drawn. These results include external and internal factors identified by companies as impacting and contributing to their development and success in the children's multimedia market in the UK.

6.2 UK Children's Multimedia Market

Throughout the period of research, external factors or forces affecting companies in the children's multimedia market in the UK have been identified and analysed. An analysis of the market developed from the literature and contextual information studied from 1998 to 2001, and from questionnaire survey responses from book publishers in 1998/1999 and new media companies in 1999/2000. Questionnaire research was very much exploratory, set within the initial process of identifying development factors or areas of value for companies in the UK children's multimedia market. Specific categories of questions uncovered information about external factors and important information also emerged within other categories such as sectors involved in the market, influences/changes, products, processes and relationships, variation of company type involved, activity, structure, culture, competitors, and other forces and developments. This information about the market helped outline the external forces companies should be aware of within a multimedia market.

6.2.1 Suppliers, Competitors and Mergers

Various children's companies and factors influencing or shaping their activity were found to be active in the UK multimedia market from 1998-2001. The initial identification of these companies was vital to the research as in the mid to late 1990s, there was much experiential reporting and commentary in trade journals, reports and websites on general developments in the fields of generic 'multimedia' or 'electronic' publishing and technology in the UK, US and Europe. However, there existed a notable gap in empirical research into the types, and activity of, companies in the UK children's multimedia market - the focus of this study. Literature in the area of children's publishing tended to focus more on book trends (Fisher 1993, Horn 1997, and Reynolds and Tucker 1997) or the more technical aspects of multimedia design for children and education (Bennet 1994, Rieber 1996 and Druin 1998). Writers such as Snyman, Feldman, Bide, Shatzkin, Negroponte and Eisenhart (1996-1999) had been sceptical about the traditional publisher's role and noted that publishers needed to restructure, conform to 'new rules' and perspectives, and develop new strategies and management frameworks as 'multimedia came of age' and offered new opportunities. Key research findings from this study describe these 'new rules' or 'strategies' which companies should be adopting for their production of multimedia.

In 1998, Pethick had observed that smaller organisations were emerging in the UK multimedia market at that time (Pethick 1998). It was found throughout the project that smaller children's publishers were having particular problems in the multimedia market. Therefore, the identification of ways in which smaller publishers could achieve success and develop strategy accordingly in the multimedia market required further examination. Literature studied in this area has focused on the activity of small and medium sized companies who have achieved success in the North Sea oil industry (Storey 1996), high-growth firms (Welbourne 1997), entrepreneurship in small firms (Deakins 1996) and the growth constraints on small and medium sized firms (Hughes 1998). At the Third Electronic Publishing Conference, Sweden it was highlighted that smaller publishers are struggling in the 'electronic publishing' market but also that some countries have produced successful companies which have developed their operations from small scale to a significantly advanced stage (Linde 1999). This study also indicates that although 30% of small conventional publishers had dropped out of the multimedia market, new media companies, which are also relatively small in size, are achieving success in this area. When smaller publishing companies were asked in questionnaires and interviews about their future intentions regarding multimedia production, publishers explained that they were being cautious in their approach but also positive about the future. Based on previous studies and the key findings from this research it seems that smaller companies in the multimedia market would be wise to focus on their core resources, skills, capabilities and competences.

The resistance of the majority of traditional publishers to enter the children's multimedia market was mainly due to the high investment costs involved, a lack of the appropriate skills (such as technical and marketing skills) required for multimedia production, and the small size of children's publishing companies in the UK. It was found from the initial telephone interviews that smaller publishers would be wise to consider partnership (43%), licensing of material (35%), and investment in research and development into children's multimedia (22%). Looking at best practice examples from other industries, external collaboration, research and development into key brands, and training investment all appear to be necessary for companies struggling due to size constraints. One new media respondent had noted the benefits of being part of a larger broadcasting or communications operation in that it allowed companies to 'diversify, experiment, take risks and ultimately cultivate innovation and stimulate creativity in more than one market'. Based on these results, smaller companies in the multimedia market would appear to benefit from mergers or partnerships with larger organisations.

Research findings also showed that both the publishers and new media companies sampled felt they have a significant part to play in the children's multimedia market and envisaged a similar position from the time of study to 2004, contradicting the scepticism about the traditional publisher's role by writers in the mid to late 1990s (Snyman 1995, Feldman 1996, Horn 1997, and Negroponte and Gates 1997-1999). Those traditional publishers who had been achieving success in the children's multimedia market appeared to be doing so by focusing on their key assets and brands as recommended by Rosenheim and Lynch in 1997 and Chandy and Tellis in 1998. Bide commented that the relatively low

cost of entry into the market place, coupled with the growing influence of both creators and consumers in the supply chain, would continue to provide opportunities for new entrants alongside existing players and noted that publishing companies in particular must change to meet the changing demands of the marketplace or other businesses will take their place (Bide 1997). The publishers studied producing multimedia for children reported to be doing this by way of investment in training and changing cultures and structures and those in the interview samples were well placed to take advantage of the opportunities of new publishing media through CD-ROMs, digital content, web sites and other online services.

In the mid to late 1990s, Snyman and Feldman noted other companies, alongside publishers, such as new generation or new media companies, software, television and audio-visual production companies appeared to have entered into the multimedia market. However, this research indicated that a wider variety of players (including new, non traditional competitors) were competing with each other in the children's multimedia market than had been previously thought. The results of this investigation showed that overall, new media companies started up their children's multimedia production later than book publishers and both companies were influenced by market demand (a larger percentage of new media companies), competition/US, and product development (a larger percentage of book publishers). The low barriers to entry that Bide mentioned meant companies from other sectors (for example software, broadcasting, film, music and other entertainment sectors) began to create extensive content in multimedia format, raising the competitive pressures. Findings indicated that this variation of company was also common to/in the children's multimedia market in the UK at the time of study and other company types were identified from the publishers and new media companies surveyed and interviewed as being present in the UK market such as: software (CD and DVD producers), broadcast, games, hardware, digital, telecommunications, online (web and content developers), production and support services, music, toy, and confectionary companies.

Based on the response, the children's multimedia market seems to have one of the most varied range of company types active in the UK multimedia market. These companies were also reported to be producing products for children cross-platform, another unique feature specific to the children's multimedia industry. The main competitors or successful companies in the UK children's multimedia market in 1999 and 2000 noted by both publishing and new media company types interviewed appeared to be large conglomerates with other strengths such as media and toy production or educational expertise. According to the majority of publishing and new media companies' interviewees, the key players or competitors in the children's multimedia market were noted to be: Microsoft, Granada and Anglia in secondary schools; Longman Logotron (Pearson) and Sherston in primary schools; Espresso and Research Machines (RM) becoming stronger in the schools sector; BBC in both sectors; DK in the home sector; and The Learning Company, Disney, Lego and Mattel were becoming stronger in the home sector. Europress, Nelson, Letts and Havas were also noted as being threats by the companies interviewed in 1999. Other toy companies such as Hasbro appeared to be

developing effectively in the market forming successful multimedia operations such as Hasbro Interactive, producing CD-ROM and games products for children across a wide age range.

Findings indicated that a cycle or pattern of mergers and acquisitions involving new media and publishing company respondents and other company types was occurring in the children's multimedia market similar to those reported in the generic multimedia market in 1998 by writers such as Snyman, Williams, Barrington, Watson, Bury and Pearson). These mergers and acquisitions highlighted that market pressures such as technological developments and increased and varied competition were forcing a shakeout in the multimedia market, and survival depended on a company's ability to market their skills, develop partnerships with other larger players, exploit niche markets and control costs. These writers also observed that companies in the generic 'electronic' or 'multimedia' market in the UK and US were merging or acquiring each other in order to achieve success or advantage in the market.

From the survey and interview responses in 1998 and 2000 it appeared that both publishing and new media companies were experimenting, in the form of merging and acquiring different companies as predicted by Snyman, Williams et al. in the late 1990s. Subsequently, there has been no research to support this. However, this research found that the focus of activity for the children's multimedia companies studied was mainly acquiring key and popular brands and licences ahead of competitors. The importance of keeping up with/identifying popular trends for UK children was noted as being key in this area. No known empirical research had been carried out in relation to this area prior to this study. Representatives from both company types also felt that more mergers would occur in the sector with software and production companies (significantly more new media companies had this view), and international companies. Book publishers thought that they would co-exist in the market place with other company types - some sceptical, felt threatened by software, toy and media companies. The majority of respondents from new media companies predicted that there would be an increase in international, book, software and production company mergers, toy company development, and mergers acquisition and development of small creative companies. They also felt that companies should be looking at market consolidation, cross-platform production strategy (due to fast-changing nature of market), and the benefits of larger operations and acquisition in other areas such as confectionery and theme parks or shops in the children's sector. One new media company commented:

> 'It will be interesting to see what other players will come into the mix, be it music companies, who are turning to other media. I think a lot will happen in the next few years because there is so much new technology.'

All interviewees predicted that there would also be more mergers occurring with, and threats coming from, international companies and felt that their production was influenced, in the main, by the US market which was noted to be ahead of other countries in terms of development. It appears that UK children's multimedia companies would therefore be wise to a) get involved in partnerships with US companies in some instances, but b) also benefit from researching best practice examples of UK/US

partnerships and successful US companies to identify the most appropriate approach for development in the children's multimedia sector.

6.2.2 Customer/Buyer Power

The research findings reflect Stone's idea that it is important for both publishers and new media companies to determine 'where the value-added sits today and where it will change' (Stone 1999, 20). He noted that in deciding what value companies wish to add depends on the type of consumer they have chosen to serve, which in turn depends on what is unique about the publishers or new media companies, for example: existing customer base, skills, resources. Both publishing and new media company respondents targeted the non-consumer (schools) and consumer (home) markets and most were targeting international markets at the time of study. Interviewees' definitions of sectors within the children's multimedia market varied, but for the purposes of this research, the market is divided into two sectors only – schools and home (not games). Within the home and schools sectors of the children's multimedia market, respondents were catering for a unique type of consumer, the 'middle market' (including parents, friends, family or educator purchasers who buy products/content for children) which Cowking (1996) and Samper (2000) had identified in earlier research as being an important area of focus for children's book publishing. From Samper's experience (PR consultant and children's book author), he explained:

> 'When talking to your customers, each one needs talking to in a different way, even if it is about the same product. This is especially true for children's publishers communicating to multiple markets.' (Samper 2000, 10)

All book publishers and new media companies' interviewees in 1999 and 2000 found that the children's multimedia market, like the children's book publishing market, was also unique in that the user and purchaser were usually different people and one publisher noted, 'the critical factor is making sure you have got the two levels of the market - the user and purchaser - right.' The children's multimedia user/purchaser situation appears to be even more complex than the children's book user/purchaser relationship. As companies started producing information for children cross-platform, various factors such as new brands, popular trends in new media products, new technology-aware children, a lack of parental knowledge or desire (for example, respondents explained that parents typically had queries or concerns about multimedia replacing the aesthetic quality of the book and questioned the value of new media in comparison to books), and new purchasing locations (for example, new retail outlets and online methods) were all found to influence the user/purchaser's relationship with children's multimedia. One interviewee with broadcasting operations noted that certain drivers for purchase existed in the children's multimedia market:

> 'Parental Guilt/Support' and 'Pester Power' or 'Playground Word of Mouth' (Blue Peter falls in to the former, Live and Kicking falls in to the latter) and this differs for books.'

The same interviewee found from their focus groups' feedback that when the parent does not have the knowledge or information required to make a DVD or CD-ROM purchase, then he/she is reliant on 'Pester Power', whereas the 'Parental Guilt/Support' driver is 'more about the product propositions which parent's prefer, such as value, quality and that 'fun through learning' factor again – which is

slightly over-rated.' Others noted that different paths should be followed for the parent/educator and the child to ensure clarity and accuracy of product information for example, value – education, entertainment; price; packaging; promotion; branding; and character merchandising to allow for effective communication with the purchaser. Book publishers and new media companies' experiences of the middle-market and the influences which vary to different degrees as the child grows older are illustrated in the UPP triangle (see Chapter 4, Fig 4.34, 124). Respondents noted that when the child is at a young age, the purchaser is either the parent or the educator and the child is obviously the user. As the child gets older he/she also becomes a purchaser. These three types of purchaser/user include the parent, teacher/educator and child, and each were noted to have a varying influence on the purchase of a children's multimedia product, which differs as the child's age increases.

Certain external factors and their changes and development appeared to be affecting book publishers and new media companies and their children's multimedia production in the schools and home markets in 1999 and 2000 and the interviewees highlighted these areas of influence. All interviewees commented that a new market had developed for children's multimedia in the late 1990s, with a decrease in hardware costs resulting in an increase in PC home ownership and an increase in internet use in nurseries and schools. This increase in PC home ownership was noted by two new media companies, to have had affected the younger members of the family (2-3 year olds) as interfaces became more accessible, user-friendly and affordable and two interviewees noted that nurseries were getting PCs at the time of interview, suggesting developments in the younger-age sector of the market which could be perhaps explored in another study. It was also noted by new media company interviewees that most schools have a sufficient amount of PCs for their students and 60% of schools have internet access, although they were uncertain about the number of schools actively using content online. It appears then that companies in the children's multimedia market should be identifying those schools, educational or childcare organisations which have IT facilities, assessing their IT capabilities, and ensuring their company products are well-matched with the needs or demands of the children and educators in these organisations. The PC, multimedia and online usage, knowledge, and attitudes of educators, management and support staff appears to require assessment, support and development.

A 'new generation' of children more sophisticated and confident with new media was thought to be emerging by several of the interviewees, supporting the ideas of Askew who discussed 'The New Generation' report by Handel Communications which noted that 'a new generation of reader is emerging with a different life agenda' (Askew 1995, 30). Interestingly, two of the new media companies interviewed also observed how technological developments had encouraged the change that was required in the way parents (the multimedia buyers) of this new generation of children were thinking about multimedia. However, the majority of companies' responses in this research highlighted a need for further change in parental views and attitudes to IT and new media. Educating parents about how to use multimedia and promoting the value of multimedia for their children is a suggested way forward. Online training and education services in the business, home and education sectors were predicted to grow strongly until 2005, and various European, Governmental and educational projects

and initiatives were developed and implemented in the 1990s to encourage growth in the UK market's multimedia and online use. Based on the response from this study, it is suggested that there is still further improvement required in terms of new media, online training and education in the home and schools sectors in the UK. As although computers, new media and online services are becoming more accessible in classrooms and homes (as noted by Cole, Ward and Taylor in 1999), they are not being used to their full potential. Further training and education about new media and online services and general computer usage for children is required in order to shift some of the negative attitudes of parents and educators which was noted by this study's sample to still exist in the UK.

6.2.3 Entry

Various educational and governmental initiatives and projects encouraging multimedia development, particularly online development (including research, developmental and financial support), (such as those projects and initiatives reviewed in the literature study in Chapter 3) were all noted to influence the companies' children's multimedia production for the school's sector in particular.

An awareness of National Curriculum requirements and initiatives (yearly) in advance was considered an important factor in the development of companies' children's multimedia products for the schools market. UK schools' purchasing was also noted to influence the children's multimedia companies produced. One company noted how the UK Labour government, in 1999, was 'committed to driving online education' and that influenced by The National Grid for Learning, all UK schools would have internet access in the year 2002. The recent developments in the pre-school curriculum introduced by the HMIE from 1997-2001 and the rolling out of the new curriculum and care standards from the Care Commission could also affect the types of products children's multimedia companies are produced for pre-school groups. However, some interviewees were sceptical about government investment and educationalist's support to fulfil this commitment. The interviewees' comments supported the views of Taylor and Young (1999) who noted that print products still dominated in schools. Reasons suggested for this included: a lack of resources, and again, training and educating of educators and local education authorities about multimedia usage. Some respondents had noted that educators were still requiring evidence that technology enhanced learning, and others realised that multimedia use was important from an early age, noting that a standard set of IT skills is now required for leaving secondary school. The key aims of European initiatives encouraging multimedia development such as Info2000 and Schoolnet have also been fostered in companies in the UK, through the use and development of ICT, focusing on key skills and areas of value, and support for online network development, access and support. Therefore, an education on the use and value of multimedia for children appears to be required for educators of children in the UK.

6.2.4 Products (New or Substitute)

Both publishing and new media companies interviewed were found to be producing new media products, cross platform and developing their content online.

6.2.4.1 Cross-Platform Development

Rittenberg and Rosen in 1999 noted that publishers in the generic multimedia market need to learn to recognise trends and react decisively and much more rapidly than even a decade ago. The book publishers and new media companies sampled appeared to be doing this quite successfully. From an analysis of the publishers and new media survey responses in 1998 and 2000, book publishers' multimedia production seemed to be part of a wider range of products for children – providing a very much complimentary role, although 42% stated that multimedia was a significant part of their production. A higher percentage of new media respondents attributed their entire production to children's multimedia.

Cunningham and Smith's findings which indicated that within the UK multimedia consumer market, CD-ROM has been the main delivery platform. They, alongside Attwooll also recommended 'hybrid products' or 'convergence technologies' in 1998. This study's findings supported these previous studies with all book publishers interviewed in 1999 noting that their main multimedia focus at that time was on CD-ROM, but with a hybrid element in that they produced books, had web sites and were also developing content online. They felt that new media was constantly evolving and one felt that the UK would not witness 'the fall of the CD-ROM' until 10 years time (2009). However, the new media companies interviewed a year later in 2000, had already been experimenting with new technology and developing new products and platforms for the changing market. All new media companies interviewed were experimenting with, expanding and developing their product and platform range, (noting the use of 'new' technologies being reported at the time of study in technology and computer-related journals), with the use of WAP technology, internet technology and gaming platforms such as Playstation 2, Dreamcast, the X Box and other consoles. Online gaming, digital and interactive TV, 'the full entertainment system' ('once improvements in broadband delivery have been made') were considered to be the next steps for most of the new media company interviewees. DVD sales had not appeared to overtake CD-ROM sales in the period of this study as predicted by Cunningham Smith a year earlier. New creative complimentary products, developed to enhance the multimedia experience, such as play-sets and electronic microscopes, were also being used by some new media companies. The companies interviewed were all producing and developing a wide range of multimedia products for children and all seemed to be aware of, or keeping abreast of, new technology and products which may impact on their future market performance – a key factor for companies competing in volatile markets.

6.2.4.2 Online Development

Although UK children have been increasingly demanding new media and online developments, (as noted in experiential reports by industry commentators and researchers), there still appeared to exist a need for improvement in the online activities of children's publishers in the UK market. In an article in 'The Children's Bookseller', Sylge noted, 'It is shocking how slow children's publishers have been in developing their internet presence' (Sylge 2000, 16). Although the research found this to be true in the earlier stages of research with smaller publishers struggling and dropping out of this volatile market

(see Chapter 4, 96), as the period of study continued, increasing numbers of children's publishers were developing effective online activities or models such as those recommended by Aston, Ward, Cunningham and Smith, Negroponte Gates and Diebold from 1997-1999 which emphasised the importance of shifting from traditional publishing models to differing access, distribution, payment, and advertising models for online content production and business activity.

Findings indicate that the internet is being used in a variety of different ways by the children's multimedia companies studied. However, a model for effective online content delivery still appears to be under development by practitioners and researchers alike. From the questionnaire survey results in 1998 and 2000, both company types predicted growth in the online sector, although a significantly larger number of new media companies predicted this and felt the move would be towards direct distribution, online learning, early learning, revision and schools-tailored programming. A smaller number of book publishers felt the move would be towards TV, hybrid products and rights development. One publisher felt book products were more suited to an online format than CD-ROM. Four of the book publishers interviewed in 1999 felt that the focus of their children's multimedia production at the time of interview was on hybrid products and online technology which matched the views and predictions of Foster, Bide Atwooll, Lakeman Fraser, Rittenberg, Rosen et al in the late 1990s. They had similar views that hybrid and online content would offer more advantages for publishers and customers than CD-ROM, and while both technologies would continue to develop, the technical limits of CD-ROM are likely to be reached substantially before the limits of online in terms of their ability to deliver the value which customers can identify. Results in 2000 confirmed that new media company interviewees shared this view. All new media companies interviewed in 2000 were producing CD-ROM and developing online content at the time of interview. One company noted the importance of estimating when a company should start shifting the concentration from CD-ROM to online production:

> 'It's making sure your CD-ROM production, which is going down, and your online production, which is going up, cross at the right time. If they cross when demand for online is too low then you're in trouble. If they cross at the point when your online demand is sufficient, when the public stop buying CD-ROM, then you will be okay. My gut feeling is that in 5 years time, CD-ROMs will be a rarity.'

Again, these results demonstrate that companies were having to plan and predict for future multimedia production. Another key finding was that the majority of publishers interviewed in 1999 felt that the attitudes of parents, educators and the culture and attitudes of staff in UK book publishing companies about using the internet had to change and the quality of the material online had to be improved. Others noted the importance of creating revenue by providing additional and profitable online services, 'fresh marketing and promotion ideas' and direct sales for the user. All new media companies interviewed in 2000 claimed to be witnessing a growth in the online sector and most also stressed the importance of having additional online services on subscription to combat competition, providing the user with added value, premium services online. The services they were developing included for example, online tutors and free homework clubs, with an increase in home/distance learning, high quality and support levels, increased internationalisation, pocket money schemes, games and competitions. Innovative and creative

ideas in terms of online development were highlighted by the companies interviewed. For example, one new media company was developing a site whereby children, parents and teachers could do their banking on the site and use their money to buy related branded products from the company web site. With regards to online development in schools, five of the interviewees noted that online delivery for schools was going to be a must and three companies noted that the whole of multimedia was moving against the idea of charging, 'Multimedia - particularly the internet is becoming free-er. We'll be paying the user to go online soon.'

The response from the publishing and new media companies studied was generally positive regarding steps taken towards online content production and business development. However, all interviewees were concerned about ways of making their online activity profitable and offering added value. This supported the views of writers such as Cunningham and Smith and Diebold (1997-1999). However, this study on the children's multimedia market in particular, found that in the market an increased focus on branding and linked advertising and sponsorship deals for specific age groups or subject sites were noted as being the way forward for the majority of interviewees. Companies need to apply effective and secure online payment mechanisms, and sponsorship and advertising models which add value - with other related companies such as toy, bike and skateboard manufacturers and retailers.

Some of the key issues both company types interviewed in 1999 and 2000 felt threatened by in developing their children's multimedia online are summarised below:
- Costs v profit (getting the financial model right)
- Pricing v quality (trade driven)
- Lack of government funding
- Free online delivery
- Acquisition of popular brands/licenses
- Bandwidth restrictions
- Call charges
- Piracy
- Unsuitable material (sites and chat rooms, for example)

Results also support Andersen Consulting's study which indicated that, 'to prepare themselves for success in this new area, publishers have to rethink their business processes and structures' (Andersen Consulting 1999). The response from companies in the children's multimedia market has indicated that children's multimedia companies need to ensure effective models are created to develop online content, business, payment, advertising, and sponsorship activity. They also highlighted a need for more appropriate branding, product links, technology capabilities, and pricing and safety mechanisms in place for online development.

These key results which have been described in this chapter identify external factors affecting companies in the children's multimedia market. These external factors are outlined in a Children's

Multimedia Five Force model which has been developed from Porter's original Five Force model (Porter 1980) and is described in further detail in Chapter 5.

6.3 UK Children's Multimedia Companies

The research results from the questionnaire surveys and the literature reviewed in 1998-2000 identified a selection of successful publishing and new media companies in the children's multimedia market. Companies' factors of value and development were identified, initially in the questionnaire survey findings, and expanded on further in the interviews which followed with successful new media and publishing companies. These factors were originally categorised in the areas of company culture, staff structure, staff skills, company procedures, and strategies for future development in the analysis of the questionnaire surveys. These areas of exploration developed due to the in-depth nature of the interviews to include other areas of activity, skills, relationships and other resources which are described in the following section of this chapter.

6.3.1 Strategic Activities

6.3.1.1 Corporate Strategy and Background

Responses from the publishing and new media companies studied supported Porter's view that:

> 'the reason why companies succeed or fail is perhaps the central question in strategy and any effort to understand success must rest on an underlying theory of the company and an associated theory of strategy.' (Porter in Dyson and O'Brien 1998, 52)

The study sample also agreed with Hamel and Prahalad who argued that resources are particularly important in the development of corporate strategy - their starting point is the contribution that resources make to the organisation. This focus on resource development (alongside a technology-awareness) is very much key to the strategic activities of the publishing and new media companies studied. The majority of publishing company representatives producing children's multimedia surveyed and interviewed in 1998 and 1999 noted that their companies had adapted their focus, producing books, magazines and television products originally moving to CD, then to DVD, hybrid production and online content provision. They viewed this move as providing a complimentary role to their existing products. They had built on marketing, brand reputation, and heritage (for example, 'a commitment to education, quality, and trust'). One company commented, 'It was tough as we had to build a market, brand and reputation'.

However, the new media companies' representatives who responded to the 1999 survey and 2000 interviews noted that their adaptation was minimal, with their original purpose to produce and develop new media, primarily CD-ROM, and online content and website development for marketing, promotion and sales purposes. These companies did not have to invest so much effort as the publishing companies studied into adapting or changing the cultural management of their companies. They provided stand-

alone products, and had developed 'young, innovative team cultures', with a product focus on family
entertainment/edutainment and education, with some toy product links and association. Representatives
from both publishing and new media company types were producing children's multimedia for pre-
school, 5-8, 8-12, teen, and special needs markets. Two noted that the teen market was the most
difficult area to produce multimedia for and an issue identified here is how do companies produce
edutainment multimedia for the teen market which is so competitive with gaming products? They also
focused on the provision of a cross-over product range with both education and entertainment content
values, and were developing in international markets, and other sectors of the market such as toy,
television, and games.

6.3.1.1.1 Company Branding

The research results support the views of various writers who have emphasised the importance of in-
house branding in a changing business or new product development (Hankinson and Cowking (1993),
Rosenpan (1998) and Tilley (1999) et al). Peters wrote of the new media market, 'The market is
hopelessly crowded. As a result, branding is more important than ever before' (Peters 1999, 46). Both
publishing and new media company interviewees also emphasised the importance of developing and
promoting their companies' brands for children's multimedia (particularly on an international scale).
The new media companies' branding in the study tended to focus on entertainment, toy linkages and
cross-platform delivery. One new media company interviewee (whose company also produced toys)
described its children's multimedia brand as being:

> 'young, creative, innovative and an extension to the fun association of our toy brand reputation.
> We can carry that heritage into our new media products and that provides parents with guidelines
> as to the quality and enjoyment to expect from our company's products. It's important for our
> company name to stand out on the boxes on the shelf.'

Some of the new media companies' interviewees supported the views of Spillane (2000), Tilley (2000)
and Young (1996), noting that the staff in an organisation need to be trained, informed and motivated
in order for them to communicate and project their company brands and values effectively:

> 'The corporate values – what they are and how to project them – should be as intrinsic to
> recruitment and training as they are to marketing and promotion. Good branding starts with values,
> and not only increases business and company loyalty, it also reduces attrition in a skills/employee-
> driven labour market.' (Spillane 2000, 15)

A new media company representative described their brand acquisition approach:

> 'With the combination of the educational brand we acquired from a book publisher with a strong
> educational reputation, and our own strong brand in family entertainment, we can cater for both
> markets effectively.'

This approach appears to indicate that companies can alter both their brand, reputation and market
focus, and/or the market's perception of the companies' values. Whereas, the book publishing
companies' branding tended to focus on the schools market - education, trust, governmental and NC
support. The market leader, at the time of study, branded its company by its 'quality, trust and support,

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educationalist's approval, commitment to government initiatives and a large, wide-ranging catalogue.' Both publishing and new media company types represented in the study also highlighted the importance of a 'quality' element in their companies' children's multimedia branding. On an international scale, one interviewee with broadcasting operations noted that certain company brand values were promoted such as 'integrity, newsworthy, quality', while another emphasised the values associated with their company to be, 'quality, education and Englishness' to everyone from their staff to their international buyers, agreeing with Tilley's idea of the 'storytelling' capability of a brand (Tilley 1999). Although these brand values should be maintained, research results indicate that adjustments are continually being required to cater for market likes, dislikes and requirements.

6.3.1.1.2 Company Culture

All companies identified linkages between strategic and cultural change as noted by Scholz in 1987. Cummings and Worley noted that efforts to implement a new strategy can fail because a company's culture is unsuited to the new business. 'A corporate culture that was once a source of strength for a company can become a major liability in successfully implementing a new strategy' (Cummings and Worley 2001, 522), noted in the mistakes made by some of the smaller publishing companies who entered the multimedia market in the late 1980s, mid 1990s. The majority of publishing companies' representatives surveyed and interviewed indicated that they had developed and adapted a company culture suited to producing and developing multimedia for children, focusing on more adaptable, leaner, and flexible structures within their organisations. These findings support Burnes' and Fowler's views that note the objective of many organisations is to move from a static or rigid culture and structure to one that is flexible and adaptable with, 'information and decision-making pushed down to the lowest levels; decentralised teams and business units accountable for specific products, services, or customers; and participative management and teamwork' (Burnes 1996). Stamper, who analysed the cultural impact of a system, offered a method of analysing the impact of an innovation such as a new product, a change to an organisation or, more specifically, a new information system. He, and Kotter and Schlesinger, noted that in order to achieve effective cultural change there must be a willingness from management, through a variety of means, to communicate the core beliefs and values of a company (Stamper 1988, and Kotter and Schlesinger 1979). Some of the publishing companies who had entered the children's multimedia market in the early 1990s, had to drop out with reasons behind this supporting some of the ideas of Stamper, who had noted a link between staff commitment and cultural change. Publishing companies which had failed noted that they experienced problems with staff commitment and values for cultural change management.

6.3.1.2 Change Management

A relatively small amount of literature on the process of change and decision making in the publishing industry was found (Luey 1994). Therefore, the area provided a sufficient amount of ground for new research, especially given the changes in multimedia publishing for children. In March 1998 at the

London International Book Fair (LIBF), it was reported that the economic cycle of change in the publishing industry had shifted from 7 years to 12 months. This shift in the industry (Pethick and Yip 1998) had become prominent due to the emergence of the internet as a viable medium, increased accessibility of products and industries, and the globalisation of markets.

In a rapidly changing market, such as the UK children's multimedia market, the research found that managers need to increase their skills at diagnosing resistance to change and at choosing appropriate methods for overcoming resistance. It was reported that, within the publishing industry, many of the more traditional children's publishing companies showed a large degree of resistance to change. Methods highlighted for dealing with resistance to change include: education and communication; participation and involvement; supporting some of the methods included in the culture paradigm developed by Pettigrew and Whipp (1993), and the ideas of Kotter and Schlesinger (1979). Response from the publishing companies' interviewees indicated that they had experienced different stages of changing behaviour prompted by new technology and products. These changes included changes in: attitudes, skills and awareness stages in the development of new product ranges for children which were also focused on by Galpin in his Change Process model and his studies on the human side of change (Chapter 3, 76).

6.3.1.2.1 Organisation

In Diebold's study in 1999 which developed a 'value-added hypothesis' for online publishing, 'organisation' was noted as a key area of value. Respondents in this study felt that commercial success on the internet could not be achieved with existing or traditional publishing structures and the internet mandates different organisational processes and different employee skills. Results show how publishing and new media companies' structures, departments, staff skills, functions and their relationships have altered for new media production for children – online and offline – and are described throughout the following section of this chapter.

> 'Change is coming far greater than any of us can predict and far faster than ever before, and who will survive and what the electronic publishing marketplace will look like in five years time is a challenge.' (Balkwill 1999, 30)

The area of change management has been prominent in the analysis, as children's book publishing and new media companies' operational and strategic developments in response to change were studied. At the LIBF'98, publishers were advised to engage in change immediately. 'Those who occupy the place of conflict early, can face their opponents in comfort'. (Yip 1998, Grycz 1992, and Tenner 1999) also noted that companies (particularly traditional publishing companies) would need to develop responsive, adaptable strategies to 'prepare against surprise; prepare for surprise; prepare the surprise' (Tenner 1999, 20). Bide also shared this view:

> 'It is only too easy to believe that what we know provides us with our core competitive advantage. In a time of change, it is all too possible that the opposite may be true. We should be particularly wary of those things we have always known.' (Bide 1999, 69)

Publishing companies such as Dorling Kindersley, BBC Multimedia, OUP and new media companies such as Hasbro, Anglia and Granada were found to be taking this strategic stance and their approaches were investigated throughout this study. Scott Morton discussed the development of publishing companies in this changing industry and suggested that 'what is required is not so much a question of technology, as of change management and organisational issues' (Scott Morton 1991, 50). The children's publishers' interviewees noted their business models were being re-engineered to achieve effective business practice within the multimedia market and the key areas of value that children's companies should be focusing on are highlighted further in this chapter. The results also outline the operational changes, skills, products and strategies, children's multimedia companies use to yield competitive advantage and/or value in an industry that is continually changing. The successful companies (both publishing and new media companies) noted that they were developing strategies to cope with these continual changes in the market, including changes in consumer tastes, product and technological developments, and competitive changes.

Studies have been undertaken on developing a 'strategic fit' to cope with changes in corporate culture and strategy (Scholz 1987), and on creating a comprehensive model for measuring the potential impact of IT on organisational strategic variables (Mahmood and Soon 1991). The research has identified key variables essential for that 'strategic fit' when companies successfully adapt to changes in the publishing market, above all those driven by IT. The research identified areas which had to be supported and strategically developed, focusing on core resources, skills, products and relationships within each area. These areas include content/editorial, production: including technical/programming, creative, testing and development, marketing/branding, promotion, pricing and sales and distribution. Porter (1985), Ohmae (1986), Sproull and Kiesler (1991), Dyson (1993, 1998), Tushman and Anderson (1996), Lynch (1997), and Collis and Montgomery's (1998) studies have focused on competitive advantage and strategic planning models and techniques for change in the 1980s, 1990s and onwards. However, as already stated, the research has found no business models to date which have been developed in the children's publishing field in relation to the changes in strategies and processes which have been required for multimedia production. Key ideas and models of change management theories, and strategic processes have been identified and analysed from Mintzberg's (1988), and Johnson and Scholes' (1997) studies. Their ideas informed the thinking process behind the research, aiding the development of the children's multimedia value chain – particularly the areas of value in relation to strategic activities and their development.

6.3.1.2.2 Type of Change

Of the four types of change Cummings and Worley illustrate: large-scale, adaptation, fundamental, and re-orientation (as shown in Chapter 3, 73), the 'adaptation' type of change, in the main, is most applicable to the process children's publishers and new media companies have been undergoing throughout the period of this study. Some publishers have attempted to adapt to conditions by changing

business strategy and moving into new, unfamiliar areas or, in the case of some publishing and new media companies studied, the change involved was solely part of a subsystem or division, therefore the change could be described as 'adaptation'. In some companies, the change could be described as large-scale, involving changing products and services throughout the whole organisation (Galpin 1996) as illustrated in Figure 6.1.

Degree of Change

	Incremental	Quantum
Total System	Large-scale	Reorientation
Sub-system	Adaptation	Fundamental

Scope Of Change

Figure 6.1 Types of Change in Children's Multimedia Companies (An adaptation of Cumming and Worley's Types of Change model)

The results also suggest that new media and publishing companies undertook the various standard change management process stages outlined again by Galpin (1996) and Pettigrew and Whipp (1993), such as exploration, planning, action, and integration stages and unfreezing, moving and refreezing steps. The majority of successful publishing and new media companies' interviewees noted that their companies accessed, researched and predicted environmental changes in the children's multimedia market. Most were leading change, all were found to be linking strategic and operational change, analysing human resources as assets and liabilities, and implementing effective coherence in the development of children's multimedia operations – all confirming the value/effectiveness of using the factors Pettigrew and Whipp noted as being central to managing change for competitive success. Although variations and additional stages (to the steps outlined by Pettigrew and Whipp et al) in the change process for multimedia development were particular to each children's multimedia company studied. The various stages and factors involved in the change process highlighted above informed the strategic activities outlined in a Children's Multimedia Value Chain model (developed from Porter 1985) which outlines success and development factors for companies in a market which is continually changing (see Chapter 5, Figures 5.7 and 5.8).

6.3.1.3 Planning and Development Strategy

A gap existed in previous research looking into research and development strategies and techniques for companies developing and investing in children's multimedia. Publishing company respondents in

1998/99 had learned from the mistakes they had made in the past which included high investment costs (over-investment), not focusing enough on specific markets and products and recognised that internally, more effective branding, scheduling and staff resourcing was required. Externally, to overcome some of the mistakes they had made, they invested in partnership, licensing and research and development. New media companies, on the other hand, noted firstly what they had done effectively, with the majority of respondents noting the value of branding. They also had become aware of the effects and influence the US had on the UK market, and how retail and online sales improvements and more specialised products were required. The main market research techniques used by a significant number of the 1998/1999 and 1999/2000 questionnaire respondents from both company types included, trade press information, surveys, retail communication, reply-paid cards and focus groups. The internet was also used more by new media companies (for marketing, sales, promotional and content distribution) and focus groups were used more by book publishers. A year on from the questionnaire survey response, the book publishers interviewed in 1999 gave an indication of the strategies they had formed to promote and develop future multimedia products for children. Brand investment and development, following US trends, international expansion, an awareness of competitors' activities and use of focus groups were the most popular research techniques used by publishers to gain an awareness of the children's multimedia market in 1999. One interviewee noted:

'We look at where we have competitive advantage and what we can do with it, work out concepts, product propositions and then test them on focus groups to find out if they would buy in to them.'

Other research techniques being used at that time included questionnaires/surveys, market relations, internet information, parallel development, experience, attending industry conferences – listening to ideas and market trends in different subject areas, and re-usable resources.

Various similar strategies were adopted by the new media companies interviewed again a year later, in 2000 to cope with future developments. Market research techniques were used by the interviewees to gain an understanding of the overall children's multimedia market, home and schools' needs, competitors' activity, new technology, products and platforms - and management systems were set up to control this information. A general awareness of the overall market was noted as being critical for development in the children's multimedia market by all interviewees. Interviewees noted that it was important to:

- estimate your market size correctly
- know what your return on investment should be
- be aware of market needs, likes, and dislikes
- use market knowledge and company's focus to determine any alterations in product focus/ company direction

Both publishing and new media company interviewees noted that they had various techniques for managing their research and information gathered about the children's multimedia market. Their research informed their awareness of the schools and home markets and information about new technology, products, and platforms .

6.3.1.3.1 Innovation

It was argued by Evans, who had carried out surveys to identify strategies for dealing with technological changes in the publishing industry (1996), that transformation to flexible manufacturing and increased marketing orientation was necessary to the formulation of corporate strategy in publishing companies as the 'electronic era gathered pace.' As, in the period of this study, the electronic era had indeed gathered pace, it was found that strategies developed allowed for innovative, flexible manufacturing by the children's multimedia companies studied (including online changes for new product development), and an increased focus on marketing activity – with branding being a particular focus. Results also supported Cronin, Cavaye and Davenport's interpretation and development of Porter's ideas on the role of information and information technology in conferring competitive advantage. Findings agree with their theory that the power of IT to add value increases as it moves along the five stages of the value chain: inbound logistics; operations; outbound logistics; marketing; and sales and service. Fresh opportunities have been identified by the more successful children's multimedia companies so their 'competitive edge could not be blunted' (Cronin, Cavaye and Davenport 1988, 179-187). However, results in this study suggest that children's multimedia companies depend not solely on IT to confer this competitive advantage. An awareness of IT developments and products combined with a focus on creative, innovative and branding strengths is key to the development of companies in this sector.

The results show ways that the internet and other new technologies (as were observed by Bide in the generic publishing industry) have impacted on the majority of the children's publishing industry's standing processes. The industry has collectively begun to analyse and understand the challenges and opportunities that these technologies present as they continue to evolve into the next generation of publishing. Bide also commented that innovation in publishing has typically not rendered obsolete what has gone before. As with other media, each new development tends to be additive. This has been particularly true in the children's multimedia sector as the publishers and the new media companies sampled emphasised the importance of the 'added value' or 'complimentary role' new media offered to their traditional/previous output. Burns, Stalker and Foster demonstrated the value of using the 'S' curve to describe the way in which companies substitute their new technologies for old.

During this study, it was found that books were not 'seriously threatened by new media' but for those publishers with a traditional output, new media served a complimentary role. In Foster's 'S' Curve analysis of the publishing industry, he noted that until the late 1990s, there have been no technological challenges which have proved to be a serious threat to the publisher's position:

> 'Television, for example, has not, as it was once feared it would, taken the place of books, because except to the extent that it competes with reading as a way of passing the time, television does not compete functionally.' (Foster 1996, in Bide 1998, 36)

In the case of new media companies sampled, it was found that the potential discontinuities (Foster described) as one technology overtakes another are evident for example in the companies' hybrid

product development from CD-ROM, DVD, to online content. Most traditional publishers who have set out to exploit new technologies for the delivery of their products have uncovered for themselves what Foster demonstrated to be a common pattern, that the first steps towards the adoption of a new technology 'inevitably go astray or prove disappointing'. This is a key message as early experiments with new technologies have often proved to be expensive 'failures', as noted in the children's multimedia market in the early to mid 1990s. Foster observed that picking the 'right' technology is critical and that choice is a matter of core strategy.

All book publishing company interviewees in 1999 noted that their main multimedia focus at that time was on CD-ROM, but with a hybrid element in that they produced books, and developed web sites and content online. All interviewees (except one) described their multimedia for children as a multimedia package that included books and CD-ROMs which served a complimentary role to the book and subject area. All of the 'successful' new media companies interviewed in 2000 provided a mix of services involved in 'multimedia publishing' including content, software provision, web development, localisation for their USA parent company, used external programmers, content development for LEA intranets, provision of special needs consultancy services (for example, SEMERC at Granada) and distribution. None of the companies interviewed provided hardware production. All companies had been developing their digital, online content and websites over the last five years. Any other products for children such as books, magazines or video were described as supporting, adding value or serving a complimentary role to the CD-ROM or website on a particular subject or story range for all of the companies interviewed, for example, offering additional modules or other teaching support material. One company was providing stand-alone online content for children in April and May 2000 and another had made a conscious decision approximately nine months before the time of interview to ensure that all their new media development would be browser-based. Additional media produced, other than CD-ROM and online development, included broadcast and video, DVD, audio-visual, Play Station and Play Station 2 and CD-ROM play-sets (a combination of CD-ROM and toy attachable to a keyboard).

The main differences between the two company types sampled was that publishing company interviewees noted they were providing a complimentary role to their 'book products' through their multimedia production, and new media companies were providing a complimentary role to their 'multimedia products' through their online content development and usage. The research findings seem to identify the actual products and strategies publishing and new media companies were investing in at the time of study. This overview indicates that the companies studied did appear to be using some of the methods of change management strategy theory recommended in management texts, although, no company was the same. In some instances companies would adopt a particular change strategy focusing on branding, cultural shifts or pulling in innovation through new skills or products. However, after using the identified market research techniques, some companies may require to revisit and alter particular strategic directions. This process appears to be common and ongoing in the volatile market of children's multimedia.

6.3.2 Core Activities

When specifically asked about what activities or skills they felt were key for children's multimedia production, all publishing and new media company interviewees noted a mix of skills in the following areas: management (as discussed in 'strategic activities'), editorial/content, marketing/branding, product development, pricing, promotion and sales and distribution. These activities which are all controlled by management are interlinked, and are highlighted below in Figure 6.2.

Fig. 6.2 Staff Activities

The key areas of activity within a children's multimedia company for the process of developing a product from concept to market were highlighted by the majority of interviewees and are discussed below.

6.3.2.1 Content/Editorial

The questionnaire and interview results with book publishers in 1998 and 1999 indicated that successful children's multimedia publishers viewed their role in the value chain primarily as 'publishers', while a smaller amount described their role as commissioners, licensors, software developers, and manufacturers. Dyson noted that there would be very important roles for publishers to perform in aggregating, filtering, assembling, and integrating 'free', 'subscription-based' content in a way which adds substantial value to the end user (Dyson in Bide,1998). She also felt that this may sound broadly similar to what publishers do now, although value will be created through process and

service, not from the control of unique assets. One publisher agreed with Dyson and Bide's definitions of the publisher/commissioner's role and noted, 'We sift and sieve to publish and produce quality products and filter out the material that is not worth publishing. - that is what a publisher likes to feel he/she does.' New media companies in 2000 considered themselves to be 'multimedia publishers', with their services being in the main, content and software development, but also multimedia production, distribution, and online development. This reflects Diebold's view that content provision, 'a publisher's main business,' must be adapted to fit the medium of the internet, and augmented with value-added online content and services (Diebold 1999, 30).

Within the editorial/content department, having acquisition skills and the ability to recognise good ideas were noted as being important by both company types interviewed. Educational expertise (and a knowledge of children's learning needs in-house), and having editors with educational backgrounds who communicate well with teachers, schools, LEA advisors and their demands was also considered to be key. Representatives from both company types felt they had to address National Curriculum requirements and the changes in those requirements, and all used 'educational advisors' as part of their multimedia production teams, either as consultants or module/activity designers. Others also felt building a critical mass of intellectual, content resources and subject knowledge in-house was also key. This was to allow companies to develop other products from their resources easily and to ensure relationships with focus groups of parents and children were also developed and nurtured. This did not support Dyson's view noted above which stated that value would not be created through the control of unique assets. Control of assets for children's multimedia (in-house or out-of-house) was found to be key to the success and development of companies in this sector alongside the development of creative and innovative services, processes and products. Various new media and publishing companies also highlighted the value of sourcing, selecting, and assessing value, 'the role of the editorial department'.

6.3.2.2 Product Design and Development

New media and publishing company interviewees highlighted in their response four key areas of value in the process of product design and development. These key areas include creativity, technical/ programming, testing/ development, and product assets. No specific empirical research has been carried out previously in these areas of investigation. Commentary on these areas of product development and design activities, and product assets (outlined in the children's multimedia value chain in Chapter 5, 208) has previously only been speculative and described in the context of generic publishing or multimedia industries. Research into the specific departments or areas discussed in this research, and particularly with a focus on children's multimedia, has been lacking.

6.3.2.2.1 Creative

6.3.2.2.1.1 Innovative/Technology-aware

Although publishing has prided itself on being a creative industry, there has been little evidence that it has had much opportunity, until very recently, to be a genuinely innovative one. In Cuteis's study of building creative culture for growing organisations, he supported Peter Drucker's definition of innovation: 'Innovation is the specific instrument of entrepreneurship...the act that endows resources with a new capacity to create wealth' (Cuteis, in Drucker 1999, 61). Cuteis felt:

> 'Today we make 50% of our current turnover with products which did not exist five years ago. Thus if we are not creative in time, we cannot employ 50% of our workforce within five years. This is the continuous burden of innovation for our company.' (Cuteis, in Drucker 1999, 61)

Publishing company interviewees in 1999 agreed that creating innovative ideas was also obviously important for children's multimedia production. However, they also noted that technological capabilities, time and financial limitations have to be considered. 'Anyone can take the most recent technology and do wonderful things with it, but if the install base isn't there, plans are useless.' Others noted that some technical skills had to be introduced to the publishing process for multimedia production – such as broadcast, digital, animation (and techniques that extend cross-platform to CD, DVD, TV and online products), interactive and web page design skills. Technical support and innovative illustration and design skills were also highlighted as being 'in demand'.

6.3.2.2.1.2 In-house Creatives

Various commentators such as Lichtenberg, Peters et al highlighted the benefits of outsourcing and pulling resources externally to increase the flow of ideas, innovative, and new, fresh approaches for product ranges. One publishing company interviewee noted that his company worked alongside the production companies which they collaborated with on television programmes. Staff 'make the most of the digital skills and resources' their production company can offer for new media. Another company aimed to have more internal creative direction rather than using 'a constant stream' of individual freelancers. However, new media company representatives interviewed in 2000 emphasised the importance of keeping creative skills in-house, rather than using freelancers and external companies. Some, who worked closely with their US companies' creative base, toy, brand and creative groups, noted that creativity resides with a mix of people with varying skills in-house; illustrators, interactive designers, graphics people, programmers, writers and teachers who use the material. One noted, 'Stimulating the creativity of the children is paramount, of course. Creativity is easy to manage, 'un-creativity presents far more challenges.' Another noted that all creative commissioning involves an enormous amount of very tight briefing, and using a mix of creatives both in-house and externally to generate creative ideas.

> 'We've got about 80 full time developers within the company and they work in teams, which include a producer, a content co-ordinator, a graphic designer, and a programmer. We also have a

few externals who work both on our ideas, and on their own ideas and submit the products for us to publish. So we've got every conceivable combination.'

There appears to be no set way of creating and stimulating innovation and creativity within a children's multimedia company. In order to encourage development, some interviewees emphasised the importance of gathering resources in-house but others also noted the benefits of using external sources or collaborators. This is perhaps an area that could be investigated in further detail in the future as perhaps there are specific requirements, best practice ways of working particular to specific company types.

6.3.2.2.2 Technical/Programming

Various industry commentators and researchers have highlighted general issues, changes, and impacts of using information and communication technologies (ICT) in generic market studies. Ang and Pavri have surveyed and formed a critique of the impacts of information technology (at a societal, organisational and individual level) (Ang and Pavri 1994), Li (1997) researched organisational re-design through information and communication technologies, and Groth, Galliers, Bates (1999) and Scholes (2000) looked at IT management, communications and linkages within organisations. In this analysis, which identifies companies' development factors and areas of value for the volatile children's multimedia market, it was important to consider views such as those of Stuckley, Evans, Groth, Gallier, and Bate's looking at strategies aiding the development, implementation and use of new technologies in a company.

In this analysis, the focus is not so much on the impact of ICT on office systems, but firstly, on the overall external impacts of new technology development affecting the companies' products, their competitors' activities, and strategies they used to prepare for new technology affecting and developing their current production. Secondly, in terms of areas or activities of value or development internally, the study analyses technical, programming and technological skills staff identified as important for children's multimedia production.

However, findings did support Stuckley's theory that IT is only an enabling tool, and it is the people in an organisation that make the difference (Stuckley 1996), and Scholes' theory that IT is linked to, and impacts on, an organisation's core competences and management processes. Certain skills were identified in this study to be necessary for successful children's multimedia production as new technology developed and impacted on the sampled companies' product development. Programming skills were noted as being particularly important for new media production and had to be brought into the publishing process by the publishing companies interviewed. Several new media companies also noted that the designers producing children's multimedia should be innovative, creative and new technology-aware.

6.3.2.2.2.1 Commercially-aware

Merriden felt that in the IT sector in 1999, there were serious shortages of skilled labour 'building up once again'. Opportunities existed for those with specialist IT skills, as the headhunting industry had been quick to appreciate. There had been a trend towards outsourcing 'net-tastic nerds', but he felt it was the combination of IT skills with some sense of business strategy that is required, as opposed to single-dimensional technical management (Merriden 1999, 45). This requirement for staff with a mix of business sense, combined with technical and creative skills was one highlighted by the publishing and new media companies producing children's multimedia sampled in this study. However, a new media company interviewee also noted that creative people are often not commercially aware, and it is the producer's role to emphasise that the products are ultimately made to make a profit. One company noted it required the skills of 'talented interactive designers who do not run on clichés but realistic deadlines.' It was also thought that in-house programmers needed to be educationally-aware, have a knowledge of new distribution and promotion channels, and ensure they were achieving maximum usability of hardware purchased, creating deals to acquire appropriate and cost-effective hardware.

A requirement for market-aware programmers was noted by some of the publishing company interviewees, 'Companies need to have a notion of key selling times, market trends, and the speed to develop the product.' New media company representatives also noted the importance of innovative ideas and being new-technology aware. A knowledge or awareness of new technology, such as WAP and other new platforms, and web development skills were also considered important. Three interviewees had noted the immediate requirement for more flash programmers and designers who can prepare artwork in flash (flash being a relatively new type of software designed for increased animation of the internet at the time of interviews) as although it is not a complicated role, companies were not aware of many flash programmers at the time of interviews. There appears to be a continuing debate over whether it is most valuable to have a programmer which also has cross-over skills, such as a 'commercial sense' or 'educational-awareness' for example , or whether it is best to keep this knowledge of the market and its impacting forces with staff in their traditional settings such as marketing or editorial departments.

6.3.2.2.2.2 Creative sense

Again, no previous empirically-based research had indicated that programmers with a creative sense were increasingly being sought after for children's multimedia production, as found in this research. Publishing company interviewees felt that programmers with a publishing and creative sense were useful for multimedia. One company noted, 'I think programmers with an awareness of publishing requirements are rare. You get many programmers immersed in their programming activities but don't actually have any editorial sense.' Another noted that there were also very few designers and editors who knew how to program: 'The rarest animal is probably finding someone who has got a good creative sense as well as an ability to program.' He was optimistic as to the skills development in

future, 'Those two sets of skills haven't started to merge well yet but as the industry matures, then there will be people who cross those barriers.' However, another publisher interviewee disagreed, 'You may not need people to be completely bi-polar, but we do need people who've got a thorough awareness of the other part of the process and that's still quite early in its development.' The same debate continued with regard to whether or not programmers would benefit from possessing cross-over skills such as creative or editorial skills. However, children's multimedia company respondents, in this instance, indicated that perhaps it is not so much a requirement to have 'cross-over 'skills' or 'abilities' more a need for an overall 'awareness' of creative and editorial considerations. Based on these findings, it appears that companies would be wise to analyse their skills and resources and make a decision about how to firstly utilise them to their fullest potential, and also how to find ways of merging and complimenting often distinctive activities in- or out of house.

6.3.2.2.2.3 In-house Programming

New media companies also emphasised how the programmer was such an integral part of the multimedia team and has such creative possibilities to contribute in-house. There is a real creative imperative to bring the programming in-house. One commented:

'Programming, now more than ever, is becoming so sophisticated that frankly, only the specialist skills and knowledge of the programmers, can guide others (i.e. writers, designers) in a creative meeting as to what their creative possibilities and capabilities are.'

Keeping programming resources in-house was found by interviewees to be cheaper and less time-consuming and problematic than using external companies' resources.

'The relationship between creative/publishing and technical/programming is where it all can go wrong as programming is so ferociously complicated. Companies have often sought the expertise externally. Project times and costs have been exaggerated. The important thing is to employ programmers internally so you don't have to understand external programmers' language.'

One noted the mistakes some publishers had made in the market, in terms of programming: 'Publishers had the content and saw programming as an outside job. This is a mistake. Programming is part of the creative resource.' There were many differences to be found between the children's book publishing process and multimedia publishing process for children's multimedia in all areas of activity within the children's publishing or new media companies studied. One of the main areas of activity which had changed the most for the multimedia publishing process for children's multimedia was identified by the companies studied as being within programming/software development. Ensuring that programming (in-house or freelance) was kept as part of the creative process appeared to be key.

6.3.2.2.3 Testing and Development

Testing and development was an area of activity also highlighted by the sample studied as adding value to the process of children's multimedia production. This area of activity has been touched on earlier in this chapter, in the planning and development strategy, section 6.3.1.3. Testing was highlighted by

publishers represented as being an area of activity more prominent in CD-ROM or media development than in books. One noted, 'You don't really have testing in books - all you have is proofreading, but that's more the content rather than both the content and the technology behind the interactivity of the CD-ROM.' Publisher and new media company representatives described testing as a 'long and often tedious' process. Testing groups were found to include testing managers, and internal and external testing groups. Testers were also described by companies as offering key information regarding market subject preferences and in some instances, further technical preferences and knowledge which is crucial to companies' development of multimedia products.

6.3.2.2.3.1 Home Consumer Testing

Focus groups and testing of home consumers, either parents/family and/or children were set up by all publishing and new media companies' interviewees (organised by specific companies or professional research companies hired to organise such groups). One new media company interviewee commented, 'the most important thing you can do with any product for children is to give it to them and they'll tear it apart.' A method of organising a home consumer focus group has been outlined in Chapter 4, 152 based on the comments of new media and publishing company respondents.

6.3.2.2.3.2 School Classroom Testing

All interviewees also used classroom testing groups to attain information and one noted that they were not only used pre-production. Another noted:

> 'We need to focus on schools and IT in schools and where it's going in schools in a few years time, what resources schools will require, how our company can tie in with that, and which products or series we can add to or develop to help us maintain or increase our market share.'

Companies noted that the feedback and comments from their testing groups in a classroom situation and with parent and children groups contributed to their market knowledge. Their ideas for strategies for post-production development have also been collated and outlined in the Figure 6.3:

Lessons learned/successes

↓

Incorporate into new or existing products/series

↓

Improvements

↓

New ways to meet market demands?

↓

Find linkages with existing products

↓

Which products/series can be developed to increase market share

Fig. 6.3 Post-Production Development

6.3.2.3 Product Values/Assets

In the analysis of value within the product development department, respondents noted important qualities in children's multimedia products – both offline and online. This was an area that had not been studied in previous research, indeed those companies studied noted that it was an interesting exercise for them to identify what exactly it was in their products that made them successful. Interestingly, some had noted that they had not reflected on specific product assets before in-depth. Therefore, this section may be of interest for those companies within the market already or for those contemplating producing children's multimedia products in the future. Within the category of 'product development' in the children's multimedia value chain, key factors contributing to companies' development have been outlined within the areas of creativity, technical/programming and testing and development.

6.2.3.3.1 Multimedia Values/Assets (Offline and Online)

No previous studies had investigated assets or values specific to multimedia products or content for children. To summarise all the interviewees' comments on their children's multimedia products' assets or value, assets include educational/NC requirements, fun/'edutainment' focus, a good story, strong/popular/reputable/familiar brands, rights, series, writer, illustrator, narrator, story teller, characters, part of series, co-editions, quality, visuals/creativity, interactivity, clarity, simplicity, intuitive, with 'short, sharp results', speed of use, logic element, engagement factor, cross-over qualities, additional, complimentary values, products such as 'play-sets' and 'key top toys', adaptability, spin-off/price perception schemes, modernity, breadth and depth, print-outs/worksheets, maximum use of software engine/digital capabilities, international focus, and a subject specific niche. This response, providing new knowledge about the children's multimedia sector, should be a useful guide for those companies contemplating development into the market sector. This is an indicator of some of the key areas companies should be focusing on to develop products or content for children offline and online. The key assets or values in children's multimedia products described by the companies studied are discussed in the following sections.

6.2.3.3.1.1 Educational/Entertainment Branding

Earlier in the study, publishing companies' questionnaire respondents in 1998/9 highlighted the value of education and quality, whereas new media companies' emphasis in 1999/2000 was on branding, content and production value. All of the successful publishers interviewed in 1999 and new media companies interviewed in 2000 felt that branding and a mix of educational content guided by NC requirements and parental approval and support, along with entertainment-based products (fun to use and learn) to encourage the child's imagination were important assets in CD-ROM/DVD products for children. Some new media companies in 2000 also noted the value of an entertainment focus in online activities, 'Children's web sites should be bright, colourful, intuitive and fun.' The educational element (in line with NC requirements) in *online* products was also considered to be important by the interviewees, although

'not as important' as an entertainment focus. High standards and quality in multimedia products were noted as being very important - particularly for teachers and parents - supporting Bide's view that the ability to define and certify quality and authenticity would be increasingly sought after. Edutainment/ cross-over qualities in children's multimedia products seemed to be a commonly used term and approach by respondents.

Reputable brands, writers, illustrators and characters, a specific market niche (yet, often with an international focus), and being part of a series publication were some of the other assets considered key by the companies studied. One publisher noted, 'A good story combined with an excellent illustrator, with a familiar style combined with our brand brings together a package that works.' All successful new media companies interviewed in 2000 also noted the importance of developing and promoting their brands in reference to their CD-ROM products (see Chapter 4, 134 on product branding). The value of online branding was also highlighted by new media company interviewees in 2000, 'get surfers used to using your site and then they progress and discover some of your other or new material of interest.' Findings describing how new media and publishing companies managed their rights and royalties also supported Rust's view that:

> 'rights should be managed in a more sophisticated way than they had been in the past, moving concentration to integrate the functions of discovery, access, licensing of intellectual property into single point and click actions, where owners, producers and users alike are in a situation where rights administration can be fully automated.' (Rust 1998, in Bide 1999, 69)

6.3.2.3.1.2 Effective Visuals and Structure

Clear and effective visual elements, and logical, interactive and engagement factors were also noted as being key. Some new media companies felt that simple/intuitive websites with clearly structured and 'easily-navigatable' information, in coherent and relatively small-sized pieces, demonstration arrangements with moving activities for the child user were also important. One noted:

> 'Interfaces can be confusing and annoying for users. Less is more. You can turn off children by flooding them with too much information on the web. Also, remember even parents are not very web aware.'

This indication of a lack of parental knowledge about multimedia and particularly, online use, is a common theme which came out in the analysis of results. Another new media company also commented on the importance of 'ease of navigation' noting: 'Multimedia is all about making intuitive connections and about being able to follow a line of inquiry freely – not having to test and swim across an un-navigatable ocean of information.'

Speed of use was also highlighted as an important aspect for online content, 'game play online should be short and fun, with quick results as children's attention spans are shorter than those of adults.' When compiling the child's games, companies also considered building the user's confidence.

6.3.2.3.1.3 Adaptability

The adaptability of multimedia was considered to be another useful asset by respondents from both company types. It offers the capability for teachers to configure software to suit their learner's needs – altering interactivities and levels for children for example. One company also felt that multimedia was an 'absolute ideal environment for learning by doing.' Added value is another important asset particular to the CD-ROM product. One company felt that the CD-ROM should offer something over the book and compliment the web site:

> 'An important principle that we've stuck to is the ethos of 'genuine multimedia' – where the consumer gets a disk, book, magazine and web link, allowing the user to follow a line of enquiry, to move freely between media.'

The product values or assets discussed above were found to be applicable to both offline and online multimedia products for children and are outlined in the children's multimedia value chain in Chapter 5.

6.3.2.3.2 Online Assets/Value

There was much literature in the late 1990s, 2000-2001 about online developments, in general, speculative terms. Practitioner reports and articles in trade journals questioned where the value is added in the online model and further key areas of value for online production were observed as being 'unique and compelling' content, access, and brand management within the appropriate context and copyright arrangements (Bide, Dyson 1998, and Wright, 1999). In this study, areas of value were highlighted as being particular to the development of children's publishing and new media companies' online content for children. These areas of value include navigation, structure, branding/authority (some of these are also applicable to offline products) and some of these generic areas were noted by Bide in his research with Vista International as being important: **'Author – Selection – Access – Aggregation – Development - Navigation – Authority'**. These areas were discussed in further detail in relation to children's multimedia by the interviewees such as individualisation and customisation of information for the online end user and the importance of effective branding and brand authority. This also builds on the comments in Diebold's study in 1999 who emphasised the importance of personalisation or individualisation of content, more frequent updates, or on-demand information, a reduction in the total amount of information, and a switch from pull to push information. From the questionnaire survey responses in 1998/9, a small number of book publishers were using the internet for content delivery, but a significant number planned to use it for that purpose in the future. A higher percentage of new media companies in 1999/2000 were using the internet for content delivery, although they were also using the internet primarily for other purposes including marketing, promotion and sales. They noted features enabling successful sales of their children's products such as visibility, engagement, playability and achievement factors and sites of an informative nature.

Product assets or values specific to online content for children were noted by the majority of book publishers interviewed in 1999 and new media companies in 2000. Factors such as a complimentary

role, access to product and company information, suitability and protection for parents and children, premium services, free information culture, magazine publication cycle similarities, updates and archives, effective prompts and category searches, and user return are particular to online content development and are discussed below.

6.3.2.3.2.1 Added Value and Complimentary Role

Some of the companies interviewed agreed with Dyson who noted, 'The aim must be to create a means of controlling content which maintains the benefits of the virtual organisation, while integrating content with the rest of the publishing system.' Companies emphasised the value they placed on familiar brands suited to online content and linkage. However, others noted that although print, offline, and online activities should compliment each other, they should still remain separate functions and certain features should maximise the potential of their particular medium. In 2000, Sylge (in the Children's Bookseller trade magazine) also highlighted the value in creating stand-alone websites complimenting existing products for children:

> 'It is not enough to give title and producer information and create a few graphics of key characters. The future is in drawing the children in with fun, entertaining interactive sites that do not necessarily focus on the concept of the book.'(Sylge 2000, 16)

Respondents noted that this complementary role (building online resources around existing books or other media resources or 'interconnected publishing' as one company described it) adds value in linking to CD-ROM products, offering additional material, down-loadable information such as templates, clipart, updates, modules, revision series, other levels of games and puzzles, activity sheets and resource packs to encourage teachers to subscribe to products/series and access related websites. Premium services such as homework help, and 'downloadables' such as games and activities free to sample, hints and tips from the screen shots, workbooks/sheets and activities which can be undertaken away from the PC.

6.3.2.3.2.2 'Suitable', 'Comfortable', 'Accessible'

The online content produced by the companies studied was noted as being 'suitable' and 'comfortable' for parents and children to use. Protection mechanisms should also be provided from unsuitable information. One interviewee noted:

> 'We become an ISP, we screen the child from seeing sites with unsuitable material - too much flesh tone or bad language. We actually positively vet sites - hundreds and thousands of sites so you can only see things that are informative, or fun or child-friendly.'

It was also noted that product and company information for children, teachers and parents should be accessible in order for them to familiarise themselves with the products or features and characters online.

6.3.2.3.2.3 'Free Information' Culture and Magazine Publication Similarities

Companies studied noted that one of the main considerations when dealing with online content is that the information being provided is free which has advertising, subscription and sponsorship implications. One company noted that publishers had to focus on similar assets particular to magazine publishing rather than those of book products when producing online content (agreeing with the ideas of Dyson, 1998). One new media company interviewee commented on the similarities of online to magazine publishing:

> 'We often say the most interactive product outside of new media is a magazine. You read through an article, you get distracted in to an advertisement, you may use the index, you go to the page/features that you want – quite different to a book. They are quite different markets.'

6.3.2.3.2.4 Updates and Archives

Current information and regular updates on children's web sites were also noted as being useful. Archives were also considered to be 'key'- one new media company representative felt that the user should be able to go backward by nine weeks or longer. Facilities to allow children to engage in and access up-to-date and archived material should be simple to use. Effective prompts and category searches for the user were also found to be valuable for online content, in the development of 'simple, intuitive sites', allowing for 'ease of navigation'.

6.3.2.3.2.5 Prompts and Category Searches

One new media company also felt that within the huge database of information that is a web site, there should firstly, be a prompt to ask users:
-   How old you/your child is?
-   Subject interest?
-   Provision of links to the most relevant and suitable information, sections and sites
-   Choice of subject categories (for example, 'history')
-   Further subject categories (to narrow down a search to 'Vikings' or 'Egyptians' or 'WW1' – or a search could be widened)

6.3.2.3.2.6 User Return

Two companies also noted the importance of developing a subject resource database in-house - building fact files using in-house subject resources and best of web links. The companies also felt they had to create an enjoyable experience so users return, 'there needs to be a reason for them to come back time and time again.' Also one company noted the importance of getting it right first time due to the 'unforgiving nature' of the internet:

'If you make a mistake the first time with your content, will the user ever come back? How do you get them back as there is a large volume of similar sites they can visit. That's something that the marketing people really need to take on board.'

An example of a new media company's web site design, a 'web trail' was described to show how the company encourages user return to the same site or related, linked sites. The new media company representative who shared this information regarding his company's website development considered his company to be fairly innovative and noted that most companies should be developing online, and understood that most were still focusing primarily on offline CD-ROM production.

6.3.2.4 Branding/Marketing

In Diebold's study in 1999 which developed a value-added hypothesis for online publishing, key factors were noted for success and development, including marketing. The study found that often a company's marketing structure had to be rebuilt from 'the ground up' (Diebold 1999, 27). Individualising content, managing interactivity, and introducing a flexible price structure were three of the important challenges highlighted by those sampled in this study. The sample's advice to other companies in the children's multimedia market was to ensure brands are focused on the right types of markets, and ensure good marketing and merchandising to carry the brand effectively to the consumer. All publishing and new media companies interviewed in 1999 and 2000 felt effective brand management of product brands or sub-brands and their development was critical to achieving success in the children's multimedia sector, in particular, TV extensions and character sites had been profitable. One new media company commented on its use of branding at the time of interview:

> 'The branding issue wasn't so important probably back in the early 90s, however, moving forward now, children are very much brand-orientated and very media-aware therefore brands are becoming more and more important. There's a larger quantity and quality of competition on the shelf now (i.e. Barbie, Disney, Lego with strong branding). So it's a learning lesson as we come forward and it may be that could turn around again. We may find in the future that it won't be possible to profit from branding, but right now, it really is.'

6.3.2.4.1 Market Awareness

Key findings indicated that there is a need for companies in the children's multimedia market to build and develop their brands more effectively and to be more market, consumer, and competitor aware. In the discussion of marketing and branding activities, it was noted by two interviewees that publishers needed to improve their awareness of the market and 'focus more on brand development and the skills that go with that.' They also had to introduce new marketing and promotional channels, and one felt, 'at certain times of the year it is the marketing team who are the most important information source, particularly when a product is about to be targeted to the market.' New media companies felt it important to recognise crazes and key licenses thought to be popular and might perhaps grow to become 'the next big thing'. Others felt it was just as critical to be competitor aware and remain one step ahead of others in the area of children's multimedia, whilst others felt a knowledge of the market was more important – keeping abreast of consumer likes, dislikes, requirements and investing in research and development in the market was noted as being key. Finding new marketing, promotion

and sales channels to target and inform specific markets about products was considered to be both a challenge and a necessity by three of the interviewees.

6.3.2.4.1.1 Market Research Techniques

Detailed information was not available prior to this research into the types of research techniques publishers and new media companies were using to investigate and develop their understanding of the children's multimedia market. Key research techniques which were found to be used by the new media companies to gain a market awareness (in order of importance) included communication with retailers, questionnaire/surveys, in-store merchandisers, reply-paid cards, Chart Track subscription, electronic registration, before and after sales purchase focus groups, and membership of related organisations and suppliers. One interviewee noted that it was talking all the time to retailers' chief buyers about current ranges and the potential of future product ranges and noted, 'It works both ways – we are giving them volume to sell, they are giving us shelf space.' Another noted its use of questionnaires and surveys was mainly to analyse schools, their needs, their perception of where the company was at, and what the company needed to work on for the schools, and others noted they usually responded to questionnaires from the DTI and governmental reports. Internet information, in particular from the DTI, Department of Education and competitor's websites and research reports such as those compiled by Chart Track were used by some of the interviewees. (One interviewee noted that most of its competitors also subscribed to Chart Track). In order to remain 'competitor aware', half of the interviewees sampled obtained company information from trade fairs, trade magazines and competitors' websites. Some publishing and new media companies also noted the importance of developing research management systems and another felt that regular updating of consumer information management systems and the use of electronic registration was critical.

6.3.2.4.1.2 Consumer/Home Market awareness

Certain market research techniques were used by all book publishing companies' interviewees to gain an awareness of consumers in the home market in particular. Communication with retailers and distributors was again noted as being effective in gathering information about requirements, ideas and plans for development and/or improvements. Reply paid cards attached to CD or DVD products were valuable in that the consumer often returned comments or suggestions on them to the companies and customer databases could be developed, useful for informing customers of new products and putting comments into practice. Two new media interviewees noted that they used information from the Parent's Information Network (PIN) and noted that as did most of their competitors, others attended child-related shows, for example 'The Under12s' and read parenting and child development press as part of the research and development of new products.

6.3.2.4.1.3 Schools Market Awareness

Various market research techniques were also used to gain an awareness of the schools' market and its requirements. Most publishing company interviewees used educationalist advisors for specialist advice, and communicated with government bodies to receive feedback about National Curriculum objectives and other initiatives. Some attended teachers' conferences 'to listen to teachers' complaints and to pick up on their needs and ideas in various subject areas', and for education market trends. Others tried to become involved in parent/teachers support programmes supported by the Family Numeracy Framework where schools had to encourage families to try out software used in schools at home over a period of time. This was described as, 'a great way for teachers to educate parents on what their children were using at school and it also encouraged children to learn at home.' Companies also felt such initiatives should be further encouraged by companies in the market.

Three new media company representatives used educational cluster groups or had education officers who made twice a term visits to schools or Local Education Authorities. Others offered discounts, training days, and free product demonstrations in return for information, and attended industry and education fairs and conferences, for example educational, teachers' conferences, educational authorities and governmental education, NC related events - BETT, The Education Show, teacher's unions, panels, and club meetings. Others read educational press and also noted the importance of having regular meetings and contact in government departments including the DTI, Department of Education and NC to keep abreast of governmental initiatives, exchange of advice and involvement in their projects. Another new media company noted it had to 'look ahead, maximise the publishing and ensure it dovetails with that initiative.' For example, in the early 1990s it was focusing on 'geography' products, but at the time of interview, it had changed to focus on numeracy and literacy in tune with the NC and governmental initiatives for UK education.

6.3.2.4.1.5 New Technology/ Product/Platforms Awareness

Another key area of value highlighted in Diebold's value-added hypothesis for online publishing was 'technology', from both a strategic and technological perspective – to allow for innovative and individualised information to integrate content, interaction, and transaction. In order to gain an awareness of new technology, products and platforms for children's multimedia, the majority of interviewees attended computer, multimedia fairs and conferences, for example the ECTS (European Computer Trade Show), and also toy, game and book product-related events, for example the London toy and hobby fair (in January), and international toy fairs such as E3 - the major US trade fair (in May).

6.3.2.4 2 Brand Creation, Acquisition and Development

Key findings also indicate that there is a need for companies to look at the importance of brand creation, seasonality, recognising crazes, popular licences, and acquiring, developing and managing

brands and rights cross-platform. An overview of the education market produced by ChartTrack (Roots 2000) also found that heavily branded licensed products are the key to success in the 'children's software' category and noted that branding proves to be a significant barrier to entry. One publisher interviewee noted that many smaller publishers in the UK often cannot afford to create or acquire new children's multimedia brands. Other new media companies noted the importance of acquiring brands/rights at an early stage and developing them cross-platform, 'Securing of key rights for all new media is the important trend. In new markets, brands are king.'

Strength of brand, product proposition and critical mass were noted as being important throughout the development of a brand. One company commented:

> 'Publishers have a responsibility to their brand, to maintain reputation and qualities attached or associated to their brand. Quality is important to fight off competition and achieve success in a number of markets.'

Interviewees emphasised the importance of developing existing properties and heritage or acquiring new stronger properties or licences to popular characters, tuning in to yearly hypes/crazes which are usually specific to individual countries (with brands such as Pokemon, being an exception to that rule). One interviewee noted that it was important to invest in brands that could be 'rolled out over the next two years', for example, he noted the success of Teletubbies but, at the time of interview, his company was also investing in the Tweenies and Bob the Builder which have since become very successful. One interviewee noted:

> 'I think product branding is probably the most important factor for any title because you're carefully targeting a specific market who knows that character and brand so you have to make sure that you fulfil their expectations.'

Some of the publishing companies interviewees outsourced their brands and ideas regularly, with one noting:

> 'We have a joint investment group where we outsource potential brands from our multimedia operation and then decide whether or not to invest in them with our parent company and broadcast company.'

6.3.2.4.3 Brand Development – Cross-Platform

Philport observed that 'variances in brand communications are substantially conditioned by product positioning, customer relations and sales incentives' (Philport 1997, 68). Traditional brands have long established entrenched formulae for developing media strategies. Results emphasised Philport's point as publishing company representatives noted that the challenge of these brands is to break from the traditional mould and develop new ways to exploit both the traditional and new media for children. This is particularly important in this study investigating children's multimedia companies where branding of a mix of products, including children's books, television, CD-ROM, toy products and online content must be considered. Philport also noted, in his article on brand communication styles in established media and the internet, that changes to the communication of the brand can confuse and alienate consumers if they are not managed carefully. Rosenpan agreed that brand-building is an effective technique for marketing products:

'The value of the brand is threefold: the extent to which your brand is recognised (and understood) will have a definite positive impact on sales; you can charge a premium price for it; and you can create loyal customers who will stick to your brand even if there is little perceivable difference.' (Rosenpan 1998, 50)

Rosenpan and Philport's views were reflected in the publisher and new media companies' response which noted that 'developing and managing brands cross-platform effectively' was also considered to be key. Brand values, three interviewees noted, should be reinforced cross-platform and there should be consistency in the products on different platforms, for example one commented, 'Tinky Winky shouldn't do something on CD-ROM or online that he wouldn't do on TV. Actions can not be altered in too much depth.' Another company also had a licensing policy to build and extend their brands into 'different channels, product categories and territories' which they would not usually handle themselves. However, another warned that companies should not use old brands and try to make them work in the modern day, 'new media needs to have new trendy brands to suit.'

The findings also supported the views of Eierhoff who also noted that value in generating direct revenue for children's multimedia companies is created by building co-branded sites on which the publisher is allowed to sell advertising space (Eierhoff, 1999). One interviewee noted, 'The potential for advertising revenue is far greater than the potential sales from a website.' The sample also focused on establishing an umbrella brand name on the Internet as individual brand names of print products usually failed. The publishers and new media companies studied had adapted their brands to compliment different media and focused on the particular values and strengths of that media, for example, online content (not directly transferring brands from traditional products).

6.3.2.4.4 Brand Assets/Value

Various assets or areas of value were attached to the product brands of those successful companies studied producing multimedia for children. Some of the assets that the companies interviewed noted were of value to their brands included those factors which are reputable, reliable, authentic, with accepted authority and quality, continuity of design, clear, recognisable, adaptable for other media, and attractive, bright, colourful, catchy, modern, and fun. In order to understand markets where brand reputation is a significant source of added value, Kay classifies products as belonging to one of four classes, determined by the way in which they are 'selected for purchase: search goods, immediate experience, long-term experience, and those for which neither search nor experience is an adequate basis for selection' (Kay 1993, 3). The research found that reputable, recognisable, accepted products added to the appeal of the publishing and new media companies' children's multimedia products. Whereas, immediate and long-term experience provided a basis for selection of most of the sample's children's multimedia products. Companies had tried to develop clarity and consistency of their company, product or site brand, for example, with bold, attractive, colourful, recognisable designs on their CD-ROM boxes and sites and bold, 'catchy' domain names. One company commented on the issue of 'brand dependency':

'Multimedia is very defying. Our largest target age group, 5-8 years is the hardest to make money and produce product for because the users know what they want and if you don't have that license they won't buy from you. Whereas, for pre-school, parents are looking for brands that they know and what they rely on in other areas which is slightly easier.'

These were the key branding values identified by the companies studied but this is an area which could potentially require further investigation.

6.3.2.4 5 Brand Identification and Association

Three of the new media company interviewees noted that the 'identification and association' of a brand by both parents and children is important. The differing influences involved in the children's multimedia market also needed to be considered and are outlined in Chapter 4, Table 4.9, 157. Interviewees' comments about the purchase decision involved for users/buyers of children's offline multimedia (CD-ROMs or DVDs) and the influence of brands on that decision are summarised in this diagram.

One company emphasised how branding differs for the two different markets in the children's multimedia industry. The company found that branding of their children's multimedia product was more important in the home market, but not so important in schools where 'there's no need to license characters as in the home market.' They felt, however, that branding of their children's multimedia company - the company brand - was hugely important in both markets.

Figure 6.4 summarises the various ways the companies sampled managed their children's multimedia brands and the processes they undertook to acquire, create, or develop strong brands for children's multimedia in 1998-2000:

Acquisition	Creation	Development
Acquiring co/product brand	Building co/product brand 'requires persistence'	Existing co/product brand heritage/strong property developed
↓	↓	↓
Research latest market developments	Respond to latest market developments	Changes due to latest developments
↓	↓	↓
Research latest consumer likes/ dislikes/requirements	Reaction to latest consumer likes/ dislikes/requirements	Changes due to latest consumer likes/dislikes/ requirements
↓	↓	↓
Research yearly crazes/hypes (specific brands/characters appeal to specific countries	Development of a clear/strong product/company brand new	Development of brand emphasis on education entertainment
↓	↓	↓
Product brand – strong licences/properties popular characters/brands education/entertainment focus	Unusual/unique education/ entertainment	Provision of parental/educator approval & guidelines
	↓	↓
	Continuity/clarity/development of concept & brand	Continuity of concept/feel
		↓
		Continuity/clarity of brand site or box design
		↓
↓	↓	Identification + association
		↓
		Character knowledge/ familiarity
		↓

Fulfilment of expectation/enjoyment/satisfaction of quality/links to other branded products/spin-offs/outsourcing possibilities

Fig 6.4 Brand Acquisition, Creation and Development

6.3.2.5 Promotion

Key promotional activities used by publishing and new media companies contributing to the development of their multimedia for children are discussed below, providing new knowledge over

previous studies. Interviewees noted a number of ways in which they achieved effective promotion and advertising of their children's multimedia products – both online and offline.

6.3.2.5.1 Offline Multimedia Promotion

Various factors contributed to the development and successful promotion of children's multimedia identified by the companies studied. Key areas of value included

- Good packaging and box design
- Magazines – childcare, parenting, women's magazines and press
- Computer or educational sections magazines and sections of the press
- In-store retail
- Websites
- Brand-related events (for example, Thomas the Tank Engine)
- TV adverts for larger brands
- Related merchandise
- Awards and prizes for example EMA, Bologna
- Industry fairs and conferences

6.3.2.5.1.1 Packaging

Three publishing company interviewees commented on the importance of good packaging and design, with one noting:

> 'Books are often purchased by recommendation or through scanning in shop. For multimedia (CD-ROM and DVD), over 50% of purchase decisions are made within the store, and yet all they often have to influence them is the box and box design. The potential buyer can't scan through the product in the shop.'

However, from 1998-2000, companies seemed to offer potential buyers more information about their product features on their websites or larger sites such as Amazon.

6.3.2.5.1.2 Magazines and Television

Cross-promotion in magazines was also considered to be an important promotion and sales driver by publishers as it enabled children, parents and teachers to access information about products. Children's and parenting press, dependant on the age group targeted, are used by all of the new media company interviewees to promote and advertise children's multimedia products – both CD-ROM and web sites. For example, with pre-school products, women and parenting press is used and educational press is used for schools' products. All companies also promoted their products in other women's magazines, computer sections of national newspapers, educational press and in-store retail promotion. One company noted that it used TV advertising to launch related branding merchandise, 'Certainly only TV companies and production companies could promote our play-sets that were launched just last year.'

6.3.2.5.1.3 Awards

Winning awards and prizes was also noted as being a promotional advantage for publishing companies in the children's multimedia market. One company which had recently won The European Multimedia Award (EMA) and The Bologna Book Prize commented, 'We can promote the quality of our products as being of a high standard and back this up by promoting the fact that they are of an award-winning level.'

6.3.2.5.1.4 Brand-related Events

The new media companies interviewed in 2000 attended and promoted at brand-related events, including joint activity/promotion with their related toy or book group at any major events where they were present, 'We'll also support other things that are going on such as the events etc that are connected to the brand, such as Spot. There's a play going on at Oxford and we supported that.' Another commented:

> 'We also have demonstrations of the CD-ROM available, displays, posters and make sure we're present at characters' special away days, for example, Thomas the Tank Engine's special trips at train stations country-wide.'

6.3.2.5.1.5 Industry Fairs and Conferences

All new media companies noted that they also attended industry and education fairs and conferences and the events noted here may be useful for companies in the early stages of development in the market for promotional and networking purposes. Related events include for example educational, teachers' conferences, educational authorities and governmental education and NC related events, such as BETT, The Education Show, and teacher's unions and clubs. Toy, games and book product-related events were also useful for promotional and networking purposes, such as the London International Book Fair (LIBF) and its Digital Media Showcase, the Bologna Book Fair, the London toy and hobby fair, international toy fairs, and E3 - the major US trade fair. Other conferences which were attended for promotional purposes included computer and multimedia fairs and conferences such as the European Computer Trade Show (ECTS) and award events such as EMA.

6.3.2.5.2 Online Promotion

Both company types interviewed in 1999 and 2000, were using the internet primarily for promotional purposes, to inform consumers/browsers about their companies, products or future products. One publisher in 1999 noted it was using the internet 'to promote other branded products, television programmes and related media' and also directed their television viewers to their website by showing their web site address at the end of television programmes. However, another interviewee warned, 'it is hard to get the pay-back from TV advertising so don't invest in it.' Some new media representatives also noted they had produced an online catalogue to sell their children's multimedia products. Key factors for online promotion were described by interviewees who recommended particular online promotional assets for differing target audiences. These factors are summarised in Table 6.1 and give an indication of how the more successful companies in the children's multimedia market have been promoting their products or content for children.

Table 6.1 Online Promotional Assets for Differing Audiences

Child	Adult	School	Retailer	Wholesaler	Potential licensee or international partner
Current popular craze	Subliminal learning benefits	Educational community & teachers targeted	Strong or popular product assets & brands held by company	List of retailers/wholesalers in the market place that the company has/has had relations with	Note that the company's sales record in the market is healthy
Game factors	Retention quality (child will want to play more than once)	Promote educational benefits of product	Effective & successful previous consumer relationships & healthy sales record highlighted	Emphasise familiarity & popularity of company + products, key selling times	Note that these sales could potentially happen in another market - note the characteristics of those sales
Excitement	Education benefit coming through unknown to child	Benefits in classroom situation – fit with traditional delivery of material i.e. NC, key stages	Clarity & boldness of promotional material & benefits of entering relationship	Note how they can make a profit from being involved	What would be involved in terms of production

Some of the generic multimedia promotional activities discussed are also applicable to online products but other activities were highlighted by interviewees as adding value to the promotion of online content for children such as:

- Creation and development of a community of user – targeting children, parents/family and educators or carers (not just specific to online). This was achieved by using 'wish lists', mailing lists and mail shots – with user information, for example, contact details, likes, dislikes etc
- Clarity of brand, online catalogue and links –breakdown of all products, enabling 'aggregation' and 'ease of navigation' and quality information and visuals
- Author and series promotion
- Security and integrity of offer
- Testers of products, games, activities free to sample, downloadable demos and screensavers, competitions/prizes

- Links to related and quality sites of interest
- Links to company's other branded products i.e. toys, books, videos, sweets
- Added value to the CD-ROM/book
- Involvement in e-commerce events

These factors are those identified solely by the companies studied as being key to the promotion of their multimedia for children. The area of promotion is one which could also adopt a separate study – particularly in the area of online promotion which has become increasingly more sophisticated in recent years.

6.3.2.6 Pricing

Findings indicated that pricing was also a key activity in the children's multimedia value chain – with major differences for offline and online products and content. Online advertising and subscription models and offline price perception, product considerations, brand/price/ purchase links, pricing decisions, and seasonality factors have all been highlighted by respondents and have been analysed in this section.

6.3.2.6.1 Online Advertising and Subscription

As multimedia publishers leverage their brands to create focused online communities of high value to advertisers and users, an Andersen Consulting study predicted there would be a gradually increasing market share of 'electronic' or multimedia advertising versus television advertising. Premium services for professional and special interest users would generate subscription fees, while services for leisure users would be financed by personalised advertising and commissions. The same study by Andersen Consulting, which showed the majority of consumer respondents would not pay for basic content such as general news, local newsgroups, or classified services, was supported by the findings from the publishers and new media companies sampled. Companies in this research noted that their consumers were expecting free content online and revenue had to be made through advertising and complimentary products. It found that the majority of the services for the mass market would therefore need to be advertising-financed and that users accepted informative and attractive advertising as acceptable online content. 'Electronic' or multimedia publishers, they noted, would benefit from a head start on their competitors in building customer loyalty and multimedia publishing would blur the boundaries between independent content and advertising, building direct links to customers. (Andersen Consulting and IENM). Successful publishing and new media companies were found to be building these links with customers in 1998-2001. The lack of online transaction activity by those companies which were not so successful was blamed on technological barriers and their under-developed payment systems.

A DTI study in 1998 also noted that various business models were being experimented with, including advertising, subscription, 'pay-per-view' and transaction charges. On the basis of this study's results, these models were being adopted by many larger children's multimedia companies, with substantial

investments being made to create a strongly branded site with attractive content. Some of these companies had sufficient brand strength to attract consumers online, but they, as well as, smaller companies, also had to position themselves within areas of high traffic and portal sites (Williams 1998, 70).

6.3.2.6.2 E-commerce

Royle, whose study on how consumer publishers' use of websites affects their relationships with retailers noted:

> 'Publishing has been quite slow to embrace e-commerce and take advantage of the opportunities it offers...' (Royle 1999, 5)

One company noted that 'the access model' had disappeared, as browsers were beginning to access information for free. Companies could also create profitable e-businesses through the development of effective advertising models, whereby they find their appropriate online reach and choose the relevant advertising channels to make revenue out of their association with that reach. This was noted to be 'growing steadily.' Interviewees' ideas about the way e-commerce has developed in recent years are summarised in Table 6.2 below:

Table 6.2 E-commerce models

	Access Model	Advertising/ Sponsorship Model	Subscription Model
Past	pay for access to information	advertising revenue = additional to profit made by product sales	substantial fee for access to information
Present	free access to information	solely dependent on advertising revenue to achieve profit online	user info provided & no fee or minimal payment for access to info

Another publisher interviewee noted how the international focus of the internet allowed access to a wider promotional and potential user/purchaser base for children's multimedia companies:

> 'We are moving from a UK publishing mechanism with territorial restrictions which will disappear as we deal with other companies on an international scale through the worldwide mechanism of the internet.'

6.3.2.6.3 Offline Pricing

Although some of the CD-ROM, DVD, audio-visual and books produced by the companies studied were sold online, and some content was also free or subscription-based online, many publishers (in particular) and some new media companies continued to use other more traditional pricing methods for offline multimedia.

6.3.2.6.4 Price Perception

Companies producing in the same subject areas were needing to develop competitive pricing strategies and innovative budget lines in order to achieve good sales and reinforce their children's multimedia product brands. Their average product price for a CD-ROM was £25.00, but budget line products at £9.99 were designed to encourage impulse purchases. One company noted:

> 'Retailers seem to like them because they made a decent profit out of them and for the company, there were two advantages: 1. they are good value and quality in terms of production and, 2. they help reinforce the brand, for example, a parent may buy the cheaper Reader Rabbit product and then discover there is another new Reader Rabbit product in the series with new features at full price and will then be encouraged to buy at full price. That's a typical spinner and it's an important strategy for us.'

The majority of products in 1999, tended to be around the £19.99 price point and one company predicted that this may come down slightly in the near future, but it was, at that time at the lowest limit of what companies could actually charge to compensate for the cost of production. One company which claimed to be 'competitive – not predatory' in their pricing, stated, 'Prices vary. We always try to adjust price for the proposition. We have an interest in driving prices down – not in building them up.' Another interviewee noted that the pricing decision for children's multimedia products is usually a joint decision between editorial, sales and marketing staff and his descriptions of his company's decision process are summarised in Figure 4.4.4, 137. These are straightforward, logical steps which were considered useful in the development of a price match to product value for the child user.

Two interviewees noted the importance of matching price to the strength of product or brand produced by a company. One interviewee commented that where the brand or product is weaker the price value is heavily promoted to the potential consumer through strong in-store merchandising. Another company which claimed to 'have a good understanding of where consumers are matched with a product and price they want', had designed a product ranged priced at under £10, 'to make a very easy purchase for the browser.' These findings also indicate that the value (physical price) which is placed on a popular brand in comparison to an educational package such as the inter-fact range can be substantially more. In terms of pricing strategy development, a comparative study looking at the value which is placed on product genres in this market may be of interest.

6.3.2.7 Sales and Distribution

This section discusses the key factors contributing to the development of the sales and distribution of children's multimedia products and focuses more on online sales development in comparison to previous studies.

6.3.2.7.1 Offline Multimedia Methods

Interviewees noted that in order to sell multimedia products effectively, communicating well with licensees, manufacturing, distributors and retailers is important:

'For future products, it's good to talk to our suppliers and distributors to receive their experience of the market, feedback about different price points, areas of security, marketing ideas and standard box designs for different areas. This is a two-way process.'

In reference to sales and distribution opportunities in this sector, 'looking outwards as opposed to inwards' was thought to be key. From the questionnaire survey responses in 1998/9, half of the book publishers respondents stated that there had been no change in their retail and distribution methods for multimedia. The other half noted the importance of direct sales and online sales, but also considered book stores to be an important outlet for them – still very much book-focused. The majority of the successful book publishers interviewed in 1999 were using book, electrical, toy and high street retailers and direct sales to schools as their main methods of selling and distributing multimedia to children. Other methods used (although not to the same extent) included libraries, supermarkets, games/computer and music stores and online sales. Half of those interviewed noted that their retail channels and distribution methods were not the same for multimedia as those methods they used to sell books. One noted, 'the initial thought by many traditional publishers was that multimedia would be sold through book publishing outlets and this simply isn't the case.' One of the problems in retailing highlighted by three of the interviewees was that the retail market leader (Dixons Group), Electronic Boutique, Game and others did not sell traditional media (books, videos, magazines etc) and over 30% of the market for software for book publishers, at the time of interview, was retail:

'It's a problem as all our multimedia products are based on books and the whole package is not wanted or required by certain retail outlets. This is a huge problem for book publishers who are delivering a more traditional package.'

Publishers are requiring to adapt their traditional packages for book retailers, offering more flexible options for new media and, in turn, new retail or online channels.

6.3.2.7.2 Seasonality/Sales

One interviewee noted that there was price sensitivity during sales when companies reduce their prices during promotion or sales. He noted that consumers were quite price-sensitive and were often fearful of buying products which reduced in price:

'Customers often wonder if the sale products are lacking in quality or appeal or questioning why there is no longer the demand for them. Were they part of a craze that is no longer popular for children in UK?'

It is suspected that these concerns and problems will reduce as the market, consumer, product and supplier relationship develops and matures. Three other publisher and new media company interviewees noted how the time of year was critical for children's multimedia product sales. December and January were highlighted as the two key sales months for all new media and PCs. This is a fairly common sense approach and could be adopted by other companies in the market as it is not predicted that these key selling times will alter dramatically, at least not in the short term future.

6.3.2.7.3 Online Methods

Vista International's studies looking at areas of value within the chain for multimedia or 'electronic' publishing highlighted that the internet (increasing in accessibility and affordability) was changing the relationship between the supplier and the user of CD-ROM, DVD and other multimedia products (Vista International, 1996-2001). Consumers were beginning to order online, publishers were interacting directly with the consumer and were attempting to protect existing revenue streams and create new ones. Online communities were being developed to attract current and new readers and provide a range of value added services, supplementing the core print product. At the time of Vista International's studies, these changes were still in their infancy and new business models were being tested and refined. The impact, at the time of Vista International's study, was described as 'minor', but it was anticipated that it would become a major growth area. In terms of selling online, three of the publishing company interviewees had developed a product information and credit payment system on the internet and one noted the advantages of doing so:

> 'We've always mailed a huge amount of direct mail in every subject area so instead our consumers can just visit our website for the information required and purchase there and then if desired. Alternatively they can join our mailing list and receive new product information via email.'

Another company that had not invested in online sales, directed people to Amazon.com to buy their products. They noted that their online catalogue was for promotional purposes only as they claimed 'the volume of their sales was likely to be too small for them to justify economically, the fulfilment or delivery of individual one-off orders.'

A new media company interviewed in 2000 criticised book publishers that had tried to sell their software to book retailers, 'There was definitely a lack of imagination and determination, and a tendency to use existing channels.' All of the new media companies interviewed were selling online and had online catalogues at the time of interview and one noted that it was no longer selling to 'shops' and another specified that its web site was used for 'sales, advertising, information and promotion purposes.' New media companies also noted the importance of direct, online and schools' sales and the companies' use of online sales had also increased over the past three years and a mix of certain features noted below were highlighted as being important for online selling purposes:

- online catalogue
- clarity of brand
- clarity of online catalogue links
- breakdown of all products
- price and visual information about products
- ease of navigation
- ease of subscription
- secure and effective ordering, payment, and general security mechanisms
- offers – bulk buys, extras, budget lines
- competitions, prizes

- wish lists/user information
- mailing lists/shots

One company noted the advantage of using sites such as Amazon to sell their products:

> 'If the potential buyer goes on a site that covers a wide range of publishers then he/she has got a much more diverse choice. Amazon covers such a vast range, in comparison to say, Foyles or the standard WH Smiths. We think that model is going to develop, as there are a number of UK sites specific to selling educational software by mail order and I think that's the way it's going.'

Larger sites with offerings which are 'easily searchable', by subject theme for example, are useful for both the children's multimedia consumer and for the producer reaching a wider customer base. Bookstores were still being used for educational products sales only or for CD-ROMs that were attached to books. High street stores such as Woolworths and electrical stores such as Dixons, Currys, Comet and PC World were used and one company noted the importance of training staff to give consumers quality advice about children's multimedia when visiting these outlets. Another company noted that new channels such as the Early Learning Centre and Mothercare had been used to cater for new users who were as young as 2 years old. Toy outlets such as Toys R Us, Hamleys and independent stores and supermarkets such as Tesco, Asda and Safeway supermarkets were also being used. Again, companies should be considering more creative and flexible options for new media sales - involving new retail or online channels.

6.3.3 Support Activities

Business process and structural support activities which were identified by the multimedia companies surveyed and interviewed involves factors of value related to the development of the human resource management of the companies studied (including new skill requirements, skills transfer and training and recruitment). It also involves an analysis of the factors which are key to the development of business processes, structural changes, and key departmental/functional relationships which add value in the children's multimedia companies studied.

6.3.3.1 Human Resource Management

Under this section, areas of value within new skills requirements, skills transfer, key skills and training and recruitment (staff increases) are discussed. Young, in 1997 in her analysis of the multimedia market, noted that 'one needs to recognise that people are part of the offer.' (Young 1996, 20)

6.3.3.1.1 New Skills Requirement

In January 1998, Dag Smith (Chief Executive of The Publishing Training Centre at that time) noted a requirement for research into 'the current and future training needs/skills shortages of those responsible for the development of the multimedia product' (Smith 1998). Comment by Foster, Groves, Morrisson, Bide et al also noted the problems of bridging the skills gap for new technology in publishing companies. Foster highlights ways in which publishers acquired new skills for multimedia production

including; hiring, outsourcing, joint venture, acquisition. Publishers and new media companies in the sample used a combination of these methods. Foster also noted the problems of bridging the skills gap for new technology in publishing companies. Foster puts it succinctly:

> 'People have a hard time changing and that's why companies have a hard time changing. People cannot be re-oriented overnight; developing the necessary skills base to manage the transition to a new technology is time consuming and expensive.' (Foster 1996, in Bide 1998, 33)

One company had anticipated that some of its staff job descriptions had to be reassessed and restructured 'to cope with the new departments and individual skills required for new media.' Another had not done this and had undergone some 'fairly dramatic learning curves, learning and absorbing information about new media.' There are clearly issues in making these changes and there are ways in which potential problems can be avoided. Some suggested ways are by keeping abreast of market developments, researching new technologies, and programming developments which should enable companies to identify specific training needs.

Some of the 'skills issues' that multimedia companies should start considering as they face new challenges were also outlined by Morrison:

> 'Producers need to learn new technical skills, and understand processes such as systems integration, database construction, bandwidth, and the latest server and browser technologies. Decision-makers at the highest level need to address the issues of training, outsourcing and securing the resources they need.' (Morrison 2000, 5)

He also considered the advances that had already been made by the IT sector, but remained optimistic that traditional media producers could still catch up:

> 'They possess the highly sought after communication skills that IT professionals lack, and can bring their flair for design and content to the new media. Provided media producers act fast enough and commit themselves strategically, exciting opportunities are still there.' (Morrison 2000, 6)

New media company representatives noted that programmers, in particular creative programmers, were the most difficult people to recruit. One interviewee felt that there are always skills shortages because there are so many ways of making multimedia and so many different languages to master:

> 'There are never enough people to cope with this and programmers and designers seem to be getting more expensive. The most expensive person you work with charges £400 a day.'

Another felt that the best of the programmers in the UK would be more interested in large-scale projects: 'It's not as exciting to work on a children's educational product as it is to say work on something like Lara Croft and so it is harder to get programmers.' The costs involved in employing 'decent' programmers were also a concern for two of the interviewees, with one noting that for good programmers now, you have to compete against 'games industry wages' which is not ideal. The other noted, 'Because we are a smaller company we may find the right person but we may not be able to satisfy their required/entitled salary.' These skills shortages and the expense of programming expertise could be problematic, particularly for smaller companies in the market.

6.3.3.1.2 Staff Increases

Publishing companies noted staff increases in research and development teams (testing and production) and numbers in design and marketing had increased substantially due to new products being produced to wider, international markets. Some increases were also noted in rights, programming and software development. New media companies, as yet, had no substantial staff increases to note for children's multimedia production in 2000 as they were set up in the 1990s for the specific purpose of producing multimedia for children.

6.3.3.1.3 Start-up Skills

Most of the book publisher representatives interviewed in 1999 had to recruit new staff with the skills required for new media when their companies decided to start up multimedia production for children. One commented: 'We had to buy in to quality skills from day one so no one could take us for a ride and we took longer because we did that.' Two interviewees had used staff from existing magazines and technical development departments to set up multimedia operations, but development managers were also recruited externally as there was 'various skills gaps internally.' Their marketing department was not fully developed until much later as their only early marketing activity was market analysis and they did not feel that this 'justified setting up a department.' Another publisher interviewee noted his company's commitment to developing skills for multimedia in 1999:

> 'We're in it for the marathon, not for the sprint. We've got a vested interest in developing skills in new media ready for a world where interactive media is at the forefront.'

6.3.3.1.4 Skills Transfer

Foster also noted that there is the difficulty of dealing with skills that are no longer of value to an organisation (Foster 1996). These successful publishing companies interviewed who had staff with more traditional skills found that key editorial skills could be transferred to children's multimedia production. Training requirements were also followed up.

'The hardest thing, initially', for one book publisher interviewed was that some of his traditional staff thought the transfer to multimedia production would be straight- forward and he had to persuade his staff that they did not have the skills set, 'They wanted to learn but we didn't have the time to teach them so we had to bring in people to do the job.' Another interviewee agreed:

> 'the actual transfer of skills or the flow of skills from traditional to interactive publishing has been very little - that wasn't a policy decision, our staff were just happier sticking to what they knew.'

It was also noted that there was a 'fear factor that traditional staff were going to be wiped out by new media but that didn't happen.' Another interviewee felt that it was much different with online publishing as there had been a 'perpetual transfer of skills between broadcasting, production and online

web design and that's going on all the time – so that flow is far healthier.' Only two publishers noted the importance of keeping skills for new media in-house.

6.3.3.1.5 Training

Publishing and new media company interviewees noted that they used a mix of in-house and external training methods. Internal training was used for staff in order for them to keep up with the pace of technology as it updated regularly. Some noted that this was done on an ad-hoc basis whereas others noted that they had a 'major commitment to training for new media' and staff used a mix of internal and external training to keep themselves up to speed with new media. External training was used for specialist skills requirements such as web page and interactive design or video digitisation if the products were large scale, while internal training was mainly used for project, time management and presentation skills.

One particular publisher which was part of a larger organisation noted their company had centrally-funded training programmes (their 2000 programme, 'New Media – My Guide') which helped their staff get the most out of new media, 'no matter what level of experience they have or where they work.' Part of this programme included an initiative called Future-cast which was an event specifically tailored to children's staff and showcased the latest developments in new media technology directly relevant to the children's division, with presentations from people working on 'cutting edge' projects and hands-on demonstrations of new technology i.e. interactive TV, online toys and stories, game-cams, WAP technology. The event aimed to bring people together to share knowledge and to generate new ideas and inspire creativity using new media.

6.3.3.2 Structural Changes

Fowler's study of cultural and structural change noted that the objective of many organisations is to move from a static or rigid culture to one that is flexible and adaptable. He also observes that new structures will not be effective until supporting procedures are in place (Fowler, 1993). The majority of publishing companies interviewed in 1999 broke off as separate companies from larger operations or their parent companies for the purpose of producing multimedia for children. Two companies noted that the two separate units (traditional and new media) come together for rights acquisitions and joint promotions involving their book products, branding and use of logos. One of the interviewees noted that her company, which had a structure dictated by academic level and then within that, subject area (ELT, academic and education) had a separate 'electronic publishing division' set up in the late 1980s as shown in Chapter 4, Figures 4.48 and 4.49, 142. However, this structure was altered and 'children's electronic publishing operations' were moved back into the appropriate subject divisions in 1998:

> 'It was decided it was much better to publish for a subject area regardless of what platform a product was being produced on – that was the theory behind the reorganisation.'

This is an interesting approach, suggesting that publishing companies understood that multimedia production is not alien to other publishing activities and indicates that a learning curve approach to a new

area occurred and is possibly an exemplar study of best practice for those companies with a similar operations' structure.

Unlike children's book publishers who previously had to adapt their structures in order to produce multimedia, new media companies did not have to invest as extensively into structural change management. Only one noted it had a slight structural change and was in the process of trying to formulate exactly what their staff's new roles were going to entail, 'Over the past year, design teams, editorial teams and in-house production has been broken up - but that wasn't too difficult. We also had to employ more staff as we grew.' Therefore, structural changes again appeared to vary, but were found to be dependant on company size, company culture (traditional or new media-focused) and other operational, staff and product/content resources. Internal critical relationships, external collaboration, and outsourcing involved in the new media companies' production of children's multimedia are discussed in the following section.

6.3.3.3 Internal Critical Relationships

New media company interviewees in 2000 highlighted the importance of project collaboration in-house. They also encouraged open, flexible working relationships between functions/departments including: creatives, technical/programming, editorial/content, marketing/branding, and testing/development. These ideas conflicted with the views of Young and Bingley who had noted the importance of not merging roles, 'functions should be kept separate to enhance creativity as discussed previously. Lichtenberg and Peters emphasised the value in gathering staff together from external sources 'like a film crew' to stimulate creativity.

From the questionnaire responses in 1998/9 and 2000, both company types noted that the specific relationship between publishing/editorial and product/software development was an important one to have working effectively. All new media companies also placed emphasis on the relationship between artists, programmers and content suppliers. Different relations with the marketing department were also considered key by a smaller amount of both company types. Most of the publishers interviewed in 1999 noted relations with creative, editorial and programming/ software development as being critical in the production of successful multimedia for children ('bringing the programmer into the creative team is now critical'). Creative, sales and marketing relations were also noted as being important, 'where timing and reaching deadlines is critical' and 'allowing the creatives to see through their ideas in a realistic timescale is high priority.'

It was thought that tight briefings between commissioning, in particular, and creatives/artists and the co-ordination control between programming, PR and marketing helped 'create effective relationships to push development, ensuring maintenance of standard and branding the whole way through.' The importance of the relationship between product development and marketing was also noted. Within the majority of the new media companies interviewed in 2000, organisations were divided into small project teams working

on different CD-ROM or web site projects, using staff from testing/development, programming, design, marketing/branding, and editorial/content all working together (See Chapter 4, Figure 4.72, 181).

The importance of keeping small project teams and their skills in-house and the relationship between editorial/content, creatives and programmers were highlighted by the majority of interviewees as being critical for successful children's multimedia. One interviewee noted:

> 'Some companies had made a huge investment into external companies to reuse their material or for creative ideas or programming purposes and they had very little in-house real development which turned out to be a failing.'

Achieving a good working relationship between editorial and marketing/branding staff appears to be key. Regular meetings and discussions are encouraged between these activity sections along with product development (including creative, technical/programming and testing and development). The benefits of keeping the staff's expertise and resources in-house was also highlighted.

6.3.3.4 External Collaboration

However, at a New Media Knowledge seminar on 'From Old Media to New Media', Groves noted that publishers could expect to face a great deal more competition in the new media marketplace than in the specialised niche they already successfully occupied. Where gaps existed in skills and experience in his company, freelancers and outside partners were used, but always with a view to learn from them and take their skills in-house (Groves 2000). At the same seminar, Ball advised anyone producing material for new media for the first time to 'keep the intellectual rights to your own material wherever possible and find partners that compliment your own skill-sets.' (Ball 2000)

Some of the more successful companies interviewed appeared to be adopting the approaches recommended by Groves and Ball. The sample's response indicated that publishing companies interviewed in 1999 used a form of the 'studio model', as Lichtenberg and Peters recommended. Some representatives from both company types noted that their companies supported the views of Young who felt that 'creativity is actually improved by not merging the roles and continuing to keep functions separate' (Young 1996, 20). However, new media companies interviewed in 2000 tended to invest more in areas and skills of value in-house in order to produce successful children's multimedia products.

Both company types interviewed in 1999 and 2000 collaborated with companies outside of their organisations. The majority of publisher interviewees collaborated externally for joint production, with one noting, 'If you outsource, you can buy in innovation, new techniques, skills and flexibility - similar to a television broadcaster's use of a production company.' Interviewees also invested in international rights sales and collaborated with companies such as creative suppliers, hardware producers, other publishers, media production companies and US companies for 'riskier', 'more technical' or 'creative' projects. Two others worked on government-funded projects, tied in with promoting new media in education. Most of

the new media company interviewees in 2000 collaborated externally with educationalists and children involved in focus group testing for market research. Networks of publishers, agents, distributors, developers or licensors were developed world-wide for most of the interviewees' rights sales activity. One company noted the advantage of collaboration with a book publisher, 'the relationship has worked well for over 8 years as we share development and copyright costs and then bring the product to the market together.' Another noted the importance of company branding while collaborating externally:

> 'Company branding is important, on a corporate level, when you're negotiating partnerships with publishers. There it's not down to product level. But for your customers, it's product level that's important.'

Others collaborated externally to buy music, graphics, video or TV programme rights, occasionally for joint production if they did not have the relevant expertise in-house. Another used product development companies (with strengths in the children's area), and localisation companies, while two others used programming freelancers for specialised web projects. Some of the companies sampled noted the difficulties in setting up the 'more technical back-end programming' for a web site and the requirement to do this 'out of house', others noted that their base products were produced in the US by internal programming teams, while another had a software development team in the US but used external programming teams in the UK, with '80% internally developed, and 20%, outsourced'. Overall, there appears to be a mix of opinion as to whether it is best for children's multimedia companies to retain staff and content resources in-house or to use external resources or freelancers. A suggested way forward would be to use external resources initially for new knowledge or projects, receive the training and skills development and then develop these skills in-house. Using externals for new or unusual projects may also stimulate fresh, creative, innovative approaches.

Chapter 7: CONCLUSIONS AND FURTHER RESEARCH

In the late 1990s to early 2000s, this study surveyed and evaluated the activity and position of a selection of publishing and new media companies in the UK producing multimedia products in tandem with their other output for children. These children's multimedia companies appear to be in a creative, confident, innovative mood. Despite being forced to confront continual changes, with new technology, competitors, products, yearly crazes, and brands, children's publishing companies and new media companies have moved on from the experimental phase they experienced in the early-mid 1990s and are now expanding into new sectors and developing partnerships with new brands, licences, companies and market sectors both nationally and internationally. Online activity also appears to be continually developing. Key market forces and areas of value and development for companies in the children's multimedia market are summarised which are impacting on the economic development of this sector of publishing in the UK. This study recommends that companies in the children's multimedia industry should analyse the external forces in their market situation rigorously and adopt similar internal approaches to those of the successful companies in the children's multimedia market which took part in this research. Equally, organisations in other publishing sectors developing multimedia could apply some of the strategic approaches of children's multimedia companies.

Certain issues have emerged in this research which seem to require further investigation. The industry is advised to follow the lines of inquiry highlighted in this chapter which could not be researched in more depth within the scope and timescale of this study.

7.1 Change Management

Throughout the period of study an understanding of the current thinking on change management within the more specific industry of children's multimedia can be developed and applied to other industry sectors. It appears the publishing industry could benefit by moving on from the traditional procedures within general consumer publishing and apply more commercial industrial theories such as the Five Force model and Value Chain model which this study has developed. Due to the volatility of multimedia industries, publishers and new media companies alike are continually having to analyse, react and adapt as new technology, competitors and products, and even the customer evolves and becomes increasingly sophisticated, impacting on companies more traditional systems. The insight into change management in this study of the children's multimedia sector contributes significantly to academic and practitioner understanding of how publishers adapt to change and may be of use to those companies developing in the market or contemplating entering the market.

7.2 Market Forces

Within the children's multimedia market, external forces or influences affecting the development of the publishing and new media companies (or divisions) have been identified and discussed in relation to companies' strategic development. The Children's Multimedia Five Force model was developed to outline the key external factors influencing companies in the children's multimedia market as discussed throughout this thesis. The model displays pictorially the overall children's multimedia industry situation at the time of study. This model was adapted as more data was gathered from both publishers and new media companies throughout the period of this study and, in years to come, could be adapted further. The model highlighted the five market forces which affect children's multimedia companies including competition, entry, substitution, suppliers and customers and the key factors affecting companies within these five forces. Based on the key results from this study, companies in the sector are advised to monitor the growth and activity of companies from other children's sectors, such as the toy and games sectors, which were also gaining increased market share of the children's multimedia sector within the period of this study. Companies in the UK are also advised to develop innovative and creative online activity and improve and update their content more readily to compete with the US market. More studies into children, parent and teacher user patterns on the internet would be beneficial to support companies' product or content development, and research investigating and outlining potential funding opportunities and support networks for SMEs could also be beneficial. These studies may be undertaken in or out of house with possible academic, governmental or European collaboration or support.

The key 'entry' effects were also identified by the companies sampled active in the children's multimedia market. With the development and introduction of new initiatives noted by interviewees, such as the recent pre-school curriculum for example, companies may need to revisit their products, provision, and strategies previously developed. The technology in the market was also found to be continually changing. This study has highlighted the kind of challenge that companies in this and other similar sectors are facing, and suggests approaches which companies should perhaps be adopting when dealing with a changing market. Keeping abreast of new technological, product, platform, programming and gaming developments, changing competitors, suppliers and distributors is also key. The study puts forward suggestions on new ways of developing companies' capabilities and working effectively, or indeed, competitively with others, which could be more widely adopted by companies in this sector or others.

A key issue with regard to customers in the children's multimedia market is the role of the 'middle market'. Parental and educationalists' attitudes about PC, multimedia and online use need to change if multimedia is to become fully utilised at home and in the classrooms. Further IT training requirements for schools and adults in the home and cost implications are issues which have been raised in this research. This study recommends that an in-depth analysis of the middle market would be beneficial to companies (the middle market being the adult influence in the children's market) and the variation of

influences as the child grows older which have been identified in this study. The ways in which products should be designed, branded, promoted and distributed effectively to adult purchasers and child users was also explained. Some of the ideas teased out in the discussion of the UPP triangle (Figure 4.34, 124) and the Factors affecting user/purchaser table (Table 4.9, 157) are common to some approaches by companies in the children's book publishing sector and could also apply to other children's products or merchandise such as games and toys.

However, in order for further development of the children's multimedia being produced by the companies studied, companies have highlighted that there is a requirement for a shift in the attitudes of adults potentially purchasing multimedia for children. Although they noted that there is a definite recognised 'new generation' of child willing to use and learn about new media, teachers', adult family members' and parental attitudes need to change in order for the companies' multimedia being produced for the purposes of educating and entertaining children to be fully utilised. Identifying ways of educating parents about becoming more multimedia-friendly and promoting the benefits of learning through multimedia is an area which needs to be addressed. Surveys of training needs and skills development in terms of PC, multimedia and online usage for adults, parents in the home, teachers, nursery leaders, other support staff in schools, pre-school and out-of-school groups could be of potential benefit for companies in the sector. The development of more user-friendly traditional learning guides or packages (with a book and CD-ROM) could possibly be more suited to the attitudes of some adults who are potential purchasers of multimedia for their children, family or students.

Although this study identified key factors which children's multimedia *companies* considered to be important in relation to the children's multimedia product and market development, the identification of factors considered to be key by *children, teachers/carers/educators*, and *parents* and other *family members* would involve further investigation. Research would be valuable if undertaken to identify the user/purchaser requirements specific to

- Children (differentiating between pre-school, 5-8 and teen age groups)
- Parents and family members
- Teachers/Educators, child carers, and nursery leaders

The results of such surveys or studies could expand on and enhance the findings of this research. Companies will also need to consider the continuing increase in demand in other children's service providers such as pre-school and out-of-school care and survey the impact on the requirements of such groups due to the standards being set with the introduction of the new standards and guidelines set out in the pre-school curriculum.

Other markets which have not been considered in this research may also benefit from a study on development factors, potential usage or promotion of multimedia for children with special needs and children learning in remote and rural areas (at home, in multi-purpose centres, or via mobile cinemas and toy libraries). Such multimedia services or provision for children may offer potential economic benefits as work patterns change in the UK and children are being cared for, educated and entertained

in different ways. A study of development factors in the games market and e-book market may also be of interest as these areas could not be researched in depth within the scope and timescale of this study. Further development of the Children's Multimedia Five Force model designed in this study, outlining effective strategies for coping with volatile markets or markets affected by changing technology, would be useful for other companies' in other sectors of publishing, information or communications-related industries in their analysis of the shaping forces influencing their multimedia production.

7.3 Companies' Areas of Value

This study also identified and evaluated internal factors (in relation to product, structural, procedural, and strategic development) for companies to succeed in the children's multimedia market. Internal activities or factors contributing towards development which the children's multimedia companies studied either had or required have been outlined in a Children's Multimedia Value Chain (informed by elements of Porter's original Value Chain model, and applications of the Value Chain by Vista International, and Diebold 1996-1999). A more specific, robust model has been designed with empirical evidence from a focused sample from the children's multimedia market.

The research has adopted a more qualitative approach to the Value Chain in comparison to Porter's original quantitative mechanism which examines the value a company creates against costs involved – ultimately identifying the marginal result. Instead, the Children's Multimedia value chain developed in this study, has been based on qualitative findings which indicate key areas or activities of value developed by children's publishing and new media companies. This study, has focused more on strategic, staff and product development rather than a financial, quantitative output in accordance with the thinking of writers such as Lynch who noted that such detailed quantification is unnecessary in the broad general discussion of strategy (Lynch 1997). The value chain (in strategic development) was designed to explore the existing linkages with value-added areas of the business. There is scope for further value chain research focusing on financial output or rights development which was not studied in-depth in the course of this research. Within the following sections, key strategic, core and support activities on which children's multimedia companies have been focusing are summarised and potential areas for further research have been identified.

7.3.1 Strategic Activities

Within the Children's Multimedia Value Chain, key areas of strategic activity were outlined. The study highlighted the key activities involved in children's multimedia production and linkages between them, aiding development in the market. Firstly, company strategy and background was analysed involving an investigation into companies' branding, culture, values and value shifts. Children's multimedia companies' strategic change management – looking at the companies' organisation and types of change involved in the adaptation of process and behaviour, planning and development strategies, research management and techniques, and innovation strategy were also researched. Although certain brand

values, such as a focus on quality or education for example, should be maintained by children's multimedia companies, research results indicate that adjustments may be required to cater for market likes, dislikes and requirements. Most of the successful companies appeared to be leading change in the market and were continually 'adapting' (new media) or investing in 'large scale' change (publishers). Methods highlighted for dealing with resistance to change include: education and communication; participation and involvement; supporting some of the methods included in the culture paradigm. The research also identified the actual products and strategies publishing and new media companies were investing in at the time of study. This overview indicates that the companies studied did appear to be using some of the methods of change management strategy theory recommended in management texts, although, no company was the same. In some instances, companies would adopt a particular change strategy focusing on branding, cultural shifts or pulling in innovation through new skills or products. However, after using the recommended market research techniques, some companies may require to revisit and alter particular strategic directions. Reactive strategic approaches appear to be common and useful in volatile sectors such as the children's multimedia market. The options set out in this study in terms of strategic approaches adopted by companies for changing, volatile environments include options which should be considered in other sectors of publishing.

7.3.2 Core Activities

Core activities which were focused on by the companies studied were highlighted within the areas of content/editorial, product development, marketing/branding, promotion, pricing, sales and distribution and other services. Some of the core 'content development' or 'editorial' activities and skills identified as contributing to the development of the children's multimedia companies studied match those mentioned in previous studies. They are summarised as being: education and subject expertise, good market relationships and feedback (from educators, parents, family, and children), commissioning of ideas/products/brands, acquiring and negotiating licences, rights and talent, sourcing, assessing value, selecting, sifting, filtering, editing, localising, translating, outsourcing, organising and co-ordinating the content development process. Control of assets for children's multimedia (in-house or out-of-house) was also noted as being key to success and development in this sector alongside the development of creative and innovative services, processes and products. These core activities were studied in detail (in comparison to Porter's and Vista International's value chain analysis of core or primary activities) and focused on the key strengths within both the offline and online activities of companies. Again, an exercise in self-examination which companies in other publishing sectors would benefit substantially from.

7.3.2.1 Product Development

Commentary on the areas of activity within product development and product assets has previously only been speculative and described in the context of generic publishing or multimedia industries. Research into the specific departments or areas discussed in this research, and particularly with a focus

on children's multimedia, had been lacking. Creative activity, skills and an understanding of issues contributing to successful children's multimedia products and content offline and online have been identified. These include being innovative, technology-aware, striking a balance between technological capabilities versus creative ideas, realism regarding time/finance considerations versus creative ideas, being commercially-aware, investing in external collaboration or in-house teams or a combination of the two, encouraging effective, open relationships with other departments, and developing in-house visual resources. There appears to be no set way of creating and stimulating innovation and creativity within a children's multimedia company. In order to encourage development, some interviewees emphasised the importance of gathering resources in-house but others also noted the benefits of using external sources or collaborators. This is perhaps an area that could be investigated in further detail in the future as there appears to be specific requirements pre company type, a variation of creative approaches on offer to companies, and best practice ways of working again, particular to specific company types.

Within the technical/programming activities section of a children's multimedia company, having commercially-aware, innovative, new technology-aware staff, having realistic, balanced approaches regarding time/finance, technical capabilities and creative ideas, ensuring maximum use of the software engine and digital capabilities, identifying a need for an 'awareness' of creative, editorial, educational considerations rather than 'cross-over skills, developing in-house resources and teams, in-house programming development, and effective, open relationships with other departments are the key development factors identified in this area of activity. There appears to be a continuing debate over whether it is most valuable to have a programmer who also has cross-over skills, such as a 'commercial sense' or 'educational-awareness' for example , or whether it is best to keep this knowledge of the market and its impacting forces with staff in their traditional settings such as marketing or editorial departments. The same debate continued with regard to whether or not programmers would benefit from possessing cross-over skills such as creative or editorial skills. However, children's multimedia company respondents, in this instance, indicated that perhaps it is not so much a requirement to have 'cross-over 'skills' or 'abilities', more a need for an overall 'awareness' of creative and editorial considerations. Based on the study findings, companies perhaps need to analyse their skills and resources and make a decision about how to firstly utilise them to their fullest potential, and also how to find ways of merging and complimenting often distinctive activities in- or out of house. This was one of the main areas of activity which had changed the most for the multimedia publishing process for children's multimedia identified by the companies studied and ensuring that programming (in-house or freelance) was kept as part of the creative process appeared to be key. Companies also highlighted the benefits of testing their products, targeting teachers, parents and children. Testing groups were held internally with testing managers and internal and external teams for information regarding market crazes/subject preferences and technical knowledge. Home/consumer testing groups (with children and parents) and school classroom testing groups (with children and teachers) were also used. The research gathered on market changes, and consumer preferences for example was fed into data management systems to inform product development. Similar techniques may be of use to other companies in the

industry or in other related industries. In terms of developing companies' technical and programming capabilities and skills for new media production, various approaches and best ways of working outlined in this research should be considered by companies considering multimedia development.

In the analysis of value within product development activities, respondents identified important qualities in children's multimedia products – both offline and online. This was an area that had not been studied in previous research. Indeed, those companies studied noted that it was an interesting exercise for them to identify what exactly it was in their products that made them successful. Interestingly, some had noted that they had never reflected on specific product assets before in-depth. Therefore, this section of the thesis may be of interest for those companies within the market already or for those contemplating producing children's multimedia products in the future. Particular product assets were noted as being key for both offline and online children's multimedia and are summarised as: educational/ NC requirements, entertainment/edutainment focus, strong/popular/reputable/familiar brands, rights, series, writer, illustrator, narrator, story- teller, characters, quality, creative, modern visuals, clear, logical, interactive, engaging structure, adaptability, complimentary values and products, international focus, and a subject-specific niche. Other product assets were identified as being more important in the development of online content such as premium services, for example 'downloadables', hints and tips, homework help, worksheets, suitable, comfortable, and accessible product, brand and company information, 'free information' culture, magazine publishing cycle similarities, updates and archives, simple, intuitive sites, ease of navigation - effective prompts, category searches, user return and in-house subject database development. These findings provide new knowledge about the children's multimedia sector, and should serve as a useful guide for those companies contemplating developing products or services in the market sector.

7.3.2.2 Branding/Marketing

Key findings indicated that there appears to be a need for companies in the children's multimedia market (both offline and online) to build and develop their branding strategies more effectively and to be more market, consumer, and competitor aware. Companies were becoming more aware of their market by keeping abreast of home and school market needs, new technology, platforms, programming, online developments, new offline products and online content, and crazes, key/popular licences, promotion and sales/retail channels. Detailed information was not available prior to this research into the types of research techniques publishers and new media companies were using to investigate and develop their understanding of the children's multimedia market. Key research techniques which were found to be used by the new media companies to gain a market awareness (in order of importance) included communication with retailers, questionnaire/surveys, in-store merchandisers, reply-paid cards, Chart Track subscription, electronic registration, before and after sales purchase focus groups, and membership of related organisations and suppliers. Again, these are techniques which could be transferred to other related publishing sectors. Steps taken by companies in the process of brand development were identified in the creation, acquisition, development, cross-

platform development and outsourcing of children's multimedia brands. The brands that more successful children's multimedia companies had developed were noted to have a key influence on the 'User/ Purchaser'. Important product features or values were described and a summary of them includes: reliability, authenticity, accepted authority and quality, continuity and clarity of design, being reputable, adaptable for new media, attractive, recognisable, bright and colourful, modern, fun and appropriate for retail or online. These factors can be used as a checklist for companies contemplating entering the industry or could be a useful comparison for those already active in similar markets.

7.3.2.3 Promotion, Pricing and Sales

Key promotional activities identified by companies as contributing to their offline children's multimedia development include: promotion in childcare, parenting, women's magazines, computer and educational press, TV adverts for larger brands, awards and prizes, brand-related events and merchandise, industry fairs and conferences, in-store retail, effective, eye-catching packaging design, website information. Value factors, in terms of online promotion, include the creation of a community of user, wish lists/ user information, mailing lists/shots, product breakdown, ease of navigation, quality information and visuals, promoting authors, series, sample product, 'tasters', free games and activities, testers/samples, security and integrity of the offer, links to related and quality sites of interest, and links to company's other branded products. Again, these factors can be used as a checklist for companies contemplating entering the industry or could be a useful comparison for those already active in similar markets. Both company types interviewed in 1999 and 2000, were using the internet primarily for promotional purposes, to inform consumers/browsers about their companies, products or future products. The factors summarised above are those identified solely by the companies studied as being key to the promotion of their multimedia for children. The area of promotion is one which could also adopt a separate study – particularly in the area of online promotion which has become increasingly more sophisticated in recent years. Findings indicated that again pricing was a key activity in the children's multimedia value chain – with major differences for offline and online products and content. Findings indicated that the value (physical price) which is placed on a popular brand in comparison to an educational package (such as the 'Inter-fact' range) can be substantially more. In terms of pricing strategy development, a comparative study looking at the value which is placed on product genres in this market may be of interest.

Online advertising and subscription models, sponsorship arrangements, offline price perception, product considerations, brand/price/purchase links, pricing decisions, and seasonality factors were all being developed by respondents. Online models were being adopted by many larger children's multimedia companies, with substantial investments being made to create a strongly branded site with attractive content. Some of these companies had sufficient brand strength to attract consumers online, but they, as well as, smaller companies, also had to position themselves within areas of high traffic and portal sites. It appears that staff culture and attitudes in UK book publishing companies about using the internet require further change, and the quality of the material online needs improvement. However,

most of the sample were concerned about ways of making their online activity profitable and adding value, increased and focused advertising and sponsorship deals for specific age groups or subject sites were noted as being the way forward for the majority of interviewees. Companies needed to apply online sponsorship, subscription-based, and advertising models which add value – with other related companies such as toy, bike and skateboard manufacturers and retailers. These online approaches or models identified in this research by the children's multimedia companies studied are models which should be considered by those in other related sectors and publishing academic research.

Traditional sales and distribution outlets were being used by the majority of companies in the study to sell their children's offline multimedia products including book, electrical, toy and high street retailers, games/computer, and music stores. Libraries, supermarkets, direct sales to schools, and online sales were also used. Publishers encountered traditional package problems when targeting new media outlets. Publishers sampled in this study adapted their traditional media packages further for book retailers, new retail or online channels, offering more flexible options. A summary of the methods identified as being valuable for online children's multimedia sales includes the use of an online catalogue, clarity of brand, clarity of online catalogue links, breakdown of all products, price and visual information about products, ease of navigation, ease of subscription, secure and effective ordering, payment and general security mechanisms, offers – bulk buys, extras, budget lines, competitions prizes, wish lists/user information, and mailing lists/shots. All companies found that sales were affected by seasonality. Again, these methods can be used as a checklist for companies contemplating entering the industry or could be a useful comparison for those already active in similar markets. The research findings suggest that companies across most publishing sectors in the UK should be considering more creative and flexible sales strategies for new media by using new or altered retail or online channels.

7.3.3 Support Activities

Key areas of value within activities identified as supporting children's multimedia companies included new skills requirement, staff increases, start-up skills development, skills transfer development, and training. There are clearly issues and potential problems in the area of skills development and there are ways in which potential problems can be avoided. Some children's multimedia companies suggested keeping abreast of market developments, researching new technologies, and programming developments which should enable companies to identify specific training needs. Other key areas such as effective business process and structural support, internal critical relationships, and external collaboration/outsourcing were identified by companies as adding value in their children's multimedia production. Unlike children's book publishers who previously had to adapt their structures in order to produce multimedia, new media companies did not have to invest as extensively into structural change management. For both companies, structural changes again appeared to vary, but were found to be dependant on company size, company culture (traditional or new media-focused) and other operational, staff and product/content resources. Achieving a good working relationship between editorial and marketing/branding staff appears to be key in successful children's multimedia operations. Regular

meetings and discussions are encouraged between these activity sections along with product development (including creative, technical/programming and testing and development). The benefits of keeping the staff's expertise and resources in-house was also highlighted. New media company interviewees in 2000 highlighted the importance of project collaboration in-house. They also encouraged open, flexible working relationships between functions/departments including: creatives, technical/programming, editorial/content, marketing/branding, and testing/development which also touches on the ideas of Lichtenberg and Peters who emphasised the value in gathering your staff together from external sources 'like a film crew' to stimulate creativity. The study findings imply that more open working relationships are being developed or sought after, with a desire for an increase in knowledge and resource sharing and management internally in UK companies and these should also be considerations for those companies in other publishing sectors. However, overall, there appears to be a mix of opinion from the companies studied as to whether it is best for children's multimedia companies to retain staff and content resources in-house or to use external resources or freelancers. A suggested way forward would be to use external resources initially for new knowledge, projects, brands or licenses, experiment, receive the training and skills development and then develop these skills in-house. Using 'externals' for new or unusual projects also appears to stimulate fresh, creative, and innovative approaches in multimedia production. Both approaches should be considered and decisions on best ways of working for companies considering entering or developing in this or similar markets should be thought out carefully.

7.4 Final Points

The Children's Multimedia Value Chain helped to outline the key factors adding value or contributing to children's multimedia companies' development in the UK. The research formalises the factors used or required by children's multimedia companies to achieve success and further development in the multimedia market and makes a valuable contribution to the discipline of publishing as the developments in multimedia publishing are still very dynamic. This seems to be the first study involving the development of models grounded in the reality of the developing and changing world of multimedia. Both models developed in this study, clearly outline external and internal factors companies should be considering to improve their development and will ultimately be of economic benefit to publishing and related industries in the UK. The research also directly contributes on a European scale, towards trends being encouraged by EC initiatives, in particular, to a study in the Info 2000 programme, which is providing strategic insight and guidance to European publishers entering the multimedia market, enabling Europe to remain ahead of its competitors as we progress in the 21st century (European Commission 1996).. The two models developed, analyse both the children's multimedia market, company, and to some degree, product. The study also provides an insight into the importance of using strategic change management analysis techniques and models to evaluate change and development in the now continually evolving publishing sector. These models and techniques from business management theory set out in the context of the children's multimedia market - an interesting, successful and volatile sector of the multimedia publishing industry – contribute significantly to

academic and practitioner understanding of how companies adapt and develop for the changing multimedia market in the UK.

The findings of this study particular to the children' multimedia market are intended to elicit interest in the techniques used and to provide a strong starting point that can be further elaborated by other researchers in other areas of the publishing industry or related information or multimedia areas. The modelling structures have continued to take on new dimensions as the study progressed and could be further developed or transferred to other companies or sectors, following the suggested lines of inquiry earlier in this chapter. The modelling structures could also be developed or adapted to involve a more quantitative analytical approach – measuring costs, financial output and implications of multimedia production, which would develop this study which focuses on the core resources, skills, competencies and relationships within children's multimedia companies.

In conclusion, this study of the children's multimedia market, a leading edge example from the multimedia sector undergoing change, is an original investigation which identified key factors contributing to companies' development outlined in the modelling structures developed. Key factors and approaches identified by children's multimedia companies as promoting their strategic development in this study, would also be useful for publishing companies in other sectors learning how to develop their 'businesses' for multimedia production. The research can now progress beyond seeing the research site from the children's multimedia companies' perspective and work at developing interpretations that are revealing and informative to both practitioners, business theorists and academics alike – providing a base for future interpretations, in both the children's multimedia sector and other publishing, information or communications-related industry sectors.

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Publishing Companies - Adapters 1998	Questionnaire 1 Response	New Media Companies - Entrants 2000	Questionnaire 2 Response	Analysis/ Comparison
Questionnaire 1 Theme	31/50 = non-mm 19/50 = mm	Questionnaire 2 Theme	27/50 mm	Analysis/ Comparison
Multimedia publishing for children	79% = 5-10% 42% = children's mm is significant part of their production	Multimedia turnover for children	66% = majority of turnover dedicated to children's multimedia production	Book publishers' multimedia production seemed to be part of a wider range of products for children, although 42% stated that multimedia was a significant part of their production. A higher percentage of new media respondents attributed their entire production to children' multimedia.
Markets targeted	40% = non-consumer 40% = consumer all child age groups 79% (majority) = teen + 8-12 years	Markets targeted	74% = home 78% = schools all child age groups 89% (majority) = 8-12 years	An equal amount of book publishers targeted either the non-consumer (schools) and consumer (home) markets. A greater number of new media companies targeted a mix of both markets. Both company types targeted all child age groups from pre-school, 5-8, 8-12 and teen years. Both company types produced most products for 8-12 year olds.
Multimedia start- up	84% = early 1990s 16% = late 80s	Multimedia start-up	60% = mid/late 90s 30% = early 90s 10% = late 80s	Overall, new media companies started up their children's multimedia production later than book publishers.
Multimedia start- up reasons	58% = product development 37% = market test 21% = market demand 21% = digital interest 16% = US influence 84% = long-term view 1 = strategic threat 1 = long-term view	Multimedia start-up reasons	92% = Break even in 1-2 years 56% = market demand 30% = growth, competition, product development	Both companies were influenced by market demand (nm companies more so), competition/US, and product development (book publishers more so). New media companies appeared to be ambitious with 92% aiming to break-even in 1-2 years, whereas over a third of book publishers were only testing the market initially (only 1 stated it wanted to be a strategic threat). 21% did, however, state an interest in using digital products in future.
Value chain position	68% = comm 37% = pub + comm. 21% = publishers 21% = distributors 1 = move more towards distribution than	Range of multimedia services provided	All = multimedia publishing 60% = content, s/w development 30% = multimedia production 15% = multimedia distribution 15% = web development	The majority of book publishers still considered their company role in the value chain to be primarily commissioners or publishers. Some noted a move towards distribution. New media companies all also considered themselves to be multimedia publishers, with their main services including content + s/w development, followed by multimedia production

				development
				and distribution, and web development.
Product range	89% = book tie-ins 2 = mm stand alone all = books, CD-ROM, A-V 3 = broadcast or online content	Product range	All = CD-ROM 30% = CD-ROM + online 16% = A-V + broadcast 1 = video	All respondents from both company types produced CD-ROM as part of their product mix. Book publishers' focus in 1998 was book-tie ins with multimedia taking a complimentary role. They produced more A-V material than new media companies. New media companies' main concentration was CD-ROM and a more substantial % of their production focused on online and broadcast content in comparison to book publishers.
Internet use	84% = not using net for content delivery 16% = using net for content delivery 81% = plan to use net in future for that purpose	Internet use Web site features	74% = marketing, promo + sales 42% = R+D + content delivery future... 44% R+D, 30% content + promo, 15% sales Promo = 33% visibility, 18% engagement, 15% achievement, 11% accessibility, 4% applicability Sales = 52% visibility, 22% playability, 15% informative, 7% competitive	A small amount of book publishers were using the internet for content delivery, but a significant number planned to use it for that purpose in future. A higher percentage of new media companies were using the internet for content delivery – although they were using the internet primarily for other purposes; marketing, promotion and sales. They noted features such as visibility, engagement and achievement factors contributing to successful promotion of their sites and visibility, playability and the informative, competitive nature of their sites enabling successful sales.
Product qualities	53% = Education content 31% = brands + stand-alone mm products 21% = reputable writer/illustrator + cost 16% = part of series 10% = graphics + all important 0 = reputable characters or entertainment value	Product qualities	Very important = educational content, audience + product interactivity Important = Brands, quality, media richness + entertainment Unimportant = usability on various platforms Very important = 85% = product branding 56% = company branding	Both companies considered educational content to be an important feature in their children's multimedia products. New media companies felt that audience focus and maximum product interactivity were just as important. Both company types also felt that brands were important. New media companies also felt that entertainment and quality were just as important (book publishers felt this was unimportant). Book publishers considered producing multimedia from scratch (rather than trying to produce a CD-ROM straight from book format) just as important as branding. All new media companies felt that both product and company branding was very useful in children's multimedia production - product branding, in particular

	Structural changes	N/A	A significant amount of book publishers adapted their company structure in order to produce multimedia for children with 32% expanding existing children's publishing divisions and one large company expanding their publishing division. None of the new media companies noted that they had made any structural changes
Structural changes — 32% = expanded children's publishing divisions; 1 = expanded publishing division			
Collaboration — 42% = contractual development; 1 = partnership; 1 = acquisition		N/A All = selling rights; 85% = buying rights; 92% = joint production	42% of publishers invested in contractual development for multimedia production. One went in to partnership with another company and another publisher invested in acquisition.
		Companies involved: broadcasters, overseas publishers, s/w companies, US parent companies, educational publishers + online companies, US parent companies, educational publishers + online companies	New media companies collaborated with a number of companies for primarily, selling rights, then joint production and buying rights.
New divisions — 37% = set up new divisions (1 disbanded)		N/A	Over one third of book publishers set up entire new divisions in order to produce multimedia for children (1 disbanded). NM companies did not note any changes here.
Staff increases — 74% = no staff increases; 26% = creative, design + marketing		N/A	The majority of book publishers did not note any staff increases for multimedia production, however those that did, stated increases were required in creative/design and marketing departments. NM companies did not note any changes
Staff re-definiton — 63% = not required; 36% = promo + marketing			The majority of book publishers did not note any staff redefinition for multimedia production, however those that did, stated that redefinition was required in promotion and marketing departments. New media companies did not note redefinition was required.
Important Staff relationships — 58% = editorial + development; 21% = within editorial; 1 = publisher + retailer, within marketing itself	Important Staff relationships	All = artists + programmers + content suppliers; 30% = publishing + software development; 16% = marketing + sales + product development	Both company types noted that the relationship between publishing/editorial and product/software development was an important one to have working effectively. All new media companies also placed emphasis on the relationship between artists, programmers and content suppliers. Different relations with the marketing department were also considered key by a

Important staff skills	Product development, commissioning, education + IT expertise	Important skills	85% = quality programming + graphic artwork 16% = good ideas	smaller amount of both company types. Important staff skills brought to multimedia from book publishing staff included product development, commissioning, education + IT expertise. The majority of new media companies felt important skills for them were quality programming + graphic work. Good ideas were also considered important (although they did not outsource commissioning – see below)
Skills outsourced	All = developing + manufacturing 68% = retailing Using external staff considered more important than employing new staff with different skills set	Function outsourced	48% = s/w, web development + multimedia distribution 33% = mm production, retail, content development + other processes such as animation 15% = hardware production	Using external staff was considered to be more important than employing new staff with a different skills set by book publishers. All book publishers outsourced developing and manufacturing and 68% - retailing. Just under half of the new media company respondents outsourced s/w and web development and mm distribution.
Useful book publishing skills	79% = creative/design 68% = editorial/comm 42% = acquisition 36% = marketing 0 = technical	N/A	N/A	Book publishing skills that publishers considered to be useful for multimedia production included creative, editorial/commissioning, acquisition and marketing. Interestingly, no technical or programming skills were mentioned.
Additional qualities	95% = envisaged future qualities 11% = aim to focus on international brands 11% = interest in new product capabilities i.e. DVD, online at that time	N/A	N/A	Most book publishers envisaged different qualities being brought to their future products - with an aim to focus on international brands and an interest in new product capabilities i.e. DVD, online at that time
External training	85% = in-house 14% = external for IT, mgmt, specialist	Training requirements	81% = in-house 19% = external for marketing, programming + new technology training	The majority of both company types chose to train staff in-house. A small amount of both used external training for IT, programming and new technology training.
Skills gaps	32% = felt skills gaps in technical +	Skills gaps/	85% = quality programming + graphic artwork	A high % of new media companies felt gaps existed in quality programming and graphic skills. A smaller (yet significant)

	interactive production		Percentages	Summary
N/A	N/A	Recruitment difficulties	16% = good ideas	amount of book publishers felt gaps existed in technical and interactive production skills. A small amount of new media companies also felt they lacked good ideas coming in.
		Uniqueness	70% = branding 44% = content 19% = creative ideas	The majority of new media company respondents attributed effective branding as the main factor contributing to their companies' uniqueness (+ content + creative ideas)
Lessons learnt	42% = costs 26% = specific market + product focus 16% = branding 11% = scheduling + staff resourcing 43% = partnership 36% = licensing 21% = R+D	Lessons learnt	44% = branding importance 33% = US influence 13% = retail improvements 10% = specialist products required	Book publishers had learnt mistakes they had made in the past had included high investment costs, not focusing enough on specific markets and products. They also recognised more effective branding and scheduling and staff resourcing was required. To overcome some of the mistakes they had made, they invested in partnership, licensing and r+d. New media companies, on the other hand, noted firstly what they had done effectively and – the majority of respondents noted branding. They also learnt the effect and influence the US had on the UK market, how retail improvements and more specialised products are required
Product issues – children's	Very important = All = visual impact, education + quality Important = Media richness, international market focus, interactivity Unimportant = Shift from selling to licensing content	Product issues – children's	48% = branding 44% = content 30% = production value 15% = good reviews	Book publishers considered visual impact, education and quality to be important qualities in children's multimedia products, whereas new media companies' emphasis was on branding, content and production value and good reviews.
Retail	50% = retail + distribution same for books + mm 50% = more direct for CD-ROM sales 63% = online	Retail	Very important = direct sales + online selling Important = schools Unimportant = music stores,	Half of the book publishers respondents stated that there had been no change in their retail and distribution methods for multimedia. The other half noted the importance of direct sales and online sales, but also considered book stores to be an important outlet for them – still very much book-focused. New media companies also noted the importance of direct and online

			supermarkets + libraries	selling – and schools
	53% direct 47% = book 42% = library, high st, book clubs			selling – and schools
Market research	68% = trade press info 63% = qnaire/surveys 53% = focus groups + retail communication 37% = reply paid cards + experience 16% = internet info 1 = US trends, in-store merchandisers	Market research	74% = retail communication 60% = trade press info, reply pd cards 44% = questionnaire surveys 37% = internet surveys 30% = focus groups	The main techniques used by a significant amount of both company types included, trade press information, surveys, retail communication, reply-paid cards and focus groups. Book publishers main research tool was trade press info, while new media companies' was retail communication. The internet was used more by new media companies and focus groups were used more by book publishers.
Future position of book publishers	63% = significant role	New media company position	56% = significant role	A substantial amount of book publishers felt they had a significant role to play in the children's multimedia market. A smaller, yet still substantial amount of new media companies also felt they had a significant part to play
Threats	All = development costs 31% = skills gaps 26% = SMEs 16% = education v funding problem 16% = Over supply/ competition 11% = Product life cycles/ speed to market 1 = pricing ever downward 16% = price v quality	Threats	63% = lack of investment 53% = SME problems 21% = high costs	Market threats considered most prominent by the majority of both company types included investment or development costs and SME problems. 16% of book publishers felt that these costing and pricing problems caused a sacrifice in quality. 31% of book publishers felt threatened by their skills gaps. Over/supply/competition and product life cycles/speed to market were also considered to be problematic for book publishers.
Market development	32% = predict growth 1 = felt book products more suited to online format than CD-ROM 16% = move towards	Market development	81% = predict growth in online sector move towards direct distribution, online learning, early learning, revision + schools-tailored	A large percentage of book publishers did not comment on market development and 19% of new media companies felt there would be no major change in the children's multimedia market in the near future. Both company types predicted growth in the online sector,

	TV, hybrid, rights 21% = branding programming 19% = no major change	although a significantly larger number of new media companies predicted this and felt the move would be towards direct distribution, online learning, early learning, revision + schools- tailored programming. A smaller amount of book publishers felt the move would be towards TV, hybrid and rights. One publisher felt book products were more suited to online format than CD-ROM. A significant amount of publishers also emphasised the importance branding would have to play in the development of the children's multimedia. 21% of book publishers also noted the importance of branding within the children's multimedia market.
Competitors	Competitors	
42% = s/w, prod co mergers 16% = international mergers 16% = co existence + sceptical + media companies threat	74% = s/w, prod co mergers 37% = international mergers 20% = book company mergers ranked as most competitive + successful: BBC, DK, TLC, Hasbro, Granada, Havas, Microsoft, Anglia, Europress, Small programmers 1 = US 1 = lack of visibility	Both company types felt that more mergers would occur with software and production companies (significantly more new media companies had this view), and international companies. Interestingly, book publishers felt they would co-exist in the market place with other company types - some sceptical, felt threatened by media companies, whereas 20% of new media company respondents envisaged mergers with book companies

Appendix II: Children's Publishing Companies targeted in Questionnaire Survey 1998/1999

The Amaising Publishing House Ltd
Andersen Press Ltd
Athey Educational
Atlantic Europe Publishing Co Ltd
Avon Books
Audio Book & Music Co Ltd
Barefoot Books
David Bennet Books Ltd
A&C Black (Publishers) Ltd
Bloomsbury Publishing PLC
British Museum Press
Drake Educational Associates
Child's Play (International) Ltd
Cherry Tree Books
Crabtree Publishing
Crescent Moon Publishing
CYP Ltd
Orion Childrens Books, Orion House
Andre Deutsch Ltd
Faber & Faber Ltd
Kingfisher Publishing (Larousse)
Letts Educational
Hunt & Thorp
Orchard Books
Franklyn Watts
Egmont Children's Books
Thames & Hudson Ltd - Thames and Hudson Digital
Word Publishing
Cambridge University Press
Collins Education/ Letterland International
National Gallery Publications Ltd
Heinemann Young Books
Houghton Mifflin Co International
David & Charles Ltd
Schofield & Sims Ltd
Stanley Thornes (Publishers) Ltd
Harper Collins Publishers Ltd
Ladybird Books Ltd
Transworld Publishers Ltd
Scholastic Ltd
World International Publishing Ltd
Wesley Longman
Lion Publishing PLC
Chalksoft Ltd
Channel 4 Learning
Penguin Books Ltd
Random House Children's Books
BBC Multimedia
Oxford University Press

QUESTIONNAIRE SURVEY

FOR AN MPHIL/PHD RESEARCH PROJECT ON

DEVELOPMENT FACTORS FOR PUBLISHERS IN THE UK CHILDREN'S MULTIMEDIA MARKET

Please tick more than one box if appropriate.

1. In which of the following areas does your company publish?

Consumer   ☐   *(please specify area/s)*

Non-consumer☐   *(please specify area/s)*

Other   ☐   *(please specify area/s)*

----

2. What percentage of your UK company's overall turnover can be attributed to multimedia publishing?

0-5%	☐	5-10%	☐	10-15%	☐	15-20%	☐
20-30%	☐	30-40%	☐	40-50%	☐	50-60%	☐
60-70%	☐	70-80%	☐	80-90%	☐	90-100%	☐
100%	☐						

3. What percentage of your UK's overall multimedia turnover can be attributed to multimedia publishing for children?

0-5%	☐	5-10%	☐	10-15%	☐	15-20%	☐
20-30%	☐	30-40%	☐	40-50%	☐	50-60%	☐
60-70%	☐	70-80%	☐	80-90%	☐	90-100%	☐
100%	☐						

4. When did you publish your first interactive format for children?

----

5. Why did your company start producing multimedia for children?

product development	☐	market demand	☐
competition	☐	US influence	☐
other	☐ *(please specify)*		

----

6. For which age group/s do you produce children's multimedia?

pre-school ☐   5-8 ☐   8-12 ☐   teen ☐

7. What were your original commercial objectives when entering the new sector?

break even in 2 years	☐	long term view	☐
market testing	☐	loss leaders	☐
strategic threat to established business	☐	other *(please specify)*	☐

----

8. Do you commission specifically for

multimedia products?   book tie-in products?

yes ☐   no ☐   yes ☐   no ☐

9. Which products does your company produce for children?

books	☐	magazines ☐	audio/spoken word ☐
audio/music	☐	video ☐	CD-ROM ☐
broadcast	☐	online ☐	other ☐ *(please specify)*

----

10. If you are not currently using the Internet, are you considering it as a medium for

delivering children's content in future?

Yes ☐   No ☐

11.   On a scale of 1-5, to what extent does your company focus on the multimedia products for children below?

(Please circle the appropriate number. 1 is low, 5 is high.)

offline (i.e. audio, video, CD-ROM)   1 2 3 4 5
online (i.e. the Internet)   1 2 3 4 5
other *(please specify)* ☐

----

12.   What qualities do you look for in traditionally published children's books that determine their suitability for multimedia production?

series publication   ☐   suitable subject   ☐
educational value   ☐   entertainment value   ☐
high graphics content   ☐   effective usability   ☐
reputable characters   ☐   reputable writer/illustrator   ☐
established brands   ☐   suitable cost   ☐
suitable type (i.e. reference, edutainment)   ☐
other   *(please specify)*   ☐

----

13.   Do you envisage looking for different or additional qualities in future products?

Yes ☐   No ☐

(If yes, please specify)

----

14. What would you say were the most important 'lessons learnt' by your company in the process of adapting to multimedia publishing for children?

----

15. How has your company implemented its move into children's multimedia publishing?

new division set up ☐	expansion of a children's book publishing division ☐
new company set up☐	contractual development ☐
partnership ☐	acquisition ☐
other *(please specify)* ☐	

----

16. Where do you now see yourselves in the value chain?

commissioners ☐	developers ☐	publishers ☐
manufacturers ☐	distributors ☐	retailers ☐
other (please specify) ☐		

----

17. Has this changed since your first launch of multimedia and why?

----

18. What functions do you outsource and how is this different for multimedia?

commissioning ☐	developing ☐	publishing ☐
manufacturing ☐	distributing ☐	retailing ☐
other (please specify) ☐		

19.	Which staff, by job title, started up multimedia publishing?

20.	Which staff, by job title, are now responsible for multimedia publishing?

21.	On a scale of 1-5, indicate the main staffing issues for your company in producing children's multimedia?

(Please circle the appropriate number. 1 is minor, 5 is major.)

staff retention	1 2 3 4 5	product supply/major brands 1 2 3 4 5
speed to market	1 2 3 4 5	over supply/competition 1 2 3 4 5
development costs	1 2 3 4 5	price points 1 2 3 4 5
product life cycle	1 2 3 4 5	redeployment of staff 1 2 3 4 5
external expertise	1 2 3 4 5	training of existing staff 1 2 3 4 5

communication between old/new staff							1 2 3 4 5
employment of new staff with a different set of skills					1 2 3 4 5
communication between technical and creative/editorial staff				1 2 3 4 5
other	*(please specify)*		□

22.	If staff numbers have increased in any of the following areas/departments as a result of your company producing children's multimedia, please tick the corresponding boxes:

management □	personnel	□	accounts	□	design	□
warehousing/customer services		□	editorial	□	licensing	□
production □	promotion	□	marketing	□		

23. If staff tasks have been redefined in any of the following areas/departments as a result of your company producing children's multimedia, please tick the corresponding boxes:

management ☐   personnel   ☐   accounts   ☐   design   ☐
warehousing/customer services   ☐   editorial   ☐   licensing   ☐
production   ☐   promotion   ☐   marketing   ☐

24. In which staffing area(s) of publishing is it most critical to establish good working relationships to successfully publish in a multimedia format?

----

25. What skills held by your existing children's book publishing staff have been particularly beneficial in the production of multimedia for children?

creative/design   ☐   editorial   ☐   marketing   ☐
rights and talent acquisition   ☐   technical expertise   ☐ *(please specify)*

----

26. Are there any gaps in the skills required for multimedia production?

yes   ☐   no   ☐   (If yes, please describe)

----

27. Where is your staff training carried out?

in house   ☐   externally   ☐
(please specify types of relevant courses, training etc.)

----

28.   On a scale of 1-5, which of these issues matter most to you in relation to publishing children's multimedia products?

(Please circle the appropriate number. 1 is low, 5 is high.)

media richness	1 2 3 4 5	visual impact	1 2 3 4 5
entertainment value	1 2 3 4 5	educational content	1 2 3 4 5
international market focus	1 2 3 4 5	local market focus	1 2 3 4 5
price	1 2 3 4 5	audience	1 2 3 4 5
product interactivity	1 2 3 4 5	modernity	1 2 3 4 5
high quality	1 2 3 4 5	flexibility	1 2 3 4 5
shift to selling products to licensing info/services			1 2 3 4 5
usability on various hardware platforms			1 2 3 4 5
other	☐ *(please specify)*		

----

29.   Are your retail channels and your distribution methods the same for multimedia as for traditional publishing?

Yes   ☐   No   ☐   (If yes, please describe)

----

30.   To which types of outlet/s are you distributing your children's multimedia products?

book stores	☐	music stores	☐	games/computer	☐
electrical	☐	toy	☐	high street retailers	☐
supermarkets	☐	libraries	☐	schools	☐
book clubs	☐	direct mail	☐	online selling	☐
other	☐ *(please specify)*				

----

31. How do you carry out your market research in relation to new media products?

experience	☐
following US trends	☐
communication with retailers and distributors	☐
company information from trade press	☐
consumer focus groups	☐
reply paid cards	☐
questionnaires/surveys	☐
in-store merchandisers	☐
information from the Internet	☐
other *(please specify)*	☐

----

32. How do the activities of other companies (including US publishers, new specialist companies such as character companies, games companies, software and hardware companies) influence your company's multimedia production for children in terms of

(1) promotion?

----

(2) pricing?

----

33. How do you envisage publishing companies such as yours faring in the field of children's multimedia publishing in five years time?

book publishers will have a significant part to play	☐
book publishers will be outnumbered by software companies	☐
more mergers will occur with other companies (i.e. software, production cos)	☐
more mergers will occur with international companies	☐

----

34. What drivers for purchase does your company use and why?

----

35. What are your views on how the market will develop and what do you think the important trends are in this area?

Please complete the details below

Name: _____

Title: _____

Company: _____

Tel: _____

Email: _____

Web: _____

I wish to be anonymous in the project findings: Yes   ☐   No   ☐
I am willing to take part in a follow-up interview: Yes   ☐   No   ☐

Please note any further comments or queries below

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a.anthoney@rgu.ac.uk

PILOT QUESTIONNAIRE SURVEY

FOR AN MPHIL/PHD RESEARCH PROJECT ON

THE UK BOOK PUBLISHING HOUSE - ADAPTING TO CHANGE FOR THE CHILDREN'S MULTIMEDIA MARKET

Please tick more than one box if appropriate.

1. In which of the following areas does your company publish?

children's	☐	educational	☐	academic	☐
reference	☐	scientific	☐	medical	☐
other	☐ *(please specify)*				

----

2. What percentage of your company's overall turnover can be attributed to multimedia publishing?

below 10%	☐	10-20%	☐	20-30%	☐	30-40%	☐
40-50%	☐	50-60%	☐	60-70%	☐	70-80%	☐
80-90%	☐	90-100%	☐	100%	☐		

----

3. What percentage of your publishing turnover can be attributed to children's multimedia publishing?

below 10%	☐	10-20%	☐	20-30%	☐	30-40%	☐
40-50%	☐	50-60%	☐	60-70%	☐	70-80%	☐
80-90%	☐	90-100%	☐	100%	☐		

----

4. When did your company start producing in a non-book format for children?

----

5. Why did your company start producing multimedia for children?

product development   ☐   market demand   ☐
competition   ☐   US influence   ☐
other   ☐ *(please specify)*

----

6. Do you commission specifically for

multimedia products?   tie-in products?

yes ☐   no ☐   yes ☐   no ☐

7. Which products does your company produce for children?

books ☐   audio ☐   video ☐
CD-ROM ☐   online ☐   other ☐ *(please specify)*

----

8. What qualities had you looked for in previous and existing children's titles for multimedia production?

those part of a series publication ☐   those with suitable subject ☐
those adding educational value ☐   those adding entertainment value ☐
those of a high graphics content ☐   those of effective usability ☐
those with reputable characters ☐   those with reputable writer/illustrator ☐
those with established brands ☐   those of a suitable cost ☐
other *(please specify)* ☐

----

9. Do you envisage looking for different or additional qualities in future products?

Yes ☐   No ☐ *(If yes, please specify)*

----

10. How has your company implemented its move into children's multimedia publishing?

new division set up ☐   expansion of a children's book publishing division ☐
new company set up☐   contractual development   ☐
partnership   ☐   other *(please specify)*   ☐

----

11. Which staff started up and now control children's multimedia development in your company?

----

12. What are the main staffing issues for your company in producing children's multimedia?

employment of new staff with a different set of skills   ☐
external expertise required ☐   redeployment of staff   ☐
training of existing staff   ☐   communication between old/new staff   ☐
communication between technical and creative/editorial staff   ☐
other *(please specify)*   ☐

----

13.   If staffing changes have occurred in any of the following areas/departments as a result of your company producing children's multimedia, please tick the corresponding boxes:

management ☐   personnel ☐   accounts ☐   design ☐
warehousing/customer services ☐   editorial ☐   licensing ☐
production ☐   promotion ☐   marketing ☐

14.   Have the skills of staff from other departments been used for multimedia publishing?

Yes ☐   No ☐   *(If yes, please describe)*

----

15.   Which staff relationships do you think need to be built on most for successful children's multimedia production in your company?

marketing/IT ☐   design/IT ☐   editorial/IT ☐
design/editorial ☐   marketing/editorial ☐   other ☐
(please specify)

----

16.   What skills held by your existing children's book publishing staff have been particularly beneficial in the production of multimedia for children?

creative/design ☐   editorial ☐   marketing ☐
technical expertise ☐   *(please specify)*

----

17.   Are there any gaps in the skills required for multimedia production?

Yes ☐   No ☐   (If yes, please describe)

----

18.   Where is your staff training carried out?

in house   □   out of house   □
(please specify types of relevant courses, training etc.)

----

19.   Which of these issues matter most to you in relation to publishing children's
multimedia products?

media richness   □   usability on various hardware platforms   □
entertainment value   □   educational content   □   visual impact□
international market focus □   local market focus   □   audience   □
· shift to selling products to licensing info/services   □   price   □
product interactivity   □   modernity   □   flexibility □
high quality   □   other   □   *(please specify)*

----

20.   To which types of outlet/s are you distributing your children's multimedia
products?

book stores   □   music stores   □   games/computer   □
electrical   □   toy   □   high street retailers   □
supermarkets □   libraries   □   schools   □
book clubs   □   direct mail   □   online selling   □
other   □ *(please specify)*

----

21.   How do you carry out your market research in relation to new media products?

experience   ☐
following US trends   ☐
communication with retailers and distributors   ☐
company information from trade press   ☐
direct feedback from customers   ☐
information from the Internet   ☐
other   *(please specify)*   ☐

----

22.   How do the activities of other companies (including US publishers, new specialist publishers and software companies) influence your company's multimedia production for children?

----

23. How do you envisage publishing companies such as yours faring in the field of children's multimedia publishing in five years time?

book publishers will have a significant part to play   ☐
book publishers will be outnumbered by software companies   ☐
more mergers will occur with other companies (i.e. software, production cos) ☐
more mergers will occur with international companies   ☐

24. Do you think demand for children's multimedia is increasing in the

consumer market?   yes ☐   no ☐
education market?   yes ☐   no ☐

25. What are your views on how the market will develop and what do you think the important trends are in this area?

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PLEASE RETURN THE COMPLETED QUESTIONNAIRE IN THE ENVELOPE PROVIDED BY 20 JULY 1998.   THANK YOU

QUESTIONNAIRE SURVEY
CHILDREN'S MULTIMEDIA PRODUCTION IN THE UK
CONFIDENTIAL

For the purposes of this research project, the term 'multimedia' encompasses CD-ROM, DVD, online and broadcast media.

Please tick more than one box if appropriate.

1. Which products do you produce for children?

CD-ROM	☐	DVD	☐	Audio/spoken word	☐
Audio/music	☐	Video	☐	On-line	☐
Broadcast	☐	Other	☐	*(please specify)*	

----

2. Which of the following services does your company provide?

multimedia publishing	☐	content development	☐	web development...	☐
software development	☐	hardware production	☐	multimedia distribution	☐
multimedia production services	☐			other *(please specify)*	☐

----

3. What percentage of your UK company's overall multimedia turnover can be attributed to multimedia production for children?

0-5%	☐	5-10%	☐	10-15%	☐	15-20%	☐
20-30%	☐	30-40%	☐	40-50%	☐	50-60%	☐
60-70%	☐	70-80%	☐	80-90%	☐	90-100%	☐
100%	☐						

4. When did you publish your first multimedia product for children?

----

5. Why did your company start producing multimedia for children?

market testing	☐	product development	☐
market demand	☐	competition	☐
US influence	☐	peer pressure	☐
to achieve growth	☐	financial imperatives	☐
logical progression	☐		
other	☐	*(please specify)*	

----

6. What were your original commercial objectives when entering the children's sector?

to contain initial loss	☐	to accept a defined level of loss in year 1	☐
to break even in 2 years	☐	to break even in 5 years	☐
other *(please specify)*	☐		

----

7. For which age group/s do you produce children's multimedia?

pre-school ☐   5-8 ☐   8-12 ☐   teen ☐

8. What is your company's main focus for children's multimedia?

offline (i.e. audio, video, CD-ROM) ☐
online (i.e. the Internet)   ☐
other   ☐ *(please specify)*

----

9. Number of CD-ROM/DVD titles in your product range for children

since start up?   -------------
currently available?   -------------

10. Do you focus on a specific product range or type for children?

HOME market ☐ :
games ☐   non-games ☐:   reference ☐   edutainment ☐   fiction ☐

SCHOOL market ☐ :
learning   ☐   educational ☐   reference ☐

other ☐ *(please specify)*

----

11. On a scale of 1-3, which of these qualities matter most to you in children's multimedia products?

(Please CIRCLE the appropriate number. 1 is low, 3 is high)

series publication	1 2 3	modernity	1 2 3
educational value	1 2 3	entertainment value	1 2 3
high graphics content	1 2 3	local market focus	1 2 3
international focus	1 2 3	reputable characters	1 2 3
reputable writer/illustrator	1 2 3	established brands	1 2 3
attractive cost	1 2 3	interactivity	1 2 3
high quality	1 2 3	media richness	1 2 3
other	☐ *(please specify)*		

----

12. On a scale of 1-3, how important does your company consider the BRANDING of a

children's multimedia company?   1 ☐   2 ☐   3 ☐
children's multimedia product?   1 ☐   2 ☐   3 ☐

(Please TICK the appropriate number above. 1 is unimportant, 3 is very important)

13. Are you currently using, or would consider using the internet for children's multimedia

	Using	Would Consider Usimg
market research and development?	☐	☐
product marketing/promotion?	☐	☐
selling children's products?	☐	☐
delivering content for children?	☐	☐
other	☐	☐ *(please specify)*

----

14. **What features do you look for on a web site to strengthen**

MARKETING of children's multimedia products? --

SELLING of children's multimedia products? --

15. **What lessons have you learnt about producing multimedia for children since the start of the 1990s (or from your start-up, if more recent)?**

----

16. **What would you say were the main factors in making your company unique in the children's multimedia market?** (or giving you competitive edge over other companies?)

----

17. **Do you collaborate with other companies for the production of your children's multimedia products, in terms of**

selling rights?   Yes ☐   No ☐

buying rights?   Yes ☐   No ☐

joint production?   Yes ☐   No ☐

If yes, please state company type(s) involved ---

18. **What functions do you outsource?**

commissioning	☐	developing	☐	publishing	☐
manufacturing	☐	distributing	☐	retailing	☐

other (please specify) ☐   --

----

19. In which staffing area(s) have you found it most critical to establish good working relationships to successfully produce children's products?

----

20. Are there any gaps in the skills you require for children's multimedia production?

Yes   □   No   □   (If yes, please describe)

----

21. What skills/area(s) do you encouter the most difficulties in RECRUITING for children's multimedia production?

----

22. Where is your staff training carried out?

in house   □   externally   □
(please specify types of relevant courses, training etc.)

----

23. On a scale of 1-3, which types of outlet/s do you consider important in terms of SELLING your children's multimedia products?

(Please circle the appropriate number. 1 is unimportant, 3 is very important)

book stores	1 2 3	music stores	1 2 3
games/computer	1 2 3	electrical	1 2 3
toy	1 2 3	high street retailers	1 2 3
supermarkets	1 2 3	libraries	1 2 3
schools	1 2 3	book clubs	1 2 3
direct mail	1 2 3	online selling	1 2 3

other ☐ (please specify) --

24. How do you carry out your market research in relation to children's multimedia products?

communication with retailers	☐	company info from trade press	☐
consumer focus groups	☐	reply paid cards	☐
questionnaires/surveys	☐	in-store merchandisers	☐
information from the Internet	☐	other (please specify)	☐

----

25. How effective are these market research techniques for the development of your children's multimedia?

(Please circle the appropriate number. 1 is unimportant, 3 is very important)

communication with retailers	1 2 3
company info from trade press	1 2 3
consumer focus groups	1 2 3
reply paid cards	1 2 3
questionnaires/surveys	1 2 3
in-store merchandisers	1 2 3
information from the Internet	1 2 3

26. How do you envisage companies such as yours faring in the children's multimedia sector in five years time?

significant part to play	☐
outnumbered by other companies (i.e. toy companies)	☐
more mergers will occur with international companies	☐
more mergers will occur with book publishers	☐
more mergers will occur with other companies (i.e. software, production cos)	☐
other (please sepecify)	☐

----

27. Who has been your main threat/competitor(s) this year?

----

28. What influences/forces within the industry do you feel are threatening your company and/or are outwith your company's control?

----

29. Name one or more other companies you would define as successful in this area?

----

30. What factors have you found appear to lead to success in CHILDREN'S multimedia production? (not adult multimedia)

----

31. What are your views on how the market will develop and what do you think the important FUTURE trends are in this area?

Please complete the details below

Name: _____

Title: _____

Company: _____

Tel: _____

Email: _____

Web: _____

I wish to be anonymous in the project findings: Yes   ☐   No   ☐
I am willing to take part in a follow-up interview: Yes   ☐   No   ☐

Please note any further comments or queries below

PLEASE RETURN THE COMPLETED QUESTIONNAIRE IN THE ENVELOPE
PROVIDED BY 31 JANUARY 2000.   THANK YOU.

a.anthoney@rgu.ac.uk

APPENDIX VI: Children's Book Publishers' Questionnaire Covering Letter

Gordon Allen
The Amaising Publishing House Ltd
Unit 7, Greendykes Industrial Estate
Broxburn

16 October 1998

Dear Gordon,

Development Factors for the UK Children's Multimedia Market

Fran Laguardia told me that you would be the most suitable person from your company to approach for a response to my questionnaire survey for the above research.

An initial questionnaire had been designed and piloted to the project's main advisors [Dave Lee (BBC Multimedia), Sharon Cooper (OUP) and Dag Smith (The Publishing Training Centre)] to gather background information and advice from industry with regards to the usability of the questionnaire. The results of the pilot survey have been analysed and the questionnaire has been modified and sent to you as part of a study sampling 50 UK book publishers.

The questionnaire survey has been designed to gather background information for a series of interviews which will be held with publishers to investigate factors contributing to their success and development in the children's multimedia market. The response will ultimately contribute to the creation of models outlining publishers' success factors and training requirements for effective change management in the children's multimedia market.

Could you please fax/post/email the questionnaire and comments back to the above address by the 5 November 1998. I would be grateful of your cooperation to enable this survey to be a success.

Thanks again for your time.

I look forward to talking to you in the future.

Yours sincerely,

Audrey Anthoney.

P.S. See attached questionnaire and aims and objectives of the research. I have enclosed a reply paid envelope for your convenience. Please note this will only take about 10 MINUTES of your time.

QUESTIONNAIRE SURVEY
DEVELOPMENT FACTORS FOR PUBLISHERS IN THE UK CHILDREN'S
MULTIMEDIA MARKET
CONFIDENTIAL

For the purposes of this research project, the term 'multimedia'
encompasses audio-visual, CD-ROM, DVD, online and broadcast media.

Please tick more than one box if appropriate.

1.   **Which non-print products do you produce for children?**

CD-ROM	☐	DVD	☐	Audio/spoken word	☐
Audio/music	☐	Video	☐	On-line	☐
Broadcast	☐	Other	☐	*(please specify)*	

----

2.   **Which of the following services does your company provide?**

multimedia publishing *(including all of the processes listed below)*   ☐

content development	☐	web development	☐
software development	☐	hardware production	☐
multimedia distribution	☐	multimedia production services	☐
other *(please specify)*	☐		

----

3.   **What percentage of your UK company's overall multimedia turnover can be
      attributed to multimedia production for children?**

0-5%	☐	5-10%	☐	10-15%	☐	15-20%	☐
20-30%	☐	30-40%	☐	40-50%	☐	50-60%	☐
60-70%	☐	70-80%	☐	80-90%	☐	90-100%	☐
100%	☐						

4.   **When did you publish your first multimedia product for children?**

----

5. Why did your company start producing multimedia for children?

market testing	☐	product development	☐
market demand	☐	competition	☐
US influence	☐	peer pressure	☐
to achieve growth	☐	financial imperatives	☐
logical progression	☐		
other	☐	*(please specify)* ---	

6. What were your original commercial objectives when entering the children's multimedia sector?

to contain initial loss	☐	to accept a defined level of loss in year 1	☐
to break even in 2 years	☐	to break even in 5 years	☐
other *(please specify)* ☐ ---			

7. For which age group/s do you produce children's multimedia?

pre-school ☐   5-8 ☐   8-12 ☐   teen ☐

8. What is your company's main focus for children's multimedia?

offline (i.e. audio, video, CD-ROM) ☐
online (i.e. the Internet)   ☐
other   ☐ *(please specify)* --

9. Number of CD-ROM/DVD titles in your product range for children

since start up?   -------------
currently available?   -------------

10. Do you focus on a specific product range or type for children?

HOME market   ☐ :
games   ☐
non-games ☐:   reference ☐   edutainment ☐   fiction ☐

SCHOOL market   ☐ :
learning   ☐   educational ☐   reference ☐

other   ☐ *(please specify)*---

11. On a scale of 1-4, which of these qualities matter most to you in children's multimedia products?

(Please CIRCLE the appropriate number. 1 is low, 4 is high)

series publication	1 2 3 4	modernity	1 2 3 4
educational value	1 2 3 4	entertainment value	1 2 3 4
high graphics content	1 2 3 4	local market focus	1 2 3 4
international focus	1 2 3...4	reputable characters	1 2 3 4
reputable writer/illustrator	1 2 3...4	established brands	1 2 3 4
attractive cost	1 2 3 4	interactivity	1 2 3 4
high quality	1 2 3 4	media richness	1 2 3 4
usability on various hardware platforms			1 2 3 4
other	☐ (please specify)		

----

12. On a scale of 1-4, how important does your company consider the BRANDING of a

children's multimedia company? 1 ☐   2 ☐   3 ☐   4 ☐
children's multimedia product? 1 ☐   2 ☐   3 ☐   4 ☐

(Please TICK the appropriate number above. 1 is unimportant, 4 is very important)

13. Are you currently using, or would consider using the internet for children's multimedia

	Using	Would Consider Usimg
market research and development?	☐	☐
product marketing/promotion?	☐	☐
selling children's products?	☐	☐
delivering content for children?	☐	☐
other	☐	☐ (please specify)

----

14. What features do you look for on a web site to strengthen

PROMOTION of children's multimedia products? --

SELLING of children's multimedia products? --

15. What lessons have you learnt about producing multimedia for children since the start of the 1990s (or from your start-up, if more recent)?

----

16. What would you say were the main factors in making your company unique in the children's multimedia market? (or giving you competitive edge over other companies?)

----

17. Do you collaborate with other companies for the production of your children's multimedia products, in terms of

selling rights?	Yes ☐	No ☐
buying rights?	Yes ☐	No ☐
joint production?	Yes ☐	No ☐

If yes, please state company type(s) involved --

18. What functions do you outsource?

commissioning	☐	content development	☐
web development	☐	software development	☐
hardware production	☐	multimedia production services	☐
manufacturing	☐	multimedia distribution	☐
multimedia retailing	☐	any other publishing processes	☐

(Please specify) --

----

19. Between which functions/departments have you found it most critical to establish good working relationships to successfully produce children's products?

----

20. Are there any gaps in the skills you require for children's multimedia production?

Yes ☐   No ☐   (If yes, please describe)

----

21. What skills/areas do you encounter the most difficulties in RECRUITING for children's multimedia production?

----

22. Where is your staff training carried out?

in house ☐   externally ☐
(please specify types of relevant courses, training etc.)

----

23. On a scale of 1-4, which types of outlet/s do you consider important in terms of SELLING your children's multimedia products?

(Please circle the appropriate number. 1 is unimportant, 4 is very important)

book stores	1 2 3 4	music stores	1 2 3 4
games/computer	1 2 3 4	electrical	1 2 3 4
toy	1 2 3 4	high street retailers	1 2 3 4
supermarkets	1 2 3 4	libraries	1 2 3 4
schools	1 2 3 4	book clubs	1 2 3 4
direct mail	1 2 3 4	online selling	1 2 3 4

other ☐ *(please specify)* ---

24. How do you carry out your market research in relation to children's multimedia products?

communication with retailers	☐	company info from trade press	☐
consumer focus groups	☐	reply paid cards	☐
questionnaires/surveys	☐	in-store merchandisers	☐
information from the Internet	☐	other *(please specify)*	☐

----

25. How effective are these market research techniques for the development of your children's multimedia?

(Please circle the appropriate number. 1 is unimportant, 4 is very important)

communication with retailers	1 2 3 4
company info from trade press	1 2 3 4
consumer focus groups	1 2 3 4
reply paid cards	1 2 3 4
questionnaires/surveys	1 2 3 4
in-store merchandisers	1 2 3 4
information from the Internet	1 2 3 4

26. How do you envisage companies such as yours faring in the children's multimedia sector in five years time?

significant part to play ☐
outnumbered by other companies (i.e. toy companies) ☐
more mergers will occur with international companies ☐
more mergers will occur with book publishers ☐
more mergers will occur with other companies (i.e. software, production cos) ☐
other *(please sepecify)* ☐

----

27. Who has been your main threat/competitor(s) this year?

----

28. What influences/forces within the industry do you feel are threatening your company and/or are outwith your company's control?

----

29. Name one or more other companies you would define as successful in this area?

----

30. What factors have you found appear to lead to success in CHILDREN'S multimedia production? (not adult multimedia)

----

31. What are your views on how the market will develop and what do you think the important FUTURE trends are in this area?

Please complete the details below

Name: _____

Title: _____

Company: _____

Tel: _____

Email: _____

Web: _____

I wish to be anonymous in the project findings: Yes ☐   No ☐
I am willing to take part in a follow-up interview: Yes ☐   No ☐

Please note any further comments or queries below

----

*PLEASE RETURN THE COMPLETED QUESTIONNAIRE IN THE ENVELOPE
PROVIDED BY 31 JANUARY 2000. THANK YOU.*

a.anthoney@rgu.ac.uk

Appendix VIII: New Media Companies targeted in Questionnaire Survey 1999/2000

10 out of to Educational Systems
ABLAC Learning Works
Acacia Interactive
Adventure Soft
AIRCOM Education
AND Technology
Anglia Multimedia
AOL Bertelsmann UK
Attica Interactive Ltd
Broderbund Software Ltd
Carlton Home Entertainment Ltd
CUC Software International
Edinburgh Multimedia
Europress Software Ltd
Euro Talk Ltd
Fox Interactive Ltd
Global Software Publishing (GSP) Ltd
Grolier Interactive (UK) Ltd
GT Interactive Software (Europe) Ltd
Guildsoft Ltd
Hasbro Interactive Ltd
IBM UK Ltd (Europe HQ)
Inner Workings Ltd
Interplay Europe
JM Interactive
Koch Media Ltd
Lander Software
The Learning Company (UK) Ltd
LEGO Media International
Liris Interactive (UK)
Maris Multimedia Ltd
Mathsoft International
Microsoft Ltd
Multimedia Corporation
Notting Hill
Online Entertainment Ltd
Pearson New Entertainment Ltd (Europe)
The Productive Play Company
Q-Multimedia
Quay Interactive
Ransom Publishing Ltd
Research Machines
SCA (Anglia Multimedia)
SEMERC
Sensible Software
Sherston Software Ltd
Two-Can Publishing Ltd

APPENDIX IX: Children's New Media Companies' Questionnaire Covering Letter

<div align="right">5th January 2000</div>

Duncan Macrae
Atlantic Europe Publishing Co Ltd
Greys Court Farm, Greys Court
Henley on Thames
Oxon
RG9 4P

Dear Duncan,

Success and Development Factors for Children's Multimedia Production in the UK

I am writing to request your participation in a survey as part of a PhD project I am undertaking in collaboration with the Publishing Training Organisation, funded by the Arts and Humanities Research Board.

In 1998/99, I sampled 50 book publishing companies in the UK, followed by interviews with publishers defined as being 'successful' in the children's multimedia market. From this survey (for which I received a 100% response rate), I have discovered factors which appear to lead to success for these publishers in the children's multimedia market. I have identified your company as being a 'New Media' company and therefore wish to include your company in my second survey, sampling 50 new media companies in the UK. The questionnaire should not take much longer than 20 MINUTES of your time to complete.

The response from the 2 surveys on book publishing companies and new media companies will ultimately contribute to the creation of models which will outline critical success and development factors and training requirements for companies in the UK children's multimedia market. The results to date have proven to be useful for companies in the industry or for those contemplating entering this market. A copy of the project findings will be available to you if you choose to be involved in this survey.

Could you please return your completed questionnaire to me in the return paid envelope to the above address by the 31 JANUARY 2000. I would be grateful of your co-operation to enable this survey to be a success.

Thank you for your time.

I look forward to hearing from you in the future.

Yours sincerely,

Audrey Anthoney

APPENDIX X: Children's Book Publishers' Interview Schedule 1999

Interview Outline

Date:
Time:

Interviewee:
Company:
Address:
Email:
www.
Directions:

1. Company profile

2. Publishing activity

3. Reasons/Influences

4. Children's Market & Products

5. Multimedia focus/Internet
Critical Success Factors (CSFs) for childn's online?/CSFs for online publishing?
Interest in digital future?

6. Product qualities & issues
Would you say that your co's focus/concentration on these issues has contributed to
your success in this area? (id CSFs from this)

7. How?
How the company implemented its move into children's multimedia publishing?
Where the company see themselves in the value chain?
Where does the creativity reside & how is it managed/controlled?

8. Functions outsourced

9. Multimedia staff/start up & responsible now
key skill-sets required at start up & now?

10. Staffing Issues
Would you say that your co's focus/concentration on these issues has contributed to
your success in this area?
(id CSFs from this)

11. Departmental functions
Staff no increases in areas/depts listed
Staff tasks which have been redefined in the above areas/depts
Necessary for success?

12. Departmental/Staff relationships
How do you improve relations between staff & depts?
Main CSFs for improving relationships within departments?

13. Staff skills
CSFs of staff within each area?
Gaps in the skills required for multimedia production? Training required?

14. Retail & Distribution
Steps to improve relationship between your co & retailer/distributor?
(CSFs?)

15. Research & Development
Why do you feel these are the best ways to carry out your market research?

16. Drivers for purchase

17. Competition
Who in your opinion are the most successful companies in the UK? (inc.your own co)
What makes these cos successful/CSFs?/In the US? US CSFs?

18. Policies/strategies
Co policy - changes since multimedia launch?/mission statement?/pull together?
Strategies/CSFs for competitive advantage & future development?
Differences in CSFs for CHILDREN'S multimedia than for other multimedia
publishing?

19. Future trends

Interview Outline

Date:
Time:

Interviewee:
Company:
Address:
Email:
www.
Directions:

1. Company profile

2. Publishing activity

3. Reasons/Influences

4. Children's Market & Products

5. Multimedia focus/Internet
Critical Success Factors (CSFs) for childn's online?/CSFs for online publishing?
Interest in digital future?

6. Product qualities & issues
Would you say that your co's focus/concentration on these issues has contributed to your success in this area? (id CSFs from this)

7. How?
How the company implemented its move into children's multimedia publishing?
Where the company see themselves in the value chain?
Where does the creativity reside & how is it managed/controlled?

8. Functions outsourced

9. Multimedia staff/start up & responsible now
key skill-sets required at start up & now?

10. Staffing Issues
Would you say that your co's focus/concentration on these issues has contributed to your success in this area?
(id CSFs from this)

11. Departmental functions
Staff no increases in areas/depts listed
Staff tasks which have been redefined in the above areas/depts
Necessary for success?

12. Departmental/Staff relationships
How do you improve relations between staff & depts?
Main CSFs for improving relationships within departments?

13. Staff skills
CSFs of staff within each area?
Gaps in the skills required for multimedia production? Training required?

14. Retail & Distribution
Steps to improve relationship between your co & retailer/distributor?(CSFs?)

15. Research & Development
Why do you feel these are the best ways to carry out your market research?

16. Drivers for purchase

17. Competition
Who in your opinion are the most successful companies in the UK? (inc.your own co)
What makes these cos successful/CSFs?/In the US? US CSFs?

18. Policies/strategies
Co policy - changes since multimedia launch?/mission statement?/pull together?
Strategies/CSFs for competitive advantage & future development?
Differences in CSFs for CHILDREN'S multimedia than for other multimedia
publishing?

19. Future trends

APPENDIX XII: Thematic analysis – development

Key Themes 1	PQ themes	PI themes	NMQ themes	NMI themes	Five Force themes	Value Chain themes
Company structure	Company structure developments 11. Start-up staff, multimedia management	Functions outsourced 9. Multimedia staff/start up & responsible now?	Structural changes Functions outsourced	7. How the company implemented its move into children's multimedia publishing? Where the company see themselves in the value chain? Where does the creativity reside & how is it managed/controlled?		Support activities Human resource management Business process and structural support
Company culture	Reasons for multimedia start-up Publishing areas Multimedia turnover Children's Multimedia turnover Start-up in non-book format Multimedia and or tie-in products commissioned	1. Company profile 2. Publishing activity 3. Reasons/Influences 7. Company development, values, creativity management?	1. Products for children? 2. Multimedia services provided? 3. Multimedia turnover attributed to multimedia production for children? 4. Date of first multimedia product for children? 5. Reasons for multimedia start-up 6. Commercial objectives when entering the children's sector? 7. Target age group/s for children's multimedia? 8. Focus – offline/online? Unique factors	1. Company profile 2. Publishing activity 3. Reasons/Influences 4. Children's Market & Products 5. Multimedia focus/Internet Critical Success Factors (CSFs) for childn's online?/CSFs for online publishing? Interest in digital future?		Strategic activities Company strategy/background Change management Planning and development strategy
Staff skills and training	Main staffing/skills issues 13. Staff/departmental changes 14. Internal transferable skills Skills gaps 17. Staff training	key skill-sets required at start up & now? 10. Staffing Issues Areas of concentration? 13. Staff skills Success factors of staff within each area? Gaps in the skills required for multimedia production? Training required?	20. Skills gaps 21. Recruitment difficulties 22. Staff training	8. Functions outsourced 9. Multimedia staff/start up & responsible now key skill-sets required at start up & now? 10. Staffing Issues Focus/concentration on these issues contributed to your success in this area? (id CSFs from this) 13. Staff skills CSFs of staff within each area? Gaps in the skills for multimedia? Training required?		Core activities Content/editorial Creative Technical/program Testing and development Product assets Marketing/branding Promotion Pricing Sales and distribution Other services

Key Themes 2	PQ themes	PI themes	NMQ themes	NMI themes	Five Force themes	Value Chain themes
Product development	Products produced for children Book qualities used for multimedia Different or additional qualities in future products? Key product features/assets	Children's Market & Products 5. Multimedia focus/Internet Critical Success Factors 6. Product qualities & issues	9. Number of CD-ROM/DVD titles in your product range for children 10. Do you focus on a specific product range or type for children? Home and/or schools 11. Product assets (importance) 12. Branding (importance) company and product 13. Online usage	6. Product qualities & issues Would you say that your co's focus/concentration on these issues has contributed to your success in this area? (id CSFs from this)		Core activities Content/editorial Creative Technical/programming Testing and development Product assets Marketing/branding Promotion Pricing Sales and distribution Other services
Processes and working relationships	Retail and distribution outlets (id) Key staff/departmental relationships	14. Retail & Distribution Steps to improve relationship between your co & retailer/distributor? 11. Departmental functions Staff no increases in areas/departments Staff tasks which have been redefined in the above areas/departments Necessary for success? 12. Departmental/Staff relationships How do you improve relations between staff and departments? Main success factors for improving relationships within departments?	Retail and distribution (important outlets) Lessons learned 17. External collaboration for selling, buying rights, joint production 18. Functions outsourced (commissioning, developing, publishing, manufacturing, distributing, retailing 19. Key/critical staff departmental relationships	14. Retail & Distribution Steps to improve relationship between your co & retailer/distributor?(CSFs?) 11. Departmental functions Staff no increases in areas/depts listed Staff tasks which have been redefined in the above areas/depts Necessary for success? 12. Departmental/Staff relationships How do you improve relations between staff & depts? Main CSFs for improving relationships within departments?		Core activities Content/editorial Creative Technical/programming Testing and development Product assets Marketing/branding Promotion Pricing Sales and distribution Other services

Key Themes 3	PQ themes	PI themes	NMQ themes	NMI themes	Five Force themes	Value Chain themes
Strategies for future development	20. Market research techniques (id) Future prediction re development of book publishers Thoughts on demand for children's multimedia (increasing or not?)	15. Research & Development Why do you feel these are the best ways to carry out your market research? 16. Drivers for purchase 17. Competition Who in your opinion are the most successful companies in the UK? (What makes these cos successful/CSFs?/In the US? US CSFs? 18. Policies/strategies Co policy - changes since multimedia launch?/mission statement?/pull together? Strategies/CSFs for competitive advantage & future development? Differences in CSFs for CHILDREN'S multimedia than for other multimedia publishing?	Lessons learned Online product marketing/promotion selling children's products delivering content for children Online marketing and sales features/assets 16. Uniqueness factors 30. Factors for success in children's multimedia 26. Future company development	15. Research & Development Why do you feel these are the best ways to carry out your market research? 16. Drivers for purchase 18. Policies/strategies Co policy - changes since multimedia launch?/mission statement?/pull together? Strategies/CSFs for competitive advantage & future development? Differences in CSFs for CHILDREN'S multimedia than for other multimedia publishing? 19. Future trends		Strategic activities Company strategy/background Change management Planning and development strategy
External Forces	Competitors' influences Market development/important future trends	Competition 19. Future trends	market research and development 24. Market research techniques (identified) 25. Market research techniques (effectiveness) 27. Main threat/competitors 28. Industry influences/forces 29. Successful companies (identified) 30. Factors for success in children's multimedia 31. Market development/ future trends	17. Competition Who in your opinion are the most successful companies in the UK? (inc.your own co) What makes these cos successful/CSFs?/In the US? US CSFs?	1.Competition 2. Entry 3. Substitution 4. Suppliers 5. Customer	