

THE FUTURE OF POLICING

A publication from  leidos



Digital Policing. Building 21st century systems

Police forces in the UK are moving at pace towards the full digital transformation of their services. Digital transformation is never an easy process for any organisation that has legacy assets and certain ways of doing things. It requires a willingness to change, patience, respect and a deep understanding of complexity and risk. It also demands clear goals, leadership and skills in complex project management, coupled with real expertise in the technologies that are set to revolutionise policing

as we enter an era where data reigns supreme.

Policing has made great strides since the early days of computerisation in the 1970s and 80s; information held in systems has enhanced the ability of forces to analyse crime data, and make investigatory and decision-making leaps that would have not been possible in the distant past. However, that advancement is at risk of stalling: large systems have grown incongruously and in many cases require inelegant, manual workarounds,

keeping officers away from the front-line, where they are most required.

Even as technology itself has flourished, differentiated and competing systems used by police keep information locked away, acting as a barrier to the gleaming prize of digital transformation, which is for information to be available and used meaningfully in real time, saving labour, cost and even lives. Segregated, siloed processes do not reflect how policing wants to be perceived in the data age: of a seamless public service which is effective,

trustworthy and responds to changing consumer needs.

Surfacing police data in a way that it can be accessed 'live' and in a relevant and useable format will unlock untold benefits to policing. Critically, it will allow police to move from a reactive to proactive delivery model. Real-time data analysis will usher in a new era of responsive, flexible resource planning, predictive policing will become a reality and the ability to digitally engage communities – where vast sources of online data →

→ currently sit untapped – suddenly becomes a major asset rather than a burden in efforts to fight crime.

Effecting that level of change

within any organisation is, however, extremely hard. The challenge to do it in a critical service such as the police is even harder. It is vital that police forces embarking on a change programme do so on the basis not of procuring a single 'solution' to each problem but by fully engaging with the process as part of a detailed review of how their organisations function. It is only by understanding the many complex policing processes – from emergency and non-emergency despatch, to the capturing of crime data, evidence collection, categorisation, charge and custody – that forces will truly start to turn the corner in their digital transformation journeys. This will not be possible unless we also recognise that the data held by policing is part of a digital conversation that includes not only intra-force cooperation but also the wider criminal justice community; that collaborative approach also reaches into other parts of the public and third sector, whether it be health and care, education, work and pensions, or local government. That will involve, ultimately, a more effective approach to collaboration and co-working that has been difficult for policing and other agencies to achieve up to now, but it must happen nonetheless.

Leidos has considerable experience as a technology company that works to understand how organisations function at a deep level, and can then apply that understanding to create value from some of the internal systems that are keeping data locked away. We can offer a strategic view as to how operational processes need to change, or be adapted, and can present a vision of the 'art of the possible' through the spectrum of emerging technologies that will ultimately move policing towards the prevention model and improve citizen experience, thereby winning all important public approval.

Whilst it is right that technology is viewed as an enabler, rather than a means to its own end, we must also recognise the risks of inaction. It is no longer acceptable to simply digitise the front end of outdated manual processes. It is only by understanding how data needs to flow across the organisation and how policing touches the citizen that the real goals of first-class user experience and enhanced service provision can be realised.

It is often said that knowledge is power. Leveraging the value of existing



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police data and enhancing it with 'open data' that exists online publicly will provide more information for officers, enabling better decision-making at the heart of policing. This data could exist in the dark corners of the web, on social media or the multitude of platforms that people routinely transact with each and every day. If policing is to make a big digital step change and harness the power of data, then it will be through this dual focus: delivering actionable insights from internal police data and from data that exists online.

It is only by upping the pace and scale of transformation - and working with people and organisations that understand current challenges and the need to work and solve problems collaboratively, at scale - that UK policing will be able to respond to the changing nature of crime. No one is under any illusions: the crime scene of the future will bear little if any resemblance to the way policing has traditionally been delivered. Wet

forensics and door-to-door footwork will always have an important place, but crime is moving rapidly online and the tag 'cyber' is no longer an appropriate term to demarcate the physical and digital world; they are quickly becoming one.

Digital also pays no regard to segregated, siloed processes and absolutely does not respect geographical boundaries; our digital presence increases by the day, providing a larger and often less protected attack surface for adversaries. Policing needs to adapt to this challenge. This requires coordination and collaboration between police forces and other agencies, and for systems to be robust, scalable and open to the idea of adopting leading-edge innovative tech in order to handle the challenges that arise from living in a world fuelled by data. Criminals will not themselves be held back in the adoption of new technology, especially if it makes crime easier, more profitable and less risky. Policing needs to catch up with

this fast-moving threat landscape and ultimately get ahead of the curve.

At Leidos, we pride ourselves in working collaboratively with our customers. We have designed mission critical services for 21st century policing and value some of the world's highest profile law enforcement agencies as our customers. We leverage the talent, assets and experience of a global workforce of 34,000 and have a strong partner eco-system. We recognise that budgets are under continual financial pressure; that is why we use agile, 'fail fast' and iterative approaches to software development, resulting in quick, tangible deliverables to ensure that business outcomes are met in a timeous and cost-effective way.

We also recognise that policing is a 24/7 enterprise and that forces must keep the lights on at all times. This means that there are few, if any, greenfield opportunities to start again. Large systems exist and are in



Digital Policing – Some of the key challenges and shaping the debate

One of the key challenges that could impact on the adoption of new technology is the lack of clear guidance or codes of practice outlining appropriate use of how police forces govern the use of automation tools, which includes artificial intelligence (AI), machine learning and the internet of things (IoT). More consideration needs to be given to creating such a framework to ensure that the police do not lose the trust of the public through clear direction on why, how and when data will be used to support crime prevention. Indeed, some police forces have set up ethics panels to consider the impact of new technology on stakeholders and local regulations.

We are fortunate that policing in the UK is governed by 'consent'. In practice, consent is a bit like the technologies that are increasingly shaping the digital world around us. It grows and evolves over time but requires continual checks and balances to ensure it is still fit for purpose and can be trusted to do the job. We have seen this become a live issue with the advent of technologies such as artificial intelligence which, if underpinned by the right ethical and moral framework - and are fully accepted by the public - can be leveraged to great and potentially transformative effect in 21st century policing.

But we are yet to have that conversation with the public and there are no clear guidelines as to how AI will influence police decision-making in practice. If the benefits of AI-assisted policing can be effectively communicated to our law-makers, and public and media concerns managed, AI will undoubtedly disrupt the way policing is practised, for the



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better. Contingent on data science becoming the norm, police officers will need training in how to interpret and analyse that data effectively and there will need to be transparency and education on how the police use technology and peoples' data in support of their goals. Indeed, a UK-wide regulatory framework may be required to standardise understandings and to ensure, among other consequences, that algorithms, for instance, don't introduce bias. There is a fine line between valid monitoring, citizen protection and the right to privacy. Regulation, good 'checks and balances' and education will ensure continued public support for policing but importantly allow the police to prevent crime and protect the public.

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also a 'digital beat', and processes need to adapt to ensure policing has a strong presence both online as well as on the street.

The digital revolution is not just happening around police officers, it's happening with them. Most young people who will join forces up and down the country in response to the latest government recruitment drive will be digital natives, and expect to join a tech-enabled workforce. The requirement for new skills will continue to grow as we see the gradual adoption of smart networks within our cities and towns, powered by 5G and data.

There is a need for continual investment in new technology to keep up with the pace of change and everyone - from force commander to civilian call handlers - will need to become data literate.

That means a solid understanding of how technology is impacting the world we live in is required at the very highest level of policing. If force commanders can develop that holistic view of their organisations, then the architecture which houses the people, processes, information, systems and devices will naturally follow.

If we can move the needle even slightly on what is a broad agenda of public service reform, then we will end up not only with a more effective means of protecting the public and policing the world as it is, and how it is likely to develop in the future, but we will end up with an experience that is transparent, engenders trust and commands public support in much the same way as envisioned by Sir Robert Peel all those many years ago. ●

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daily use because that is the reality of the legacy environment and the nature of delivering a vital public service.

The key to change is understanding the data and business processes that currently exist and avoiding a cottage industry approach to the acquisition of new technology which will only perpetuate past mistakes and make the challenge of digital transformation harder to attain. Leidos's expertise is in systems integration within an increasingly cloud-based technology stack, enabling policing to move towards a model whereby all data can be surfaced and presented to officers as and when they need it. It is only through expert engineering and integration that we can maximise the value from legacy systems, allowing us to move towards a more affordable and 'fit-for-risk' future where technology can be utilised to adapt rapidly to organisational change. ●



Providing Solutions
for the Most Critical
Challenges in Policing

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