

ACCELERATING DIGITAL SERVICES

ACROSS UK PUBLIC AGENCIES

Roger Camrass
CIONET UK

Accelerating digital services across UK public agencies

This article was written by Roger Camrass, Director of Research for CIONET International, and is based on the conversations held during an event on 30th November sponsored by Mendix and entitled 'accelerating digital services across UK public agencies'

The convergence of post-pandemic trends and technological advancements are fundamentally reshaping the provision, distribution, and access to e-government and digital-first services for the public sector in the UK. Public agencies are expected to make decisions at speed and deliver value in real time. Gartner estimates that public agencies will need to triple their citizen-facing digital services by 2023.

Mendix, a subsidiary of Siemens AG, is the global leader in multi-experience platform development (MXDP). Such platforms help to accelerate digital transformation by integrating cloud, mobile, data and API interfaces. During the round table the following issues were discussed:

- Eliminating shadow IT by adopting modular and reusable solutions on open platforms
- Modernising legacy systems to help exploit new technologies such as IoT, 5G and AI that can improve efficiencies
- Adopting security by design, embedded from the start of software projects to reduce cyber vulnerability
- Unlocking agency silos by introducing a single registration system to protect citizen identities.

Here are some of the key points raised during the roundtable by leading executives from public agencies such as London Boroughs of Kensington and Lambeth, DEFRA and DFE, Ministry of Justice, NHS, Royal Household and Surrey County Council.

How does Low-Code help?

According to Mendix, low code can compress time to market from 6-12 months, using traditional coding methods, to just 4-6 weeks. This has important consequences when developing a 'minimum viable product' or MVP that helps confirm solutions to business problems. Low code has also become a key enabler when organisations adopt agile development. Compressed development times support rapid 'sprints' that help businesses test solutions within practical settings.

Several examples of rapid development were mentioned by delegates such as:

- Developing an event management tool that cuts down wasted time and effort
- Improving procurement and contracting processes during a crisis such as COVID
- Responding to current energy and food shortages during a cost-of-living crisis
- Absorption of refugees within local boroughs and councils..

Encouraging re-use of applications

One borough described its current programme of applications modernisation covering some 600 different software packages. One driver for modernisation was to reduce the data silos within and external to the organisation that introduce inefficiencies. Using low code tools and an associated platform (as provided by Mendix), many of the applications can be quickly modernised and integrated to improve usability by all parties.

A key aspect of rapid solution developments is the use of joint IT and business teams, or what Mendix refers to as 'fusion teams. Business solutions can be visualised using low code, enabling all parties to agree on a suitable design. Visualisation accelerates the coding and enables the business to receive a solution that fits current needs.

All delegates agreed that public services have common requirements that should be met once rather than multiple times. For example, London has 36 boroughs all of whom attempt to develop their own software solutions. A low code solution developed on a common platform could be shared by all parties, saving 60-70% of costs. This can also be applied to some 400 local councils across the UK, and similar numbers of NHS Trusts. The economics is compelling.



A marketplace for low code applications

Some ten years ago government introduced G-Cloud to simplify procurement of e-services. Low code could enable a further development that would enable different parts of government to develop an App once and share it across similar departments. There is a strong parallel here with the Apple Apps Store that has encouraged millions of coders to develop new applications for sale on the Apple platform.

Th ingredients for success here could be:

- Common data connectors that are necessary to link different agencies together around individual citizen needs
- Accelerated migration to cloud for core applications that can be developed once on an AWS or Azure cloud platform and shared multiple times
- Communities of practice that would work together in tackling common business problems such as local boroughs.

Given the mounting cost pressures on public services today, the possibility of shared developments seemed appealing to all delegates.

What are the obstacles along the way?

One serious obstacle lies on the side of suppliers who are often too keen to encourage replication of effort – and the associated need for external resources. A marketplace for common applications could reduce overall government expenditures at a time of tight money and reduce dependence on external resources.

A second obstacle is the public sector's attitude towards risk. Private sector is often keen to adopt new methods if there is a quantifiable return. This can show up immediately in the P/L account and generate cash incentives for staff. Public sector employees are risk averse and might sacrifice commercial benefits for security of employment, especially when considering lucrative pension arrangements. Media exposure is also a risk to be considered when conducting new experiments.

Reputational damage, especially at ministerial level, plays heavily into the civil service mentality. The concept of fast fail is only just beginning to find support within the public services. Crises such as COVID and Cost of Living do help to accelerate adoption of new approaches such as low code.

What can we learn from the discussions?

Delegates agreed that low code, agile development, sprints and MPV have much to offer the public services, especially when sharing is taken into accounts. Some of the steps to be taken include:

- Start small, start today – select a single application and start a low code development
- Encourage the Cabinet Office to take a lead governance role in establishing standards for low code and an associated marketplace for sharing apps
- Involve the London Office of Technology in this process, especially as it could affect over one hundred different charities, all of whom have common needs.





Roger Camrass
Lead researcher

A pioneer of today's Internet as an ARPA research fellow at MIT in the seventies, Roger has spent over forty five years helping corporations harness the power of new technologies such as cloud, mobile communications, e-commerce, voice recognition and satellite. He was a partner at EY responsible for e-commerce during the dot.com boom. He is a graduate of Cambridge University and MIT, and a visiting professor at the University of Surrey.

See rogercamrass.com

