Press release: Huge boost to UK's data capability as big business backs world-first AI talent scheme and chair of data ethics and innovation centre is confirmed

The plans are part of a package to boost the UK's data capability being unveiled by the Department for Digital, Culture, Media and Sport, which also includes:

- Confirmation that Roger Taylor will chair the Centre for Data Ethics and Innovation;
- The launch of a <u>consultation</u> on the Centre's remit and a search for the team to run it;
- New plans to develop a National Data Strategy to unlock the power of data in the UK;
- Measures to increase the UK's leading role in the ethical use of data in the public sector;
- £350,000 to help Internet of Things (IoT) innovators and the emerging technology sector;
- The South West being selected as one of two areas designated as a Digital Skills Pilot Area, with the establishment of a new Digital Skills Partnership to build a thriving digital economy in the region.

The work follows the Government's £1 billion artificial intelligence sector deal, announcement of its modern Industrial Strategy, and new figures published this week by Dealroom and Tech Nation showing the UK's track record of producing successful tech companies. Forty per cent of Europe's unicorns — \$1 billion-plus tech companies — are based here.

Digital Secretary Matt Hancock said:

We're already recognised as the number one country in the developed world in readiness for AI and we are working flat out to keep hold of that crown.

With Roger Taylor at the helm of our new Centre for Data Ethics and Innovation, plans to train the top-tier tech experts of tomorrow and a commitment to develop a new National Data Strategy, we will continue to be Europe's digital dynamo and the place to start and grow a digital business.

Julian David, CEO of techUK, said:

Today's announcement is more evidence of the Government's commitment to keep the UK at the forefront of innovation in AI. In building a world-leading framework for digital and data governance, the UK can be a pioneer in the development of responsible AI.

We are pleased to see the Centre for Data Ethics and Innovation start to take shape. Industry stands ready to support Roger Taylor in his new role and the consultation process announced today. The Centre has a crucial role to play in creating the right environment for industry, academia, civil society, regulators and policy makers to consider how best to ensure ethical decision making is at the core of all implementations of AI.

techUK also welcomes the investment and commitment made by industry and Government in the new industrial masters programme. Building the next generation of UK AI talent is vital to securing the UK's AI future.

These announcements come as the Government also confirms:

- A new Start-Up Visa for entrepreneurs to launch in Spring 2019. This will replace a visa route which was exclusively for graduates, opening it up to all business people.
- A new £2.5 billion Patient Capital Fund to open for business to support UK companies with high growth potential to access long-term investment to grow and go global.
- Two new Tech Hubs launched in Brazil and South Africa. UK companies will be paired with overseas innovation through these hubs, to develop skills, capability and business networks in these markets, and facilitate partnerships.
- The opening up of the Ordnance Survey's valuable geospatial data to small businesses for free to boost competition in the digital economy.

Further Information:

AI masters programme

The new industrial masters programme for artificial intelligence will see the British Computer Society and Alan Turing Institute partner with universities and major corporations to boost the numbers of highly qualified experts and help give the UK's tech industry the talent it needs to thrive in the future.

The scheme responds to recommendations made by Professor Dame Wendy Hall and Jérôme Pesenti in their independent review into growing the UK's AI industry as part of the Government's Digital Strategy.

Hall and Pesenti called for top-tier programmes developed with industry to meet the needs of employers and conversion masters degrees for students not studying computing or data science.

Work to develop the programme will begin in July with an ambition for it to launch in 2019.

Doug Gurr, UK Country Manager, Amazon, said:

For 20 years, we have been in the UK thanks to the great talent and strong culture of innovation across the country. So we welcome the new AI Masters Programme as an important commitment to developing and enhancing the skills needed to boost productivity and maintain the UK's competitiveness on the global stage.

Nicolaus Henke, senior partner and head of McKinsey Analytics and Chairman of QuantumBlack, said:

We depend on a diverse, global talent pool to power our ability to deliver impact to our clients. We grow where we can find the best talent, and we are committed to helping develop talent in the markets where we operate.

We're excited to support the AI Masters Programme in their efforts to enable distinctive candidates in the fields of medicine, business, law, and social sciences to develop and apply the critical skills needed to bring AI to their fields. We believe strongly that by developing a cadre of "translators" we will enable these fields to harness the full potential of analytics and artificial intelligence in the pursuit of their missions.

Thomas Lee-Warren, chief technology officer, R2 Data Labs, Rolls-Royce, said:

The opportunities and developments in Artificial Intelligence are moving ultra-fast. At Rolls-Royce we believe that collaborating

with the UK Govt, leading universities & the Alan Turing Institute, to establish an AI Masters Programme that drives diversity and inclusiveness, will further strengthen our reputation as a world-leading adopter of AI technologies and the UK as a global centre of excellence for data science and AI.

Paul Clarke, Chief Technology Officer, Ocado, said:

When it comes to disruptive technologies, AI really is the "one to rule them all". That's why the government's AI Sector Deal is so important for the UK's future competitiveness, productivity and prosperity.

Realising this opportunity means feeding and maintaining the digital literacy and skills pipeline that stretches from primary school, through tertiary education and on to lifelong learning; the new AI Masters programme is an important new section of this pipeline.

Centre for Data Ethics and Innovation

Roger Taylor will lead the new Centre, which is core to the Government's Digital Charter and desire for the UK to lead the world in innovation-friendly regulation that boosts the tech sector and provides stability for businesses.

The centre will promote safe, ethical and innovative use of data. It will put the UK at the forefront of global efforts to seize the opportunities of artificial intelligence.

A <u>consultation</u> on the Centre's role, objectives and activities has been launched today alongside a search for the team with the skills and expertise to run it.

Roger Taylor, new chair of the Centre for Data Ethics and Innovation, said:

I am delighted to be appointed as the first Chair of the Centre for Data Ethics and Innovation. I'm looking forward to setting up the Centre and working with the board to ensure that powerful data-driven technologies are deployed in the interests of society. The Centre has an ambitious and important role to play in making sure we harness the full benefits of data and artificial intelligence and I am pleased to play a central role in shaping its work during this early and critical phase.

National Data Strategy

The Prime Minister has also today asked the Digital Secretary Matt Hancock to

produce a National Data Strategy to unlock the power of data in the UK economy and government, while building public confidence in its use.

The UK has a strong record on data and this move will build on the UK Digital Strategy, Digital Charter, Industrial Strategy and Grand Challenges to break new ground on data.

Data Ethics Framework

Government work in this area includes leading the global debate on how data should be used in the public sector. Following the recent expansion of data policy in the Department for Digital, Culture, Media and Sport, a new Data Ethics Framework has been launched to make sure the UK Government sets the highest global standards for how public servants should use data appropriately and provide first-rate evidence for policy and service design.

The scheme is the only effort by a national government to discuss the considerations public servants should make when using data to inform policy and service design.

Luciano Floridi, professor of Philosophy and Ethics of Information at from the Oxford Internet Institute, said:

The Data Ethics Framework [is a timely and very helpful step forward in how government and the public sector can use data in ways that are ethically preferable. It is grounded in actual practices and in the core values of the [Civil Service Code: integrity, honesty, objectivity and impartiality. And it provides clear advice about how to deliver data-based solutions for social good. DCMS should be commended for such an excellent initiative.

Michael Veale, researcher in responsible public sector machine learning at University College London, said:

Aligning advanced government data science with public values can't be done with a simple recipe or static "best practice". It needs a creative, inclusive and rigorous process. To my knowledge, the UK Government Data Ethics Framework is the first document in the world which places this at its heart, drawing together design principles, core questions and caveats, and the key social, legal and technical dimensions—all within the realistic contexts of those designing, maintaining and overseeing systems on-the-ground.

Data science needs and priorities within the public sector are so different than other domains that knowledge of how to do this well has to be invented in-house, not imported. The framework connects issues ranging from procurement and reproducibility to algorithmic fairness and accountability, and is the document all government

data scientists should be given on day one.

Digital Catapult

DCMS is also providing £350,000 funding to the Digital Catapult's work to help Internet of Things (IoT) innovators and the emerging sector. The investment will link up IoT projects in the UK, helping people benefit from connected devices and technology safely. It will showcase the UK as an international leader in these fields.

ENDS

Notes to editors

- The Minister for Digital and the Creative Industries Margot James will also today (Wednesday 13th June) host the annual UK-Korea Creative Industries Forum with Korea's Vice-Minister of Culture, Sport and Tourism, Roh Taekang, at the British Library to discuss future collaboration in AI, immersive tech and gaming. An agreement between the UK and Korean governments will be signed setting out how the two nations will work together on innovation to support jobs and growth.
- The British Computer Society is the recognised institute for IT professionals and the key accreditor for computer science degrees.
 Working with a range of other institutes and accreditors, the BCS will consult widely on the requirements and opportunities for delivering a Masters Programme to provide industry the skills and qualifications it needs.
- Roger Taylor was the co-founder of Dr Foster, a provider of healthcare data management and analysis, and helped grow the organisation from a start-up to an international business.
- He was also founder and former Chair of the Open Public Services Network at the Royal Society of Arts, producing a series of publications on transparency and user engagement in public services.
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- He is well placed to establish the Centre as a credible and authoritative source of advice on the governance of data and AI.

