Joint Councils Executive Report on Trends this Month

Digital Strategies, Policies and Standards, Data, and Digital Workers in Government were key trends this month.

Key insights - Digital Strategies, Policies and Standards

UK - The UK government's digital strategy has 'lost momentum', according to a new report by the House of Commons Science and Technology Committee. It goes on to detail that, this issue has been caused by a lack of political leadership in digitization due to the minister for the Cabinet Office leaving his role in 2015 and the departure of senior civil servants from the GDS. Read more about the potential of the strategy and digital champions within the organization here.

US – Officials released their Digital Modernization Strategy, offering insight on the way the Pentagon plans to prioritize its roughly $46 billion annual IT budget over the next five years. Cloud adoption, artificial intelligence and cybersecurity will all factor heavily in the department's technological future, according to the strategy.

US - Worldwide organizations recently published principles to guide artificial intelligence research and development. Surprisingly, these principles reflect a broad international consensus -10 of the 12 most common principles are put forth by 90 percent of the organizations. The 12 most common principles are summarized by organization in this table. The surprising commonality in principles expressed across governments, professional associations, research labs and private corporations suggests that we have the basis for an international treaty on AI. However, the broad consensus does have some gaps; current principles need to improve specificity and broach the issue of enforcement. Read more here.

US - The National Institute of Standards and Technology proposed actions the federal government should take in developing artificial intelligence standards. Specifically, the federal government should:

- Bolster AI standards-related knowledge, leadership, and coordination among federal agencies to maximize effectiveness and efficiency.
- Promote focused research to advance and accelerate broader exploration and understanding of how aspects of trustworthiness can be practically incorporated within standards and standards-related tools.
- Support and expand public-private partnerships to develop and use AI standards and related tools to advance trustworthy AI.
- Strategically engage with international parties to advance AI standards for U.S. economic and national security needs.

Key insights – Data

US - How can municipalities and states gain similar rewards from more effective use of data and analytics? This paper outlines best practices to make data more accessible for government decision-makers: How Government Can Unleash the Power of Data and Analytics, Center for Digital Government Content Studio.

US - Explore modern approaches for unleashing data-driven decision-making for federal, state, and local governments in this recently published report by the Centre for Digital Government Content Studio: Data Innovators in Government.

AUSTRALIA - Australia is about to undergo a once-in-15-year review of the way it delivers federal government services. According to CIO Magazine, re-examining service delivery and whole-of-government ICT provides a rare opportunity to break down data silos and shift the mindset on how data can be used. It is an important opportunity to develop maturity around data use, to create a culture of data understanding and sharing built around appropriate controls and governance.

CANADA - Currently, employee monitoring is permissible in Canada if it is conducted in conformity with Canadian privacy statutes. But as privacy and data protection concerns gain increasing prominence in the workplace, are employees' data and privacy rights being adequately protected, and are employers aware of employee rights and their own obligations? Canadian Lawyer provides their insights here.

Key insights – Digital Workers in Government

AUSTRALIA - According to Government News, an increasing number of government agencies are exploring robotic process automation (RPA) as a way to deliver on their specific 'missions' with more efficient processes, fewer mistakes, a more optimized workforce, better compliance and more satisfied citizens. The article reviews the true value of RPA in government and how to prepare the workplace for change. The author argues that "RPA isn't going to get rid of employees … far from it. In fact, it's going to help make them better, happier and more productive."

US - Bloomberg recently released an economics article that contains statistics on AI and jobs. Findings include:

1. The majority of workers in the US expect that AI will remove jobs;
2. Only 1 in 4 Americans are confident that the higher education system is doing enough to address the need for career-long learning and retraining.

Find out more here.

Other noteworthy articles this month:

Australia: Unhappy customers: are inhuman public services destroying trust? The Mandarin

USA: Looking beyond process automation at government agencies. StateScoop

Pakistan: The Geopolitics of Artificial Intelligence. Daily Times

UK: UK advanced manufacturing gets boost with new investment in digital tech competition. GOV.UK

USA: Why VDI Makes Sense for State and Local Governments. StateTech

UK: Just one in five UK citizens use government digital services. Consultancy.uk
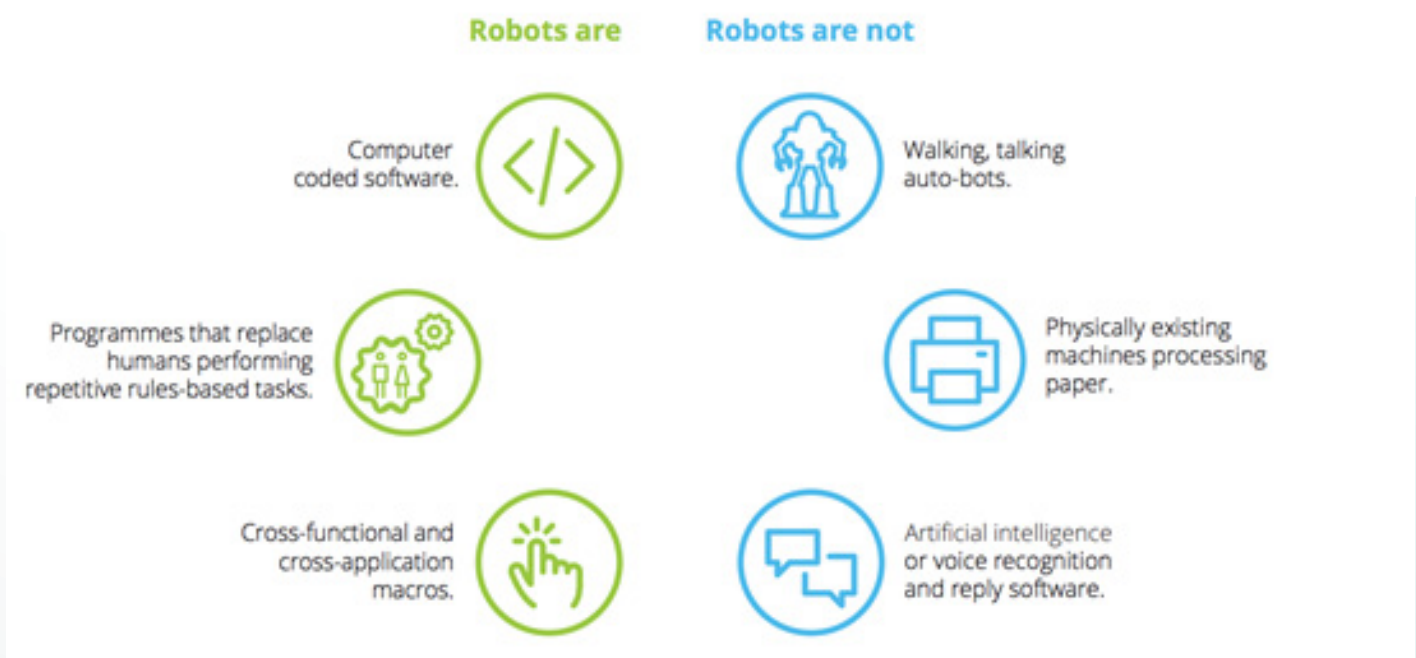
Research repository

Access the ICCS Research Repository here.

This month's feature: Opportunities and Challenges of Robotic Process Automation in the Public Sector

According to EY, Robotic Process Automation (RPA) is software that emulates human activity via existing user interfaces. As Willcocks, Lacity and Craig from London School of Economics, comment, "RPA most commonly refers to configuring the software 'robot' to do the work previously done by people."

While RPA contains the word "robotic", it is not a robot in the sense of manufacturing or a futuristic movie. The following illustration from Deloitte UK provides a schematic of what RPA is and is not:

Robots are
- Computer coded software.
- Programmes that replace humans performing repetitive rules-based tasks.
- Cross-functional and cross-application macros.

Robots are not
- Walking, talking auto-bots.
- Physically existing machines processing paper.
- Artificial intelligence or voice recognition and reply software.

According to Deloitte, in practice, the types of actions that RPA can carry out are:

- Opening emails and attachments
- Logging into web or enterprise applications
- Moving files and folders
- Copying and pasting
- Filling in forms
- Reading and writing to databases
- Following if/then decision/rules
- Collecting social media statistics
- Extracting structured data from documents
- Making calculations
- Rekeying information across programmes
- Scraping data from the web

Opportunities for the Public Sector

RPA presents a great opportunity for the public sector as it creates efficiencies with so-called predictable and repetitive processes, and it is an easy solution to implement. In fact, according to Rob Mills from Government News, "the public sector is learning every day how to best apply RPA within their agencies. While some of the initial return on investment (ROI) focus is around cost savings, creating agency efficiencies and ensuring compliance; the true value is three-fold and is delivered across the entire department and, potentially, beyond." This value is:

- RPA helps to drive down costs
- RPA enables a more citizen centric approach
- RPA frees employees from "the robot" inside of them and allows them to work on more interesting tasks, increasing their overall job satisfaction.

Case studies abound that demonstrate the *return on investment* for RPA. Some examples from the public sector include:

Automation in the Public Sector

RPA opportunities in the frontline

For frontline workers in the Public Sector, RPA has the potential to free up their time, make strides in their productivity and improve their responsiveness to the public. In many cases, the technology is complementary to current activity, allowing time to be redirected from repetitive, mundane tasks into activity that is more interesting, more highly valued and makes better use of skills.

With RPA only just catching on in the Public Sector, there are a wealth of frontline opportunities to explore. We have highlighted potential use cases in just four areas of the public sector, however this list is by no means exhaustive.

Our clients are regularly finding new opportunities as they look more broadly across their teams.

Central Government – Universal Credit and benefits calculations, tax calculations, anti-fraud checks, licensing applications processing.

Local Government – revenue collection, permit applications, incident reporting, case management, contract administration.

Policing – fixed penalty processing, intelligence reporting, crime reporting, firearms licence processing and replacing the need for officers to double key the same information into different systems.

Health – coding, diagnostics, discharge processing, outpatient clinic outcomes, cashing up.

Education – managing admissions and enrolments, student timetabling and estates utilisation, student inance management, course assessment data handling, alumni database maintenance.

Support Service RPA opportunities

Moving into support services takes us to the functions where RPA first gained a foothold in the private sector. Here we are beginning to see RPA maturity, particularly in shared service operations. We have seen large robotic workforce rollouts spanning HR, IT and Finance functions. These provide a blueprint for similar implementations in Public Sector.

HR functions – payroll, benefits management, education and training, recruitment and new joiner processes.

IT functions – infrastructure/application monitoring, folder and file management, user/directory and release management, network monitoring and desktop support.

Finance functions – Reconciliations, claims processing, expense payments, returns management and inventory processing.

In concrete terms, this blog provides 45 examples of *return on investment* from implementing RPA, including this healthcare example:

Organization	University Hospitals Birmingham NHS Trust
RPA	Blue Prism
Country	UK
Industry	Healthcare
Function	Customer Service
Case Study	Patient self check-in
Results	• 50% reduction in effort • 2x improvement in turn around time • Improved data quality
Time to Implement	<3

Challenges of RPA

The challenges of RPA relate to the tremendous opportunities and how this impacts people and the workforce. There is uncertainty regarding whether there will be cost savings; and whether there will be fewer employees, or employees will be in a position to take on more meaningful work, or both.

Similar to other solutions that create opportunities for greater efficiency, planning for change, dispelling myths and educating the public will be important factors to realising the benefits of RPA. "The key to success is having a solid change management process in place and involving employees early on in the journey, so they clearly understand the impact and intention of the automation project. The reasons must be clearly communicated so they're easily understood to engage the business and get everyone on board." Read more here.

How employees are impacted will depend on the needs of the organisation. In a world where the workforce is aging and the citizens expectations are increasing, there are opportunities to transform organisations to do more with less by removing the mundane portions of people's jobs and limiting recruitment to new, higher value

> Some pundits have noted that, **"In many cases, automation will take a portion of people's roles or daily activity away, so know from the beginning how you're going to reallocate their time. Upskilling will be required if employees are now being asked to do something different that wasn't part for their previous job." Read more here.**

roles. A clear plan and good communication about these intentions will take effort, but will allay fears about what the change means for individuals.

Additional Resources

Tighter budgets, expanding workloads, declining workforces, increasing regulatory requirements, rising data security concerns and growing citizen expectations are among the mounting challenges facing government executives every day. Read more about The Rise of Digital Workers in Government.

Andres Aavik from Estonia discusses the future of work with regard to automation and software robotics in this short, interesting video.

The report – The path to prosperity: Why the future of work is human – explores the role of technology and how it's changing the very nature of work, and therefore the skills required by people to ride the constant and ever increasing waves of technologically-driven transformation.

How GSA turned an automation project into an acquisition time saver provides a case for how RPA supported an organisation with a shrinking workforce (includes podcast) – USA

In this report, PWC provides a primer on how to incorporate RPA into its digitisation strategy

We would love to hear from you!

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