

MOVING FORWARD

Simon Hall reports on the dawning of a new era in frontline police technology

In the past few years, the approaches to delivering front line software have changed with blistering speed. Systems that were state of the art just two to three years ago now lack the required flexibility moving forward. The demands arising from COVID-19 and Brexit have only accelerated the pace, with forces needing high agility to meet rapidly changing requirements. Policing is now much better prepared to adapt and deploy new technology when the time calls for it. But this more agile approach did not happen overnight; a number of factors converged to reach this tipping point.

We now have a new generation of officers and new cloud-based services to help them. The traditional but inflexible technology investments of the past are giving way to a new breed of cloud-first, Software-as-a-Service (SaaS) solutions that can deliver change at a significantly greater pace and at lower cost while giving forces more control over their own destiny.

While this transition was already in motion prior to the pandemic, it was undoubtedly accelerated by COVID-19. The switch to virtual meetings over Microsoft Teams almost overnight is a good example of this. Such an achievement would have been almost impossible if it wasn't for the adoption of cloud technology by Forces beforehand, led by the National Enabling Programmes (NEP).

Frontline officers are also benefitting indirectly from the consumer technology revolution of the last few decades, with devices and services that can support advanced innovations such as artificial intelligence, augmented reality and natural language processing.

This new combination of cloud-based services with cutting-edge devices brings new found freedoms to our forces. The question now is, how do they harness these freedoms without creating new problems and bottlenecks that will slow down the pace of change, or inadvertently repeat the mistakes of the past by swapping the 'Big Consultancy' of yesteryear with the 'Big Tech Company' of today?

Technology has become a bit of a sore point for officers, with some citing it as a contributing factor to early retirement. To quote directly from Andy Rhodes, Lancashire's chief constable at the 2021 UK Police Digital Summit, one officer told him: "I'm actually leaving the police earlier than I should have been doing because of the technology. I can't cope with it. It's not me doing my job, doing the thing I know."

Senior Officers and Ministers have been aware of these issues for some time and have put a strategy and initiatives

in place to address them. The Policing Vision 2025 and the National Digital Policing Strategy 2020-2030 both recognise the need for greater interoperability between police and other related systems, uniform data standards and better data quality, for example. This new era is being led from the top and needs to filter down through the policing organisations and hopefully into procurement too, so that more innovative and agile SMEs can play a greater part in delivering this vision.

The success of the National Enabling Programmes (NEP) has demonstrated how the cloud can deliver meaningful business change to forces in a short timeframe and with minimal disruption. This lesson is also being applied to other projects run by the Home Office, most notably with the recent announcement of the evolution of the Police ICT Company into Police Digital Services (PoDS).

THE SAAS-FIRST APPROACH WILL ALLOW FORCES TO DEVELOP AND INTEGRATE THEIR OWN PROCESSES

The Police ICT Company – along with the success of the NEP – has played a significant role in shifting the mindset of policing around technology in advance of its vision of: "Supporting UK policing to keep people safe, get more from technology investments and make better use of public money". Police Digital Services, which has been up and running since April this year, and will replace the Police ICT Company, will pick up the mantle with a bigger budget and more resources. With a focus on delivering outcomes rather than specific technologies, Police Digital Services has a broad range of objectives; these range from providing a seamless experience for citizens when they engage with the police, to the digital enablement of officers and staff through digital while empowering the private sector to play a key role in the delivery of innovative and cost-effective solutions. Police Digital Services has an important role to play in maintaining the current momentum towards more SaaS-first, cloud-based technology deployments across police forces in the UK.

One of the key sessions from the recent Police Digital Summit was delivered and demonstrated by Philip Bartholomew, Digital Transformation Programme Manager, Essex Police. He showcased a solution that was developed using an in-house team, using Microsoft Power



Solutions must be fit for purpose and flexible enough to meet likely future requirements

Apps and the Power Platform to provide a quick solution to an immediate need within the forces around COVID-19 3E/4E frontline processes.

Using the platform, they produced a 'minimum viable product' for frontline officers in six weeks, having been quoted six months from one of their existing providers. This approach also achieved an estimated saving of £20K-£50K.

Mark Gilmartin, Director of Support Services, Essex & Kent Police, commented: "The ability to take a requirement from the operational leadership and convert it into an application that can be deployed effectively, so quickly. That level of agility and responsiveness is the big, big plus for this particular initiative."

This is a great example of the future direction of frontline policing – it is no longer about the 'Big Consultancy, Big Project' approach of the past, but instead it is about adaptable SaaS platforms that align with the NEP blueprint.

The SaaS-first approach will allow forces to develop and integrate their own processes if they wish, using 'no-code/low-code' solutions, share their process designs with other forces at no or low cost and take advantage of scalable integration platforms to overcome the logjam of proprietary legacy integrations.

The challenge with the 'build-your-own-apps' approach is that forces have a significant number of processes that

they would like to digitise; "upwards of 1,000 processes between Kent and Essex" was mentioned at the Summit. While many of these could be replaced with other solutions like RPA ('Robotic Process Automation', a form of business process automation) this would still leave many that will need to be carried out by frontline officers.

COMMON USER INTERFACE

This approach would require hundreds of Power Apps, each with their own user interface and limited ability to share data, which would be far from ideal. We are advocates of Forces using tools such as Power Apps to build their own solutions and reduce their reliance on 'Big Consultancy', but they should be mindful of important factors like interoperability, data quality and security – and the user experience – when doing so. It is important to adopt a common user interface to reduce the training burden on officers, use common data standards to ensure data is applicable and sharable across different processes and enforce good data quality by minimising the amount of manual input and rekeying of data wherever possible.

It is certainly good that the Microsoft Power Platform has demonstrated the agility of cloud-based solutions in response to urgent needs and made a strong case for more cloud/SaaS solutions within policing. However,

general purpose 'citizen developer' platforms may not be a panacea for the particular requirements of operational policing, specifically when it comes to data security, sharing, re-use and interoperability. Two summit sessions showcased two different uses of Power Apps, each having different user interfaces and no built-in support for data security or sharing. Maintaining consistency across many processes, perhaps authored by different forces, introduces new challenges.

Rhys Willis, Business Change Consultant at the National Enabling Programmes, commented: "People should view Power Apps as low code, quick and dirty solutions to challenging business-critical issues. The NEP COVID app is a great example of this. They can be used to replace basic paper processes that forces have produced around Taser use, training *etc.*"

The point is that Forces need to transform all frontline processes – including their existing mobile policing solutions, which connect to critical police services such as RMS, Command and Control, Intelligence, PNC, NLEDS, HO Biometrics *etc.* Modern frontline apps should be sufficiently agile to handle urgent new requirements, without going back to vendors for often costly custom development.

A two-track route (new low-code solutions like Power Apps alongside the established first-generation police solutions) also increases the financial cost and training requirements. When it comes to mobile solutions for the frontline specifically, an alternative approach is to adopt a fresh generation of police-specific frontline applications, which address the specialist needs of policing, and which also adopt the agile no-code/low code approach of modern platforms.

While Power Apps are a great solution to allow Forces to streamline many of their business-critical processes themselves, they do not necessarily allow forces to build exactly what they need for frontline policing. Frontline operation has many niche requirements, for example

the need to be able to work offline for long periods, re-use data between processes without re-keying, use on-device integration to biometric scanners, ANPR and the like, plus the ability to capture information from identity documents such as driving licenses and passports – while also ensuring appropriate levels of data security. Such functionality, if built in at the start by virtue of using a SaaS-based platform, would be applied automatically to any new process without the need for complex development work – ie, adding new processes becomes easy, seamless and quick.

INFORMATION REQUIREMENTS

As a final word, it is worth remembering that the 'I' is as important as the 'T' when it comes to Information Technology. There can be a tendency to rush to adopt 'shiny' tech without full consideration of the actual data or information requirements. Solutions must be fit for purpose – not just to meet the immediate requirement, but also to be flexible enough to meet likely future requirements. Forces' cloud journeys are building out the strategic architectures to make this possible.

The next step is to adopt appropriate next-generation applications that can bring the long-awaited benefits the cloud – and SaaS – promises. Digitisation of processes is not just about the data either, it is about reducing workloads on officers, even when offline, improving data quality, automating data capture and re-using data, eliminating duplication of effort, as well as meeting all of the requirements of integrity, security and governance. For next-generation apps, these capabilities should come 'out of the box'. All of this should be realised in a way which facilitates interoperability, even in the absence of universal data standards and eliminate the age-old problem of data silos and data sharing.

We are truly heading into an exciting new era of policing where instead of seeking early retirement to get away from it, our officers will be inspired by the capabilities of the technology that is available to them ●

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Digitisation of processes should not just about gathering data, it needs to focus on reducing officers' workloads

