Capturing the potential of digital technology

A report by National Health Executive
In almost every person’s working life, they will have experienced that moment: the IT solution they’re using stumbles, falters or fails. It can be hugely frustrating, but it doesn’t have to be this way. Particularly as the NHS drives forward with its digital agenda and shifts focus to further digital integration, from emerging automation and cloud technologies through to effective service management governance, to ensure reliable and well-integrated solutions which can transform services for staff and patients.

At National Health Executive, we’ve recently embarked on a body of research with our audience to better understand the NHS transition towards cloud and automation technology, the challenges we’re facing as a health sector and the potential solutions to support successful adoption. Alongside our research partners, BMC Software, Fusion and The Dudley Group NHS FT, we’re able to draw a clearer picture of the current barriers to an integrated cloud solution in our health service.

A number of common challenges were quickly apparent among our audience in achieving high levels of end user engagement: resources, service management, communication and training.

In particular, effective service management controls were key to ensure the correct resources, communication and training were provided alongside the core technology components.

Equally, an effective solution requires an invested end user group, who feel there is clear progress towards modernisation and transformation of the trust’s digital services. As such, when more than four in every five respondents stated their organisations remained early on in their cloud journeys (82%) and had just partial understandings of the methods used, it tracked with a sentiment that the limited cloud adoption showed many parts of the NHS to be running behind the pace in their modernisation efforts and explained some of the end user discourse.

As one respondent explained: “[Our biggest challenge is it] not being made clear to staff how the use of digital solutions can make their day-to-day jobs easier and processes more efficient.”

For Gary Pruden, CTO at Fusion, this wasn’t surprising to see either. He said: “It’s what we had expected to see. We commonly hear from people we engage with about limited resources, a lack of investment in people and infrastructure and communication.

“That lack of investment is causing consequences for trusts as a whole.

“People understand the importance of investing in technology. It just has to prove its worth and be the right technology. [Data like this] helps validate those points, so we can engage at high levels, with evidence, to in turn ensure money is spent on the right solutions and end user satisfaction increases.”

And those conversations at the highest levels, particularly internally within trusts, are ongoing. Our study showed 48% of respondents were aware of conversations going on at a senior level around cloud technology, with more than a third of those occurring with regularity and confidence in the technical aspects. Meanwhile, just 10% stated these conversations were limited to just digital and IT teams.

People are open to the potential of the digital shift. Cloud technology is beginning to become more approachable, while automation processes are becoming commonplace among many health service providers with two thirds of respondents having seen automation projects underway in their NHS organisations.
1. What are the key causes resulting in downtime of IT services?

- 35% Single Points of failure
- 31% Changes
- 7% Lack of monitoring
- 26% Other

2. How far along is the trust on its journey to moving to cloud?

- 45% Just starting
- 37% Small number of cloud services deployed
- 8% Approximately 50% of our services are cloud
- 9% Most of our services are cloud

3. What is the level of digital confidence in organisational leadership and decision making?

- 28% Discussed with limited confidence at senior level
- 19% Regularly discussed with confidence at board level
- 13% General confusion and avoidance in governance groups
- 10% Only discussed in digital / IT teams
4. What level of automation has been reached within the trust?

- 33% Not really started
- 55% Achieved some automation but a lot more to do
- 11% Have automated a lot and have a path to further automation
- 1% Comprehensive level of automation

5. Where do you perceive the biggest gains in automation and AI are?

- Administrative functions 54%
- Imaging 52%
- Clinical diagnostics 55%
- Care navigation 38%
- Citizen Access 35%
- Automated triage 32%
- Other 16%
It shows NHS trusts as being receptive to becoming Autonomous Digital Enterprises; a term referring to an organisation which embraces intelligent infrastructure across every facet of its business, supporting it to thrive even during the most seismic changes. Successful organisations in this area look to developing new operational models, building on key technologies to deliver transformational care, capitalise on the potential of automation and drive data-based business outcomes – all backed up by robust cybersecurity and support for innovative DevOps opportunities.

Across the NHS it’s not quite the status quo yet, but the wheels of motion are clearly beginning. According to the survey, 12% of respondents were seeing a significant or comprehensive level of automation at this stage, but it still remained the clear direction of travel for many others. Resources were the overwhelming barrier to entry or limiting factor for most, but as the healthcare automation marketplace continues to mature and the rewards are felt by those who’ve adopted, this shift is expected to continue.

Tom Hockton, Sales Director at BMC Software, added:

“Investing in an effective solution can help make a significant change, improving patient pathways.”

Yet, none of these issues are insurmountable. With the right level of investment and engagement from NHS trusts, as the data backs up, there is real potential for an effective, well-integrated shift to cloud and automation solutions within the NHS. This is the sort of tech-enabled adoption which will enable healthcare organisations to move forwards on their journey to becoming an Autonomous Digital Enterprise.

Northumbria Healthcare NHS FT can be seen as a prime example of this, leveraging a digital workplace IT solution provided by BMC Software to significantly streamline the processing of temporary “locum” clinicians, covering for another medical colleague or an absent post. Implementing an easy-to-use solution, which staff were trained to use comfortably, has allowed the trust to bypass much of the redundant paperwork post systems may have required, creating a tangible impact on patient care by reducing waiting times and streamlining administrative procedures.

Cost and resource also feature once more when it comes to cloud migration. One of the biggest strengths of cloud technology is the potential for interoperability between systems, but as many respondents outlined, limited investment and legacy hardware curtailed some of their potential within NHS organisations to maximise these benefits.

One respondent explained how their organisation’s “bespoke PAS system was hard to integrate with other systems” while another commented on limitations that they had with integrated technology solutions with equipment in their theatres.

“[For us, we struggle with] compatibility of medical devices with the Trust’s IT management system. In theatres, for example, it’s not known if the vital signs measurements can be taken from the monitor and recorded directly to patient care plans / notes.”

“[It also helps reiterate the importance of clear comms and training. We put significant onus on this: having a way of letting people know what is coming. The last thing anyone wants is a new solution that is either not picked up effectively by the end user or is pushed out by IT without clear communication on how to best use it.”