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# Ground-breaking research supports technology adoption. [News article].

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# Ground-breaking research supports technology adoption

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- Investigating psychological factors that influence technology adoption
- Technology Centre partners with Aberdeen's Robert Gordon University
- Industry toolkit will support technology developers and operating companies

The Oil & Gas Technology Centre and Aberdeen's Robert Gordon University (RGU) have launched a new research programme to identify the behavioural barriers to successful technology adoption and deployment on the UK Continental Shelf (UKCS), creating a toolkit to support both developers and operating companies.

With lower prices, increased complexities and decommissioning challenges, the oil and gas industry requires new technologies more than ever. The Oil & Gas Technology Centre is working with the industry to achieve this, with 10 field trials delivered in 2017 and more than 50 planned throughout 2018. But more needs to be done to help unlock the full potential of the UK's oil and gas reserves.

The two-year research programme will:

- Identify the key psychological factors that influence the deployment of new technology and tools in the UKCS oil and gas industry
- Identify best practice to overcome any barriers, drawing on experience from the industry's approach to safety and successful innovators in other industries such as retail and automotive
- Develop a practical toolkit to support companies trying to deploy and adopt new technologies

Considerable work has been done across the oil and gas industry to understand the human factors affecting safety with decades of learnings to draw on. Many of these are equally relevant to the challenge of technology deployment. The retail industry worked hard to develop a detailed understanding of the human psyche and how it influences buying decisions. This ground-breaking research will be led by Dr Ruby Roberts and seeks to learn from these and other sectors to bring the latest science and understanding to help rapidly increase the industry's ability to develop and deploy much needed new technology to maximise economic recovery from the UKCS.

David Millar, TechX Director for the Oil & Gas Technology Centre, said: "The race to be second in terms of adopting new technology is not unique to the oil and gas industry but has been a real barrier in recent years. To overcome this the Oil & Gas Technology Centre is partnering with the industry to stimulate and accelerate new technology

and good progress has been made. However, ultimately humans are the enabler or barrier to some of the new technology being adopted. So, we need to spend more time understanding the complexities of these human factors to ensure everything we do is for the benefit of the industry.

“We want to create a deep understanding and develop a practical toolkit with RGU that can be used throughout industry to help the deployment of new technology rapidly and make a real difference.”

“There is an ever-expanding spectrum of new technologies out there that will help us maximise the economic recovery from the UKCS. If we understand what influences the decision-making process for adopting new technologies, it will make it easier for us to work with industry to transform the future of the oil and gas industry.”

**Luca Corradi, Innovation Network Director, said:**

“Too often new technology succeeds at pilot stage but fails or takes too long to be widely adopted. This is rarely to do with the technical features of the technology and often a consequence of underestimating the human factors in technology deployment. This research programme will help both technology developers and operating companies understand and address these factors to both improve the speed and success rate when developing or introducing new technology.”

**Rhona Flin, Professor of Industrial Psychology at Aberdeen Business School, said:**

“RGU is delighted to have the opportunity to work with the Oil & Gas Technology Centre on this new study. Searching for ways to understand the challenges facing society and finding innovative solutions, through close collaboration with industry bodies, is a key tenant of the university’s ethos.

“We are intrigued by the psychological factors that make changing behaviour a smooth process and will be gathering evidence from both innovators and adopters of new technologies on the UKCS, to learn from their experiences.”