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President's Report

By Nicola Graham,
Socitm President 2018-2019

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Socitm

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Introduction

During my presidency, I have taken the opportunity to apply my 25 years of experience working in the technology sector to articulate how the society can support its members on one of the most pressing issues generated by the extent and pace of technological change. I have worked with colleagues to help define the scope and remit of my key policy theme: 'The ethical use of emerging technologies' and to design the associated research and action plan that will underpin our ambitious objectives in tackling this topic.

Whether it be chat bots, Artificial Intelligence (AI), machine learning or the growth of the Internet of Things (IoT), technologies are becoming mainstream that 20 years ago would have been considered science fiction. AI is already widely adopted, but largely goes unnoticed. Coupled with the introduction of these technologies is the ability to leverage better insights from the burgeoning amounts of data that they generate.

As a society, the increase in these new technologies brings about some ethical questions; will they be a force of good or something we should be afraid of? How do we derive the benefits, without causing harm?

Our responsibility in the public sector should be to prepare for the changes that result from the use and application of these technologies, using data in a more meaningful way and ensuring that we are embracing these capabilities to make improvements in public service delivery. We need to improve our digital capabilities internally and grow our workforce competencies in response to the challenges. We also need to prepare and redesign our services, so that the whole of society can benefit with better outcomes from these revised practices and ways of working.

These technology-enabled changes are inevitable and undeniable. During my presidency and beyond, I plan to work closely with Socitm, our members and our partners, to explore how the public sector can embrace and harness these technologies further and how we ensure we do this in an ethical and safe manner.

In the section below, I articulate the specific areas on which we plan to focus our efforts.

01 — AI ethics and the impact on our workforce

How will AI be used now and in the future? One of my main priorities will be to address some of the challenges I see, particularly about the ethical use of these technologies.

A 2017 Accenture report[1] states that the growth of AI in healthcare will be driven by the fact that it 'thinks and pays for itself, a self-running engine for growth'. The report goes on to advocate that the potential of AI is limitless, and that councils need to harness this potential, consider early adoption and its implications for longer-term cost savings, amongst other strategies that they are deploying.

This being the case, how can we make best use of tools, such as data analytics, automation and augmentation, to create a more effective public services workforce? Data analytics can increase productivity, identify patterns in data, predict consequences and potentially make decisions.

HMRC has been a pioneer in the use of AI. Its 'Connect' database allows tax inspectors to quickly carry out preliminary investigative work and avoid costly and time-consuming property raids. The system has proven to be particularly effective in collating and analysing data.

The use of AI is still in its infancy within the public sector. Our ambition will be to catalogue case studies of good practice that will focus on practical deployments to achieve successful outcomes from a variety of aspects of service delivery, process and workforce-related improvements.

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[1] https://www.accenture.com/au-en/insight-artificial-intelligence-healthcare

02 — AI and automation in action

Many councils are starting to use AI for discrete functions or services.

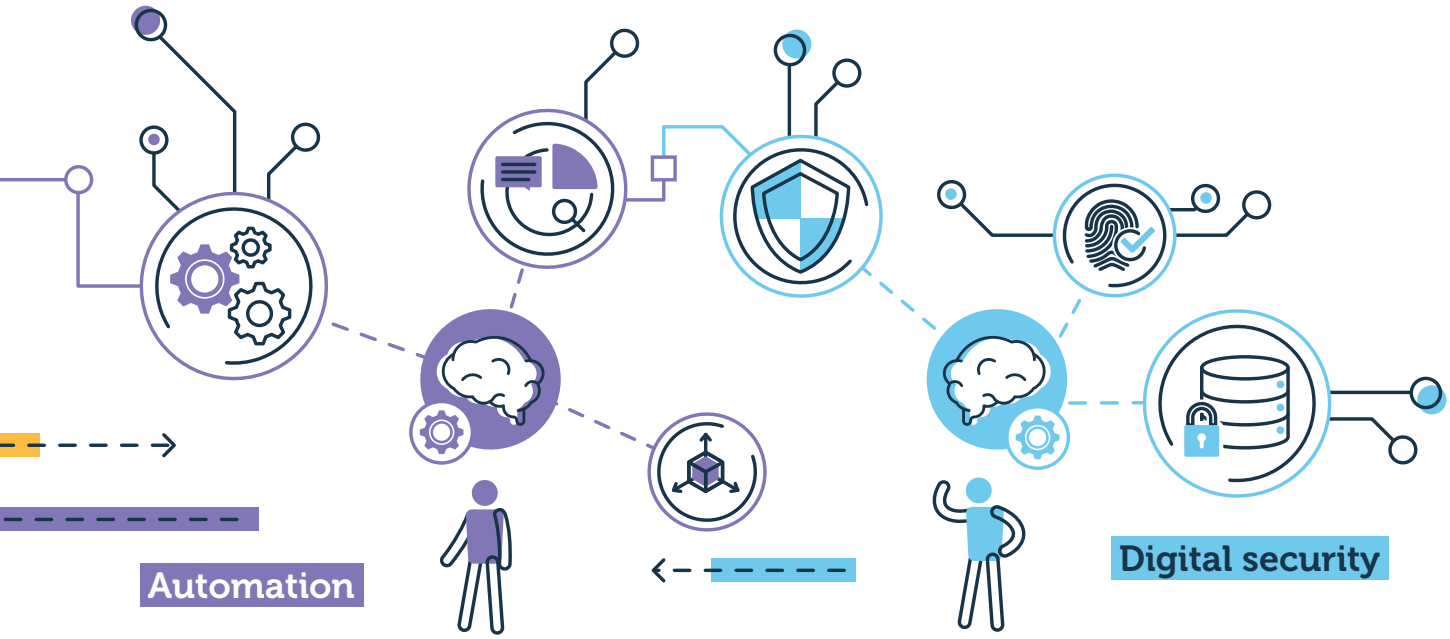
The London Borough of Enfield has has piloted Amelia, a call centre chat bot, designed to improve local service delivery. Capable of analysing natural language, Amelia understands context, applies logic, learns, resolves problems and even senses emotions. It will help residents locate information and complete standard applications, as well as simplify some of the council's own internal processes. This will be the first AI implementation in a public sector organisation and is a significant milestone for Enfield Council's overall digital strategy.

Councils such as Wigan and Hampshire are already trialing the use of voice-activated, assisted technology to help maintain independence for people with a physical disability. Automation using this technology can bring efficiencies in both economic and physical labour, combined with improvements in quality of service, and we should explore its full potential further.

03 — Digital security

The use of automated technology is in its infancy and comes with a number of unanswered questions around security. How can we ensure that our systems are safe, and that data does not fall into the wrong hands? How is the data being used? How much choice will we build into this technology in our provision of services to vulnerable people? The use of assistive technology in the home to monitor health conditions and to help disabled people, needs to be balanced with privacy and human rights concerns.

As we all know from the recent Cambridge Analytica scandal and other widely publicised abuses, there is a balance between the benefits of embracing technologies such as machine learning and data analytics, and the ethical and privacy risks that they pose. Guidance is needed for the public sector; we need to address the privacy issues that are overlooked by current legislation and regulations and we all have a responsibility to ensure transparency and accountability in decision making.



04 — What challenges do we face as a society?

There are some clear misconceptions around the impact of technology on our lives, such as the sense of fear about how much technology will eliminate jobs. However, this same sense of fear has arisen during every industrial revolution that has taken place to date. A recent analysis by PwC[2] demonstrates that AI will create more jobs in the UK than it displaces, with the most positive effects being in the health and social work sector, where PwC estimates that employment could increase by nearly 1 million, equivalent to around 20% of existing jobs in the sector. On the other hand, PwC estimates the number of jobs in the manufacturing sector could be reduced by around 25%, representing a net loss of nearly 700,000 jobs.

The challenge facing us in imagining a post-work society is how do we structure a fair post-labour economy? Will emerging technologies serve to increase inequality? Could AI algorithms potentially discriminate against particular groups? How do machines affect our behaviour and interaction?

Automation will reduce jobs in certain sectors, but new businesses will emerge around AI/automation and sensors, meaning that job roles will change, with more of a focus on 'adding value' rather than on delivering the mundane, repetitive processes. Thomas Frey, one of the world's leading futurists recently commented: 'The future of industry will be micro industries with 100,000 new micro industries being created worldwide over the next two decades. That's not new businesses. It's new industries, with new opportunities for different kinds of jobs.' [3]

05 — The ethics of AI in the public sector

AI is likely to result in fundamental changes to the way councils operate, from the way that citizens interact with services to how citizens engage in their design and co-produce outcomes. As with any new technology, choices need to be made about how they are introduced and managed to achieve successful outcomes.

Can AI be trusted to be fair and neutral? Before embarking on the use of AI, councils need to consider the ethical implications. AI systems created by humans can inherit human bias and can be judgemental. But if used sympathetically by those who strive for social progress, AI can become a catalyst for positive change. We need to look at how to remove bias from the outset and throughout its use in order to ensure that systems can be trusted.

The public sector needs to start an internal debate now on the limitations of new technology, consider the risks of 'big brother' surveillance, and issue and monitor guidelines to avoid negative press coverage and public mistrust. We should actively seek out bias within AI systems, particularly when starting their deployment. This will include testing how data generated behaves through the application of particular algorithms.

In order to pre-empt negative publicity from both intended and unintended ethical consequences of using automation and digital technology, we need to make data ethics an integral part of our business operations. A key issue will be balancing pressures for cost efficiency with selecting technological solutions that benefit users.

[2] *https://www.pwc.co.uk/press-room/press-releases/AI-will-create-as-many-jobs-as-it-displaces-by-boosting-economic-growth.html*

[3] *Frey, T (2018) speaking at the Municipal Association of Victoria's Technology Conference in Geelong, Australia*

06 — The role of Socitm

Socitm draws its membership from all areas of the public sector. We always seek to understand our members' challenges. We look at innovation within and outside the UK, including that of our international partners. We aim to enable our members to circumvent problems that have been overcome elsewhere, to save effort and expenditure on their part. And, we will issue guidance and support for our members to help them achieve ethical uses of technology and data, and to build public trust.

While technology advances are a certainty, the impact on society and consequences on regulation and public attitude are still unclear. The ethics of public sector use of emerging technologies and data will be something we will continue to explore over the coming year.

We need to take responsibility for our actions, be competent, show empathy towards our customers and overall build trust. The key message is: 'It is not about the technology, it is actually about what we do with the technology'.

Public opinion has a big part to play. There needs to be open and honest dialogue about how and why we're using particular technologies - trust is essential. Whilst the growth of AI, IoT and robotics is fairly well accepted, we still have a long way to go in the UK. What is clear is that nothing will stay the same - we will all be working differently.

I believe we are at a tipping point for the convergence of digital technologies, such as AI, with the public sector. This comes with challenging ethical and moral questions that cannot be ignored.

Taddeo and Floridi[4] make the point: "To deal with the risks posed by AI, it is imperative to identify the right set of fundamental ethical principles to inform the design, regulation, and use of AI and leverage it to benefit as well as respect individuals and societies. It is not an easy task, as ethical principles may vary depending on cultural contexts and the domain of analysis."

[4] *Taddeo, M. and Floridi, L. (2018) "How AI can be a force for good", Science. 361 (6404) 751-752*

President's Conference 2019

I look forward to meeting many of you at our next President's Conference, presented in partnership with Capita, on June 18th – 19th at the NEC, Birmingham.

At the conference, we will be taking a closer look at our key policy themes – ethical use of emerging technologies, service redesign and transformation, health and wellbeing, leadership, diversity and skills and cyber resilience. We will present a progress update on the wwork being undertaken on each theme, sharing expertise from our sponsorship partners and showcasing evidence of where organisations are responding to the challenges 'head on'.

In my workshop, 'The ethical use of emerging technologies', I will be looking at the steps that individuals, organisations and communities can take to tackle ethical concerns about the use of these technologies and the data that they generate.

Another key session, hosted by incoming Socitm President Sandra Taylor, will look at the 'digital skills gap'. It will ask how leaders can keep up with the increasingly fast pace of technological advances by taking a holistic, collaborative and flexible approach that includes upskilling and promoting diversity in the workforce to help retain and attract new talent.

About this report

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