

The path to automation for good in public services

Perspectives from UKAuthority's Automation & Bots4Good 2022 conference



Automation & Bots4Good 2022

Event Partners

ss&c | blueprism

TPXimpact

Contents

1. Delivering successful automation	3
2. Key themes	3
3. The initiatives	4
4. Choice and ambition	7
5. DAY ONE - Wednesday, 23rd November	8
6. DAY TWO - Thursday, 24th November	9
7. Event Partners	10
SS&C Blue Prism	10
TPXimpact	10
8. UKAuthority Events	10

1. Delivering successful automation

It is easy to do automation badly, in a way that fails to deliver the benefits and creates extra frustrations for employees and the public, but by combining industry best practice with a strong understanding of one's own processes it can be delivered successfully and often at speed.

This was one of the key messages to emerge from the recent UK Authority Automation & Bots4Good conference, which brought together several examples of public sector success with perspectives from the industry on how to apply the technologies.

It was underpinned by a reiteration from several speakers of the case that automation can free up public sector staff from the mundane tasks to spend more time on more challenging work and dealing directly with the public. While details of deployments will always be influenced by those of the processes and the nature of a services they support, there are key themes that will often arise and should influence the planning of any projects.

2. Key themes

A starting point was raised by Darren Atkins, chief technology officer at the Royal Free Hospital (RFH) London NHS Foundation Trust and a pioneer of automation in the health service, emphasising the need to combine attention to quality with an engaging culture.

He suggested the availability of low code platforms on which to build automation can feed a perception that it is easy, but it still requires attention to a methodology, such as the six-stage lifecycle approach developed by RFH. This

involves taking time to observe how a process works and the factors that improve or disrupt it, and can be used to ensure the automated process meets the demands of a service.

This has to come with a recognition that many people still fear automation as a threat to jobs, and that there is a need for engagement with staff to help them appreciate it is about a better use of their time – which the RFH has summed up as 'making time matter'.

With many organisations considering the prospects for a programme of automations, an early step is to think about the business case and risk in investment. The conference discussions reflected perspectives at previous events that there should be an emphasis on the whole enterprise rather than specifics of one project in the business case. Atkins said the case has to include the original investment in technology, ongoing costs, those of investing in people to develop automations and when the benefits will start to come through.

But for some organisations it can be more about gut feeling. Dave More, service owner of the Digital Robotic Automation Centre of Excellence in the Department for Environment, Food and Rural Affairs (Defra) said its case evolved organically, with the first project proving the centre could provide an enterprise capability and showing the potential to unleash hidden capacity.

"At no point does anyone ever have a pipeline of opportunity in their back pocket," he said. "Defra took a risk, made an investment to set the service up based on what we had done before because our gut feeling was there was huge opportunity there to do things better, faster, cheaper. It was a calculated risk."

Another part of the discovery process is to choose the tools and technology partner. Discussions emphasised the importance of carrying out due diligence and research, with estimates on the return on investment where possible, which will all be influenced by the technology already used by an organisation and its broader digital strategy. This comes with an acknowledgement that most want their automation programmes to evolve rather than set out precise plans, and that they need a partner that can help them adapt to circumstances and exploit opportunities.

Leonardo Tantari, chief digital information officer for Leeds City Council and the Leeds office of the NHS West Yorkshire Integrated Care Board, made the point that: "We are looking for true partners more than just the technology."

He also emphasised the need to keep inclusion in mind, pointing out that many people feel uncomfortable interacting with bots, and that Leeds is increasing the live chat capability for public facing processes.

There was also a consensus that, while a technology partner can provide the early momentum, there is a need to build internal skills for developing automations – although the partner can play a role in making that possible.

Naz Juna, local government lead for SS&C Blue Prism, commented: "It's important to know what you want the third party provider to do for you. They have a place in educating a new team, and while there are online resources it's never the same as being with other humans, talking about roadblocks you've hit and learning how to get through it. But you should not always be dependent; you should be in control of your own destiny."

There are challenges in recruiting people internally to develop the skills, and in retaining

them when public sector salaries are not the best on offer. Speakers acknowledged the problems, but said there are people who respond to the prospect of it opening new career opportunities and are motivated by the value of public services.

Underlying all this is the fact that automation is not the solution for every technical issue. Atkins described it as a "last resort", saying there are often better ways of fixing things, and organisations should be wary of regarding it as a magic wand that distracts attention from a wider digital transformation. But he also said it should not be neglected as an important option.

"It's about getting the balance right," he said. "Automation should certainly be a part of an organisation's digital strategy. For those that exclude it, there's going to be a heap of spaghetti in a year or two's time that needs to be unpicked at a huge cost."

3. The initiatives

Details of several ongoing initiatives in automation were presented at the conference, conveying how approaches can vary according to differing demands.

Dave More explained that Defra's centre of excellence has been designed to align with a repeatable service design and aims for quick delivery of projects at a low cost. Since its launch in 2020 it has delivered a number of quick win projects through a minimum viable service that covers only attended automations, processes involving desktop applications and no virtual machines or cloud systems, and a service approach that negates the need for test management and solution architecture roles. This comes with a set of 11 service design principles, of which More highlighted the importance of not assuming the partners can convey everything that is needed the first time around, and the

importance of managing data quality and accuracy. It has led to a low risk approach to individual projects, deploying solutions in high supervision mode until they are validated by the partners.

He said a key message is to start not small but very small, looking for quick wins that can build confidence and make it possible to scale up over time, and that a repeatable service design can help to avoid the traditional project lifecycle.

A local government view came from Scott Attreed, applications delivery manager for Norfolk County Council, describing work on its own centre of excellence and intelligent automation service. This has involved a team of four business analysts, four programmers and a service manager, although Attreed emphasised that the approach always involves a close collaboration with the service teams. One of the business analysts will work with department leads to develop low level requirements, which are then fed to a delivery team to take an agile approach in working with the services in building solutions. The effort has been underpinned by use of the Blue Prism cloud and the Microsoft Power Platform, with API integrations.

Work on the service began in 2020, the centre was launched in April 2021 and at the time of the event it had delivered 39 automations with another 15 in development. An example has been the deployments of bots in processing around 30,000 records for adult social care in 8,000 hours, providing a range of benefits in the council's own records management, ambulance referrals to social care and exchange of data with the CACI system.

Delivery has been accelerating over this financial year, there are plans for growth over 2023-24 with the use of AI and machine learning for processes such as task mining, and continual improvements through 2024-25 in alignment

with the council's customer experience replacement programme.

"We're looking at adopting a service led automation approach, involving customers more and a federated model under our centre of excellence," Attreed said, adding that it could extend to multi-agency working with partners in the police, NHS and other services.

Leonardo Tantari outlined how automation fits within the digital priorities of Leeds City Council, which are focused on moving more services online with the principles of cloud and mobile first. It has a number of workstreams on automation, the first to move processes onto the Microsoft Power Platform and the increased use of Power Apps and Power Automate. It has a team delivering four Power Apps applications per month, taking just four weeks from concept to deployment.

This is accompanied by the deployment of robotic process automation (RPA), which began in April 2022 for taking in direct debits, which is now handling tens of thousands of records. The council had set up an internal team and at the time of the conference had put out a tender for support to step up the momentum. It was also working on the delivery of chatbots, working through Microsoft Teams, which could respond to live text and transfer enquiries to a helpline when necessary. This involves building a knowledge base for a range of services to support the bots in handling enquiries.

It has also taken a more ambitious steps in developing a skill for Amazon Alexa in responding to questions on bin collections.

Tantari said the main learning points have been to: ensure the right mandate is in place within the authority to ensure funds will be available and departments will be ready to change; build the right strategy; ensure the infrastructure is ready;

be ready to rationalise the applications estate; ensure the data architecture works for RPA and bots; and develop the right skills in the digital team.

Another local government initiative was presented by David Cunliffe, intelligent automation lead for Cumbria County Council, which has used SS&C Blue Prism technology in two successful projects. One was to automate the validation of Blue Badge applications. This has traditionally involved the receipt of an email with multiple files attached as proof of identity and eligibility, and which could take some time to check and attach to a case management system. The automation reduced this “by orders of magnitude”, removing a backlog of several days in its first day in place, and has now been running successfully for around 18 months.

The other was in dealing with invoice slips, which amount to around 1,500 per week for purchases by the council and its schools. It was a manual process that involved a central team scanning all of the invoices, but this was replaced with a new web form that generated an email with documents attached for audit. This has removed the need for printing and scanning, saving over 1,000kg of paper in just three months, and saving the staff the hours they would spend in attaching stickers to the printouts – which in turn has given them time to focus on dealing with any complex transactions.

Cumbria took a further step in the spring of 2021 by setting up an internal team to replace the external provider in managing the development and support of new automations. Cunliffe said the emphasis in recruitment was on project rather than technical experience.

An NHS England perspective came from Saf Angelo, assistant director of the digital productivity team in the Transformation Directorate, who said RPA and automatic data capture (ADC) are three crucial elements of its

vision to tackle the elective recovery backlog and make the health service more productive.

It has identified the potential for RPA to support the management of referrals, appointments, diagnostics, theatres, outpatients and patient management outside the care setting, along with challenges in funding, resistance to change, the need for education, a lack of developers to build and maintain automations, interoperability of systems and the prevalence of unstructured data. But there has been progress with the provision of automation capabilities to 42 integrated care systems, 61% of the acute trusts in England and 38% of community care and mental health trusts. This has applied to business and clinical functions, with plans to take it further and move into intelligent automation over 2023-25.

The directorate’s ADC programme is aimed at helping NHS organisations achieve operational efficiencies through automating the identification, tracking and collection of data from objects, using technologies such as barcodes and tags for the first step, Wi-Fi, Bluetooth and GPS for the second, and patient and inventory management databases for the third. Angelo said this will have applications in managing assets such as medical devices, medicines, blood supplies, beds and mattresses, and extending to patient flows and infection control. The plans have been formulated through 2022 and should be put into effect up to March 2025.

Darren Atkins outlined the delivery of 18 RPAs during 2022 by NHS North London Partners Shared Services, half of which were enhancements to existing RPAs and half new. These included the saving and updating of Health Education England trainees spreadsheets, trainee satisfaction surveys, professional registration checks and processes for identification and the right to work. He also referred to national automations to provide NHS Mail to care homes and the provision of

home shopping delivery vouchers to social care organisations.

He pointed to the centre of excellence set up by the RFH, which provides professional services to healthcare bodies at cost and teaches them to carry out automations themselves. The team has grown from two members to 49 over two years and he said one of his ambitions is to make the NHS a global brand for automation in healthcare.

RPA has also provided benefits for Kettering General Hospital (KGH), whose former digital director Ian Roddis explained how it has worked with TPXimpact in deploying software bots – also known as digital workers – in clinical and business operations. He said the crucial first step was to map the process for automation, making it clear what the digital workers have to do at each stage and the business rules they have to follow. In the case of the SitReps -the submission of a daily situation report – this involved gathering three lines of data – from the HR department on how staff were affected, from the incident room on patients with Covid, and from wards on those admitted into or discharged from the hospital – all of which was emailed to Covid19Admin system.

The digital workers were programmed to input the data into a SitRep file which was then signed off by the incident room lead and emailed to clinical and administrative officials and the Department for Health and Social Care.

He highlighted two key features that would apply to any RPA deployment. One is that while the digital worker can carry out the basic process of collecting data, completing forms and passing them to other systems, it has to be able to recognise instances that do not fall within the business rules and pass them to a human worker who can then exercise their judgement.

The other is that whenever an element of the process is changed – such as the addition or

removal of a piece of data, or the introduction of a new stage – the software has to be redesigned to ensure the digital worker handles it correctly.

4. Choice and ambition

Initiatives like these convey the breadth of activity taking place with automation, and the sense that it can go well beyond the routine administrative tasks for the which it has widely been applied. But the conference also conveyed the message that it should not be seen as a panacea for time savings and raising productivity.

In the closing discussion Ian O'Neill, managing partner of TPXimpact, made the point that plenty of digital leaders advocate a focus on factors such as standards and interoperability more than automation, but that it is not a binary choice.

“There are ways to unlock efficiencies using RPA that will give you the time and even the money to look at how you will do the other work you need to do the experience,” he said. “We will never get to the point where the NHS does not have some legacy tech, it is an ongoing battle, so you have to make some choices. RPA will be the right choice for some but not for others. But once you scratch the surface and look at this you would be mad not to look more deeply.”

This reflected a view that it has reached the point where every public sector body should be looking seriously at automation, both in terms of the types of processes they can see working well for others and in those more specific to their operations.

There is also plenty of scope to share work that has already taken place. Naz Juna said organisations are already sharing with others in their sectors, and emphasised: “We’re getting to the point where it is only our imagination and risk appetite that is stopping us fully exploiting the technology.”

5. DAY ONE - Wednesday, 23rd November



00:01:10: A repeatable centre of excellence service design: how to start small and quickly smash it - Dave More, Service Owner of Digital Robotic Automation Centre of Excellence, Department for Environment, Food and Rural Affairs

A session on creating a centre of excellence, sharing lessons learnt and what has been achieved so far ([Download slides](#))

00:18:40: Innovation by the NHS for the NHS - Darren Atkins, Chief Technology Officer – Intelligent Automation, Royal Free London NHS Foundation Trust

With the philosophy of Making Time Matter, Darren Atkins and his team has automated more than 600 corporate and clinical processes across the whole Integrated Care System (ICS) to improve clinical workflow. Here he outlines their journey and has one simple message - to be successful create an engaging culture from the outset ([Download slides](#))

00:33:00: Finding the agility to succeed - Naz Juna, Local Government Lead, SS&C Blue Prism and David Cunliffe, Intelligent Automation Lead, Cumbria County Council

Join this session and take a whistle-stop tour on how Intelligent Automation can empower your teams to tackle these unique "once in a lifetime" pressures we are facing. Discover, how using digital workers in your partnerships, departments and your processes can give you the agility to maneuver at lightning-speed and deliver resilience never seen before. It will aim to cover:

- What is Intelligent Automation? And why so many organisations are clamoring to become early-adopters
- We will highlight specific use cases deployed at Cumbria County Council and the benefits to service delivery and ultimately the community
- You will benefit from key learnings; and what best practice advice we can impart to bring automation in your organisation

([Download Naz Juna's slides](#) | [Download David Cunliffe's slides](#))

00:57:15: Q&A and panel discussion - all speakers

6. DAY TWO - Thursday, 24th November



00:01:00: Leveraging RPA and digital productivity technologies to optimise the NHS - Saf Angelo, Assistant Director Digital Productivity, NHS England

NHS England's Digital Productivity programme focuses on accelerating the adoption of evidence-based technologies to improve productivity across the NHS and social care. Saf Angelo will introduce evidence-based digital tools such as RPA, Automatic Identification and Data Capture (AIDC) including Radio Frequency Identification (RFID) and Real Time Locating Systems (RTLS). We will hear how these tools can be – and already are being – used effectively to improve productivity, enabling the NHS to deliver care and treatments to more patients, improve the quality of care, reduce the burden on the workforce, save time, lower costs, reduce waste, and increase patient and staff satisfaction. The session will highlight the resources available to NHS bodies, and the lessons learned by those that have already adopted RPA - freeing up frontline time worth up to £12.5 billion a year – almost 10 per cent of its annual running cost ([Download slides](#))

00:13:00: Delivering an Intelligent Automation service and building a Centre of Excellence for success - Scott Attreed, Applications Delivery Manager, Norfolk County Council

An overview of Norfolk County Council's automation initiatives, its journey so far and what's next ([Download slides](#))

00:27:00: Making automation reusable - Ian Roddis, Digital Director, Buckinghamshire Healthcare NHS Trust and Holly Hall Hare-Scott, Senior Partner, TPXimpact

This session will cover what can be achieved from a focused automation program, what drives innovation and ROI, and how can this program be successfully replicated ([Download slides](#))

00:46:00: Automation - Leonardo Tantari, Chief Digital Information Officer, Leeds City Council and NHS (Leeds) West Yorkshire Integrated Care Board Automation in the city of Leeds

1:04:00: Q&A and panel discussion - all speakers

7. Event Partners

SS&C Blue Prism

SS&C Blue Prism allows organisations to deliver transformational business value via our intelligent automation platform. We make products with one aim in mind — to improve experiences for people. By connecting people and digital workers, you can use the right resource, every time, for the best customer and business outcomes. We supply enterprise-wide software that not only provides full control and governance but also allows businesses to react fast to continuous change. Exceed customer expectations, stay competitive, accelerate growth.

To learn more, visit www.blueprism.com and follow us on twitter [@blue_prism](https://twitter.com/blue_prism) and [LinkedIn](#).

TPXimpact

TPXimpact is a change agency helping organisations dream big, achieve more and make a positive impact in people's lives. Bringing together leading UK consultancies, we're combining human-centred design and the latest technology with rich knowledge and a heritage of delivering results to help organisations respond in an ever-evolving digital landscape.

To learn more, visit www.tpximpact.com and follow us on twitter [@TPXimpact](https://twitter.com/TPXimpact) and [LinkedIn](#).

8. UKAuthority Events

Support from our event partners enables UKAuthority to produce free events for the public sector to share success stories, best practice and experience

[Click here to find out more and register to attend future UKAuthority events](#)

UKAuthority

This briefing note has been researched, written and published by [Mark Say & Helen Olsen Bedford](#), UKAuthority.

UKAuthority champions the use of digital, data and technology (DDaT) by central and local government, police, fire, health and housing, to improve services for the public they serve.

Visit UKAuthority.com to keep up with news and developments in the use of DDaT for the public good. We host regular virtual round tables and events exploring best practice and innovation in the public sector. [Visit the UKAuthority 2022 events schedule here](#)