



Law enforcement in the age of the digital revolution

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Law Enforcement in the digital age

Law enforcement agencies are facing unprecedented challenges and change. As guardians of public order, they are at the very epicentre of a maelstrom of technological and demographic shifts that are shaking the foundations of police work.

Agencies and their officers are being tasked with tackling and preventing new forms of digital and digitised crimes, wrestling with the broader implications of advanced technologies, and managing ever evolving relationships with the communities they serve. They are increasingly expected to go far beyond the traditional boundaries of their role, such as dealing with the mentally ill or being the front line in combating overdose deaths. It is all fundamentally changing what law enforcement is.

To meet these new and increasingly sophisticated challenges demands an approach that marries both new tools and new strategies. The tools that need to be able to pair the empathy of human judgment with the data-processing ability of machines, while strategies need to go integrate enforcement with community engagement to do both exceptionally well together, rather than silo them off.

And it all needs to be achieved in a climate of restricted budgets, economic turmoil and the ongoing confusion of the pandemic crisis.





The twin revolutions of demography and technology

We are in an age of multiple revolutions – an overhaul of the way we work, live and co-exist with one another, all accelerated by technology and changing demographics.

Technology is disrupting the way we communicate, the way we connect, the way we share. Police forces are constantly on camera, combatting crimes which are becoming increasingly digitised – not in the cyber threat sense (thought that is an increasingly significant part of law enforcement), in the way digital tools are being used to aid and abet the committing of crimes.

At the same time, demographics are changing rapidly, both within law enforcement and the citizenry those forces serve. Younger officers see the role as a job, rather than a profession, and bring with that adjustment a different expectation of how law enforcement as a career will support them, and not just the other way round.

A Deloitte report notes that these “shifts are changing where we live, who we live next to, and how we interact with those around us, all challenging the ability of police to form meaningful relationships with the communities they protect.”¹

What this means is that citizens still expect to be protected, but now there is a mistrust – smartphones and social media mean incidents are easily shared, with alleged abuse quickly disseminated not just within the local neighbourhood, but internationally.

Part of the challenge is that, for many, law enforcement presence equals emergency. The declining visibility of officers does little to adjust this perspective, yet the equation is simple – citizens feel safer, and crime levels drop, when officers are visible on the street.

To rebuild trust, police forces need to reconnect with communities, so that their presence is not only associated with emergencies. Yet the demands of modern crime fighting and budgetary restraints makes that a significant obstacle, with paperwork taking a significant proportion of officer time and removing them from the streets.

These revolutions of changing demographics and disruptive technology are undoubtedly challenging. However, they can also be opportunities.

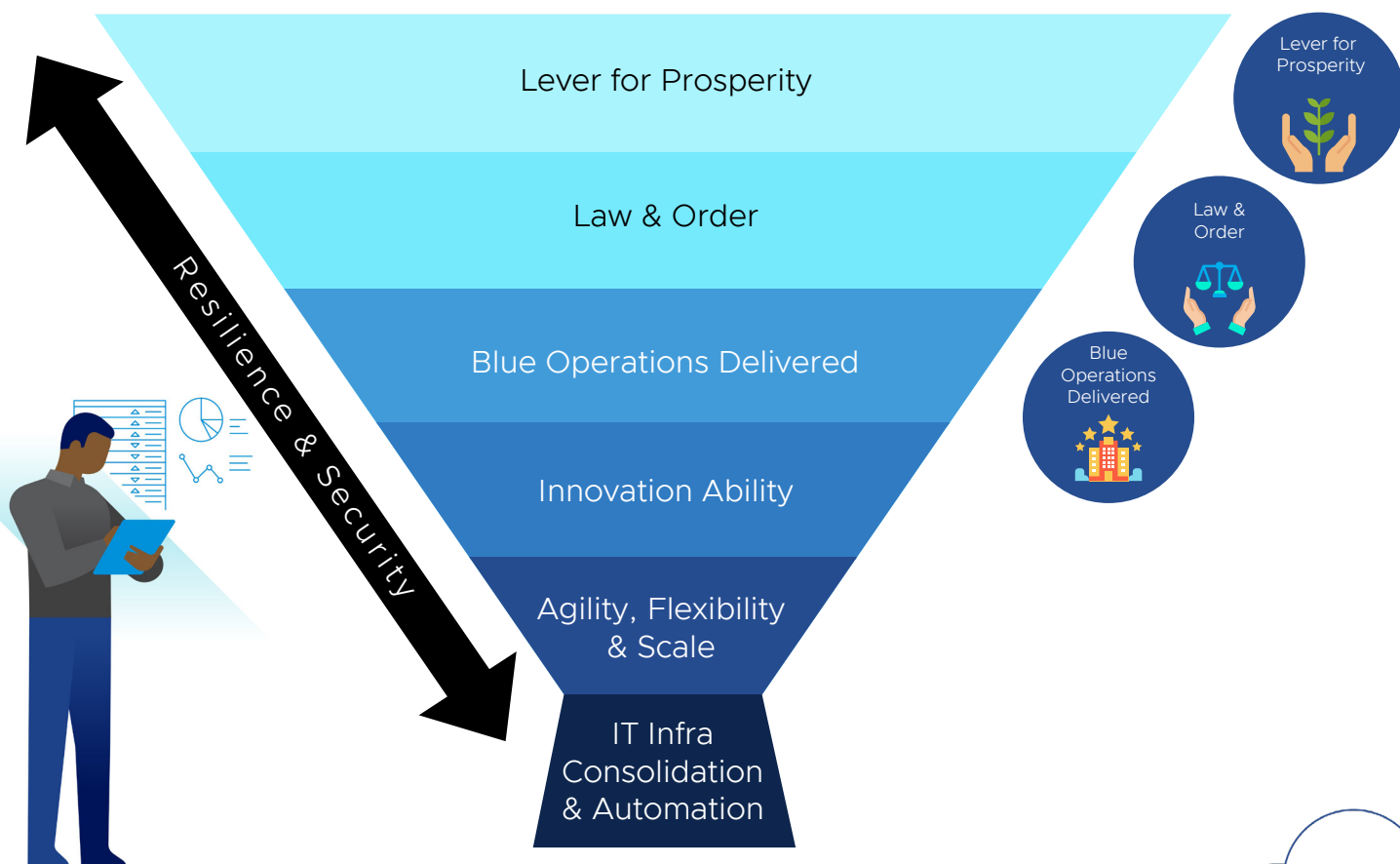
For instance, a generational shift in law enforcement employees can help diversify frontline workforces, helping to combat mistrust, particularly in communities that may feel unfairly targeted. It can also bring in younger, more technologically adept officers, aiding the overall transformation of police.


Technology, on the other hand, can help in both the frontline and backend, empowering individual officers to have a greater community impact while helping support budgetary solutions.

Yet to deliver this technology requires skills and new talent – both of which are in short supply globally, and more likely to be attracted to working with innovative private sector businesses than resource-restricted police forces. In the maelstrom of these twin revolutions, police force IT, and the teams that use it, is critical to the delivery of effective law enforcement.

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The Police Digitisation Champion Cup





The future officer mobile, fully connected, proactive and supported

To combat both mistrust and rising crime, police officers on the front line need to become more connected, whether on foot and in their vehicles. They need to be visible and responsive.

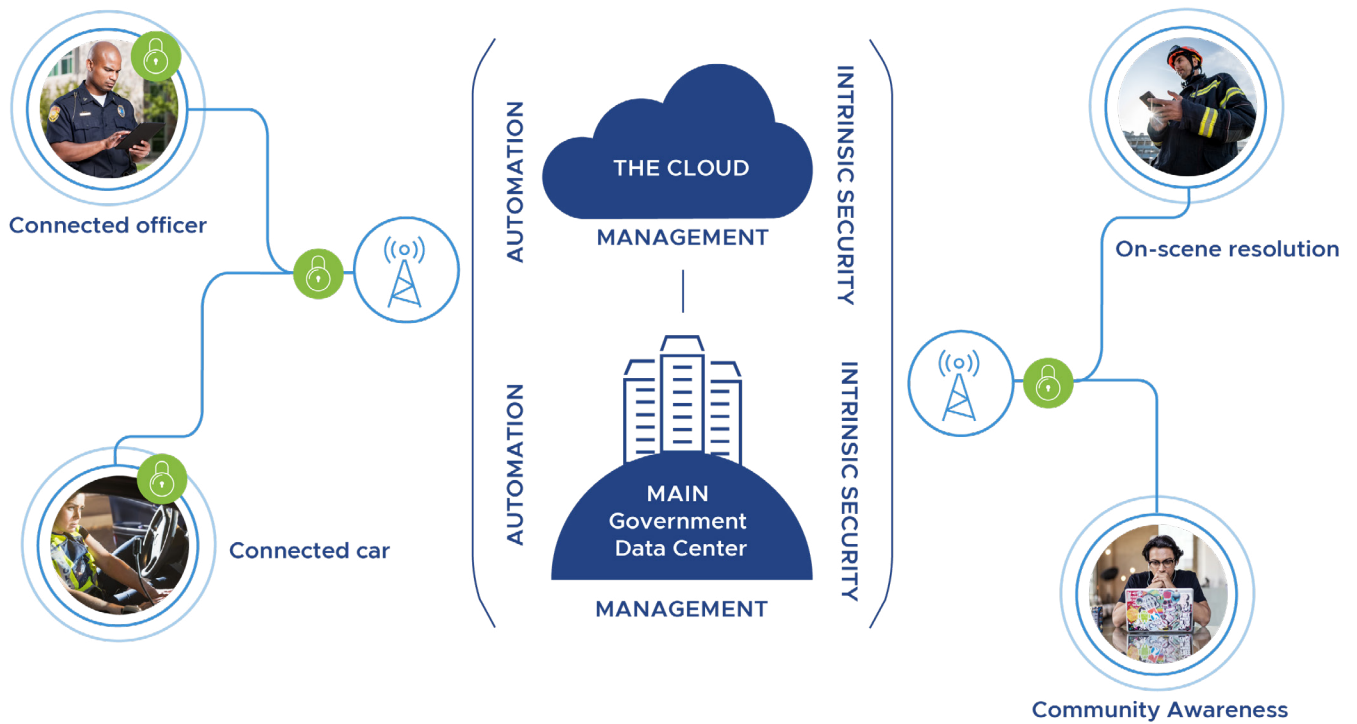
Yet agencies still require due diligence, paperwork and other administration to be completed. Technology will ensure this can happen without dramatically increasing workloads or staffing costs. With mobile devices and secure connections to cloud storage, officers would be able to access information, progress investigations, file necessary paperwork and conduct police work, all while on their shift.

Whether contributing to a broader investigation by providing accurate, real-time updates on suspects and suspicious behaviour, or pursuing their own investigations, having access to databases of intelligence means front-line officers are better equipped to make decisions on the ground.

And, rather than have to write-up notes afterwards, they can upload details on scene, and focus on productive, community relationship-building police work in the field.

Then there is the data that digital evidence is producing. From body cameras and analytics to neuro-linguistic processing and voice and facial recognition, it is all vital, yet coming through at a volume that could overwhelm an under resourced team. To manage this flood of information, and to be able to extract intelligence in real-time, requires digital tools to processes, analyse and present insights, along with a way of securing and storing it all that allows ready access in the future.

This is the digitalisation of current law enforcement efforts, but in many ways it is a bit like using email over letter writing – while faster and digitised, it is merely the modernisation of an age-old process. To go further, police forces and other agencies need to move beyond being reactive to being proactive in stopping crime.



That means introducing predictability – not to the level of science fiction, in which people are arrested before they commit crimes, but being able to use data to identify potential problem spots and acting accordingly. So, it might be having sensors collecting an increase in crowd noise, sentiment analysis to determine how said gathering might develop, and then being able to dispatch additional units to increase presence on the ground. This is not about relying on old information and known conflict or high-crime areas, but about gathering, analysing and making decisions in real-time. It is human policing augmented by artificial intelligence.

Finally, there is the impact of COVID-19. Through enhanced workplace mobility, the right digital solution can provide secure, safe ways for civilian support staff, so critical to the running of law enforcement agencies, to work remotely.

It all needs a digital foundation that provides the secure, agile and accessible storage of data, as well as the digital workspace solution required to deliver the required mobility. That infrastructure can only be delivered by cloud computing, and the right mix of public, private and edge clouds – a truly hybrid cloud.

Many organisations may feel they have this set up already – the organic sprawl of a mix of environments, from on-premises to public cloud that has characterised much of piecemeal digital transformation. Yet what they lack is the connective tissue that allows those different environments to be operated as one – no specialist skills or teams dedicated to a single environment, no complicated refactoring of applications to move them from one location to another. A seamless experience that allows IT teams to deploy applications and services where they are best supported, in line with enterprise requirements. For a sector that will struggle to attract digital talent, being able to make the most of what they have is critical.

How VMware can help

Hybrid cloud offers law enforcement agencies a way to deploy the infrastructure they need to create the future officer, while managing limited resources and budgets.

That means having a digital foundation that supports the hybrid cloud platform required to accelerate law enforcement needs. Working with VMware, authorities can save time and money, utilising the skills their teams already have, by bringing together consistent operations, management and deployment across on-premises, private and public cloud. Using VMware cloud management tools means migrating workloads between different environments, and reversing the process if needed, is achieved in a consistent manner. This enables reversibility, allowing data and applications to be deployed on the platforms that suit them at that time, then moved when required. For instance, a regional police force managing a major, politically contentious event can increase their computing demands to support the deployment and coordination of additional officers for its duration. For officers in the field, giving them access to the data they need to help them make critical split-second decisions, also gives them

the chance to spend more time on duty supporting their communities. They can even swiftly integrate and coordinate with additional agencies, such as national forces and security services, and just as quickly scale back down once the event has finished. All without harming their ongoing policing efforts, and still working towards that goal of improving trust in policing.

It is the modern infrastructure that police forces need in the digital era.

As part of this cloud foundation, an IDC whitepaper sponsored by VMware, “The Business Value of Hybrid Cloud with VMware”, found that using VMware Cloud on AWS delivered a 26% reduction in infrastructure costs, with migrations that were 69% less expensive than working with native cloud providers. Applications were deployed between a third and two thirds faster, while overall migration was 54% faster.

What’s more, as a day one member of the European Cloud’s GAIA X initiative, VMware is committed to delivering the required flexibility and agility that digital infrastructures need, while respecting data sovereignty.



Have VMware as your hybrid cloud partner supporting your blue operations in the field

Want to see how VMware's hybrid cloud offering might be the key to delivering modern law enforcement? Get in touch today.

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¹ https://www2.deloitte.com/content/dam/Deloitte/xs/Documents/public-sector/DI_Future-of-law-enforcement.pdf

