



At the AI & Machine Learning Summit 2019, from left: Irfan Rasul, principal solutions consultant, Oracle Business Analytics; Dejan Cusic, business director, Ireland and UK, Comtrade Digital Services; Paul Verkaik, director, EMEA solution strategy, IPsoft; Clare Dillon, technology evangelist, Pat Breen, TD, Minister of State for Trade, Employment, Business, EU Digital Single Market and Data Protection, Department of Business, Enterprise and Innovation; and Mark Kelly, founder of AI Ireland and chief customer officer at Allidus International

Pictures: Maura Hickey

Automatic for the people

Ireland currently ranks as the sixth 'most-digital' economy in the EU. Last week's Artificial Intelligence and Machine Learning Summit provided an overview of where we are now, and where AI can take us in the future, writes **Róisín Kiberd**

Taking place in Croke Park, the inaugural Artificial Intelligence and Machine Learning Summit explored the possibilities of an automated future, including ways Ireland can profit from AI, coming trends, public policy, AI ethics and risk management.

Pat Breen, Minister of State for Trade, Employment, Business, EU Digital Single Market and Data Protection, delivered the opening address, discussing digital transformation for the EU as well as on a national level. Thirty initiatives were announced by the European Commission in 2015, geared towards helping Europe embrace 'the digital revolution', including the removal of European roaming charges, rules against geo-blocking, and GDPR.

"Completing the single digital market is a priority for us here in Ireland," he said, stressing that the outcomes must be "pro-trade, pro-enterprise and pro-innovation". He identified the pillars of digital transformation: digital foundations, trust, security and well-being, and the effective use of the digital economy and labour market.

In December of 2018, the EU published the Plan on the Development and Use of Artificial Intelligence Made in Europe. It establishes a model for cooperation in AI across European countries, including providing a necessary digital infrastructure, the marketing of academic research and setting standards for interoperability. Ireland's national AI strategy is also already in action.

"I'm inspired by the examples which I've seen throughout the country," said Breen. "We are uniquely positioned to take part in the revolution that's happening at the moment, and it stands to benefit all of us."

The opening keynote was delivered by technology evangelist Clare Dillon. Providing an overview of the ways in which AI is currently changing business, she discussed the challenges of "real-world implementation", which can reduce costs, accelerate R&D processes and improve how teams work together. AI-powered diagnostic services are currently making waves in the field of healthcare, and AI algorithms are in use everywhere from social media platforms to facial recognition used by police.



Paddy Farrell, University of Limerick, with Steven Lee, IPsoft

Going against the argument that robots will take people's jobs, research company Gartner predicts that by 2020 AI will create more jobs than it eliminates, Dillon said. "The narrative around jobs has definitely changed in the last 18 months", shifting to "an acceptance of forecasts that there will be more jobs created than destroyed".

Spending on AI is estimated to grow to \$77.6 billion by 2022, with the banking and retail sectors ranking highest for investment. The US is the global AI leader at present, followed by China. Voice-activated devices, computer vision, real-time language translation and 'digital agents' installed on smartphones are only the tip of the iceberg, experts warned organisations to start managing their data more carefully, preparing it for safe and secure use by AI.

"The only constant here is change," said Dillon. "Some of this will involve whole new industries that we can't even imagine today, but that will exist entirely thanks to AI."

Moving from the age of discovery to the 'age of implementation', we're beginning to understand the issues arising from AI and the context in which it's deployed. Owen Lewis, a Partner at KPMG, spoke on AI and the Future of Work, highlighting how automation is poised to affect every job category by at least 25 per cent. "There's a growing trend to seeing this as a positive

movement, rather than as purely negative impact," Lewis said.

The concept of 'human in the loop' is applicable here; organisations will have to ask themselves is their AI helpful, understandable,



From left: Andreea Wade, co-founder, Opening; Dr Patricia Scanlon, founder and chief executive, Soapbox Labs and Owen Lewis, partner, KPMG

morally right, achievable, necessary and safe.

Irfan Rasul, principle solutions consultant at Oracle Business Analytics, gave a talk on 'Putting AI to Work'. "It seemed radical many

years ago, but is beginning to become reality," Rasul said, naming business optimisation, smart networks, risk analysis and behaviour analytics, among other fields, as currently benefiting from AI.

including Bank of Ireland, whose online platform has been modernised through AI, and Acumen Aviation, where AI is used for engine maintenance forecasting, leasing, service bulletins and supply-demand. Paul Verkaik, director of EMEA Solution Strategy at IPsoft, gave a talk on Conversational AI and Your AI Journey, covering recent developments in AI, and changing expectations among customers.

In 2019, businesses must be omni-channel, offering a service that's personalised, instant and, crucially, human. Unexpectedly, perhaps, full stack AI will help SMEs to achieve this goal.

"To deliver a service that people want, you need a technology that can deliver customers' expectations," said Verkaik. "They want a proactive service; no longer just asking a question and getting a response. Customers want to be understood. They want an advisory service." There are, however, barriers to entry: IT issues, cost, integration with legacy tech and a chronic shortage of AI specialists in Ireland.

The second half of the day was introduced by Owen Lewis, who introduced a talk from Dr Catherine McCabe, director of the Trinity Centre for Practice and Healthcare Innovation, on the ways in which clinical decision-making is being transformed by AI. Currently AI diagnostic tools are able to read tissue samples, and smart contact lenses are capable of the early detection of cancer.

The final panel of the day looked at AI in business. Viktor Kovacevic, vice president and general manager of Comtrade Digital Services, said that even AI specialists are now under pressure to innovate and constantly overhaul their approach. "Software engineering itself will be one of the industries most disrupted by AI, because many of the jobs will be automated and replaced. This means we have to transform ourselves."

However, Kovacevic is also certain that AI will also create new jobs in business analysis, data engineering, software engineering, data science and other areas.

Overall, the summit provided a valuable overview of the state of AI in business, as well as fuelling a conversation about its future. Ireland currently ranks as the sixth 'most-digital' economy in the EU; if we play our cards right, AI stands to transform our economy further in coming years.



From left: Professor Barry O'Sullivan, vice chair, European Commission High-level Expert Group on AI, president, European AI Association, School of Computer Science, University College Cork; Dr Joan Cahill, principal investigator, Centre for Innovative Human Systems (CIHS), School of Psychology, Trinity College Dublin; Mark Kelly founder of AI Ireland and chief customer officer at Allidus International; Aoife Sexton chief privacy officer, Trúata and Allan F. Beechinor, group chief executive officer, Advanced Meta Data.