



Policing 4.0

Deciding the future of
policing in the UK

UK Public Sector | #FutureofPolicing

Contents

Foreword	01
Executive summary	02
The policing context	05
Future trends	08
Police preparedness	15
Deciding the future	23
Conclusions	41
Contacts	43

Foreword

In recent years Deloitte has helped many police forces in the UK and beyond to respond to the challenges they face, both operational and organisational. The passion our teams have for the mission of policing, and the admiration we have for the people who deliver it, are considerable.

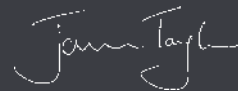
What we have not done in that time, however, is draw together the insights we have gathered from this work and look forward to the challenges that policing might face in the future. This report seeks to do just that, and to assist police leaders and policymakers by offering thoughts on some of the strategic choices they face, and the frameworks they might use for making them.

We draw on our experiences working with policing clients, as well as primary research and interviews with policing leaders, policymakers and academics, and wider lessons from the private sector.

The research and interviews that informed the work were largely conducted in the UK. However, many of the trends affecting the future of policing are global and policing organisations face similar choices internationally.

The enthusiasm of policing leaders from around the world for the output of this work demonstrates the high regard in which UK policing is still held, and the wider interest that exists in the choices that UK policing makes. This report also starts to draw attention to some of those policing organisations elsewhere that have already made some of these strategic choices, and can therefore perhaps offer lessons to their UK counterparts.

I hope you enjoy this report and that it makes a valuable contribution to the debate about the future of policing.



James Taylor

Justice & Home Affairs Lead, EMEA,
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Executive summary

Volunteers guide a drone across the sky as they look for a missing person. A police officer completes their augmented reality crime-scene training. A nuisance caller is immediately spotted when they call 999 as the police customer relationship management system kicks in and averts an unnecessary deployment. Police body worn video footage secures another successful prosecution. A team deploys Artificial Intelligence (AI) to scour the internet and find any image of drugs with a phone number attached.

This is not the future. It is policing today. The British tradition of policing by consent endures, the country's counter-terrorism capability remains the envy of the world, but forces up and down the country are changing. Use of technology is developing rapidly but this is not the only change. Twenty percent real terms spending reductions and profound shifts in society and patterns of crime have also contributed to changes in police structures, recruitment approaches, ways of engaging the public, investigative methods and approaches to preventing crime and supporting victims and the vulnerable.

Progress has been considerable but sporadic. In our research, we have found pockets of excellence in the UK and internationally for almost every policing activity but we also found some forces struggling to cope with deep spending reductions, increased demand and a faster, more complex, and more scrutinised policing environment. In pockets of the country, 999 calls are being left unanswered, detection rates are falling, investigations are collapsing, and the preventative work of neighbourhood policing teams has been dramatically reduced.

Policing leaders are working tirelessly and with skill to address problems, but are worried. We surveyed leaders of a quarter of UK police forces and national bodies and not a single person felt policing was ready for the future challenges created by technology-enabled crime.

Leaders were also deeply concerned about policing's capacity to harness technology effectively, though many have developed impressive new capabilities, for example, in mobile working. There were some doubts about how well policing was set up to deliver a co-ordinated local, regional and national response in the context of crime problems that do not fit neatly within geographic or organisational boundaries. And many felt that motivating a changing police workforce and harnessing specialist skills needed to deal with issues such as fraud and vulnerable victims were significant, though lesser, challenges.

Worries are heightened by awareness of the powerful trends and forces that will influence crime and policing over the coming decades, which we set out in this report. We believe that the future presents more opportunities for policing than threats. But the police must prepare for six new policing realities:

1. Serving a fully digital world, where every crime has a digital footprint, every police function harnesses digital technology, and data is one of policing's most valuable assets.

2. Outgunned by private sector and civil society, with private investments in crime prevention and investigation vastly outweighing those of a state struggling to fund growing health, care and pensions expenditure.

3. Responding to a much faster pace of change in every arena, with constant business innovation creating new criminal opportunities and potential policing tools and social connectivity creating a rapid spread of news and ideas.

4. Harnessing cyber-physical systems, as a result of exponential growth of sensing technologies and connected ('internet of things') devices.

5. Using an unknowable volume of knowledge about 'what works' in reducing crime and managing police services.

6. Operating with near-total transparency, due to increasingly omni-present surveillance of the public and the police.

To do this, we believe that politicians and policing leaders – nationally and locally – have some big choices to make about their role, priorities, and policing philosophy. And they must decide which new capabilities they will need to invest in to cope with policing's new realities. Policing cannot continue to try to do all of the same things and more, in the same ways, with less money. This report therefore provides a new framework for making the big choices facing policing and a set of ideas and case studies of success to support decision making (Figure 1). We share our vision for Policing 4.0, a future in which policing harnesses clear thinking, data, person-centred design and cyber-physical systems to improve public safety and create public value (Figure 2).

Figure 1. The key choices facing policing: A framework for decision making

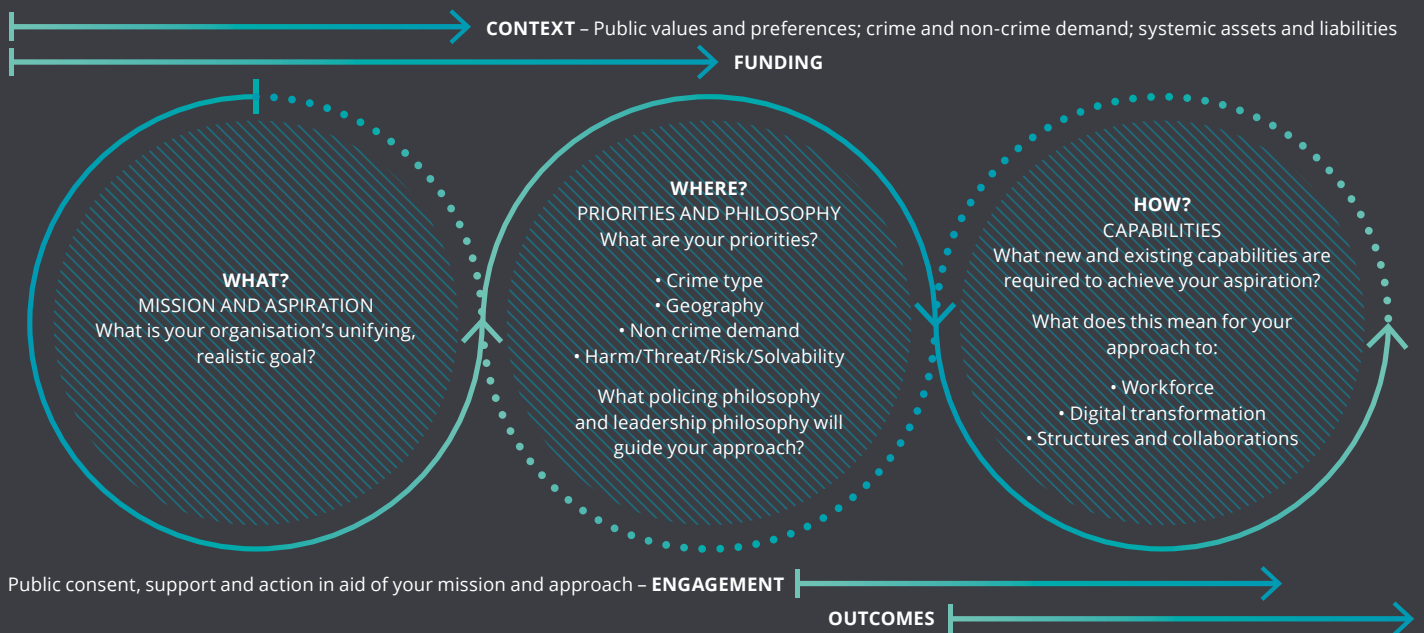
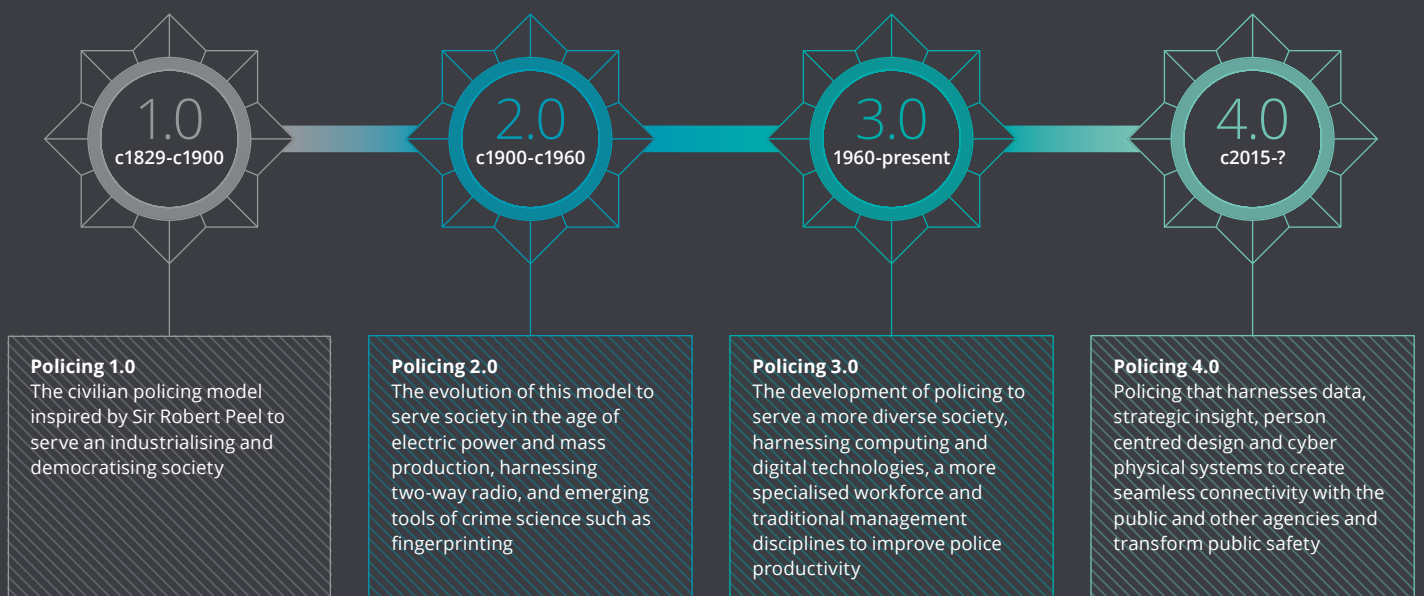


Figure 2. Policing 4.0. The next evolution in policing



Leaders are currently considering the right choices for citizens, with an immediate focus on the 2019 Spending Review. And to support them we also set out our views on ways that government, Police and Crime Commissioners (PCCs) and police leaders can work together to ensure policing is equipped for the future, suggesting they:

1. Involve the public in difficult prioritisation choices and trade-offs to maintain legitimacy, including through deliberative processes such as citizens' juries.

2. Have more rigorous, data-driven conversations about which demands can be serviced and what preventative capabilities are maintained, at different resourcing levels.

3. Protect 'hard-edged' crime prevention capabilities in order to avoid a vicious cycle of simply responding to increasing demand, by:

- Managing demand in the short term (through enabling self-service, setting up resolution centres and other ways of dealing with low level crime more efficiently).
- Redefining 'visibility' to include online and telephone interactions, providing a better but cheaper universal policing offer.
- Engaging public sector partners and businesses in dialogue to determine who is best placed to manage problems (and reallocate responsibilities if needed).

4. Ensure organisations are pulling in the same direction, by taking time to build alignment around much clearer, more meaningful organisational aspirations and by clarifying core policing and leadership philosophies.

5. Articulate the capabilities needed to address current and future demands, and assess (and measure) current capability gaps – focusing not just on officer numbers, but the mix of people, processes and technology that will deliver the best outcomes for the public.

6. Invest in data as a critical organisational asset, one which can empower the workforce, enable the development of productivity-enhancing artificial intelligence tools and support rapid identification and assessment of threats, risk, harm and 'next best decisions'.

7. Build understanding of those policing services (and investigated) by developing 'Citizen Relationship Management' systems – informed by open source data and wrapped into processes that enable personalised services and tailored approaches to harnessing community and business crime prevention capabilities.

8. Develop digital transformation capability, embracing user-led design and developing tools to harness workforce creativity and skills, and support wellbeing (Workforce Relationship Management).

How well policing makes tough choices today will decide the future of policing. Deloitte is supporting leaders making these choices across the UK and internationally, not just through client work and this report but by initiating a series of events, discussions and short publications on the issues raised in this report over the course of 2018 and 2019. We see the future of policing as being one in which traditional police values and expertise are augmented, supported by a new clarity of purpose, new uses of data and technology and new approaches to developing and supporting officers and staff. The challenge now is to make that future a reality.

The policing context

UK policing today is under the microscope. A spike in serious violence and falling detection rates in some parts of the country have brought political focus onto the resilience of a model of policing that has long been the envy of the world. Police leaders and politicians are asking straightforward questions about whether there are enough police focused on the most harmful crimes – but also more probing ones about whether policing has yet fully adapted to profound and continuing shifts in patterns of crime, society, policy and technology.

A stretched service

Our research shows that policing is certainly in flux. The police are grappling with **a spread of demand in every direction**. As public and police attitudes have changed, the police have shifted from dealing with crimes in the public sphere to tackling private sphere crimes, seeking out and prosecuting domestic violence and sexual offences that were too often ignored previously. As crime has shifted online, the police have – somewhat reluctantly – followed. From dealing almost exclusively with the crimes of today, policing now deals much more regularly with historic crime. And the police increasingly feel that they must take responsibility not just for crime but for protecting the vulnerable, including those suffering mental ill health, missing children, and those affected by accidents. They must also monitor a greater number of individuals who pose risk to the public, with the number of people registered as sex offenders living in the community having risen by eighty-two per cent from 2006/7 to 2016/17 and terrorism watch lists constantly expanding.¹

Figure 3. Our research method

UK focus informed by international comparisons



Twenty three interviews with:

- Chief officers or Police and Crime Commissioners from around a quarter of UK police forces
- Leaders of national policing organisations
- Leading policing academics and researchers



Two focus groups:

- Regional representatives for Police Superintendents Association
- Chief officer team of a large UK police force



UK and international statistics:

- Data benchmarking work in seven key geographies, examining crime, expenditure and workforce trends
- Additional UK data analysis on key trends and issues



UK Police Survey with:

- Fourteen senior representatives covering around a quarter of UK police forces
- Four leaders in national policing organisations
- Two UK policing academics
- A small number of recent police recruits



Literature Review:

- Recent research on UK policing
- HMICFRS annual reports and thematic studies
- Home Office policy documents



Deloitte experience:

- Interviews with Deloitte policing leads from seven key geographies
- In-depth discussion and workshops with UK policing team
- Review of case experience and client testimonials

This spread of responsibility, partially off-set by a long-term and possibly now faltering decline in some 'traditional' crimes, is exacerbated by **dramatically increased complexity**. Some crimes (for example, car theft) are arguably easier to investigate or prevent today due to improved surveillance, forensics and security tools. However, crimes in the private sphere are taking the police into unsurveilled spaces and deeply complex relational issues and very largescale investigations. Chief officers we spoke to often mentioned cases of systematic abuse as absorbing vast investigative resources – for example, a case involving two victims but 70 suspects, 60 witnesses, 200 crimes and requiring months of work for a large team.

Cyber-dependent and cyber-enabled crimes do not respect traditional geographic boundaries and require new technical skills. Our digital footprints are now vast, which provides greater opportunities to solve crime but imposes a huge investigative burden and challenges for current legal processes. Criminal techniques also continue to evolve, in particular through the use of new digital tools. Business and social innovation without considering the crime consequences creates new opportunities for crime and allows the development of new methods for perpetrating crime. As one chief constable summarised, "we are still grappling with the explosion of the digital world".²

Communities are in some ways becoming more complex for policing to serve and represent too.

Complexity is partly the price of progress in policing practice. The rapid development of knowledge bases, equipment, technology and managerial tools mean that no individual today could claim to perform all policing tasks to adequate standards. And the job of police managers at all levels is growing more complicated – requiring the bringing together of skills ranging from operating specialist equipment (flying helicopters or drones), to dealing with child victims, investigating complex financial fraud, and using data analytic tools and randomised control trials to test new crime prevention methods.

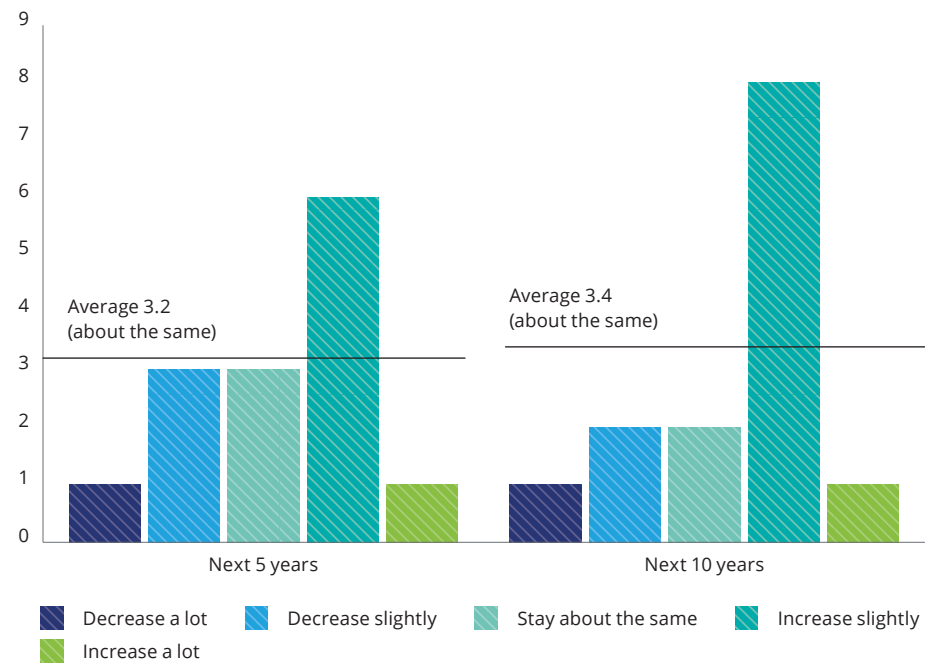
Alongside complexity comes a **new level of speed**. We now live in a world where a well-produced video calling for retaliation after a stabbing can be put online within two hours of an incident.³ The 2011 riots originated in Tottenham, but spread rapidly partly aided by use of Blackberry messaging functions by rioters. Social media, however, also helped a faster mobilisation of community support in clean-up efforts and was dominated by anti-riot messaging, with the most retweeted message during the riots being from comedian Simon Pegg: "Visit riotcleanup.co.uk for info on how and where to help if you can #riotcleanup".⁴

The police now also deal with **increased scrutiny**. Society rightly expects growing levels of accessibility, transparency and accountability from the police, partly due to historic scandals and awareness of the ever-present potential for corruption. But attempts to meet these expectations have also created new pressures, adding both procedural burdens and psychological strain and too often lead to blame and risk aversion, rather than deep organisational learning.⁵ Technology, used by the police and the public, has provided tools for radical transparency but these have created challenges around privacy, policy and procedure.

Since 2009, a new pressure has arrived: **austerity**. After steady increases in investment in the 2000s, police budgets have fallen by around twenty per cent in real terms since 2010 in England and Wales, with somewhat similar falls in Northern Ireland and smaller but significant real term reductions in Scotland.⁶ Police workforce numbers are now back at the levels seen at the turn of the century when the country had ten per cent fewer people and it is hard to disagree with our survey respondents, who on average thought police funding would probably not improve significantly over the next five to ten years. Other organisations supporting the police mission are similarly affected by spending reductions, with chief constables interviewed for our research mentioning reduced capacity in probation services in particular.

Recent policy changes are also still playing out, most notably **the arrival of Police and Crime Commissioners (PCCs)** in 2011, elected representatives whose main jobs are to set policing budgets and strategy at force level, hire and fire chief constables and account to the public for police performance. The power of PCCs was, in effect, recently enhanced through temporarily increased tax-raising powers. In 2017, PCCs were permitted to raise the ‘police precept’ element of local taxation by up to £1 per household per month in 2018 and thereafter, a shift that has seen lively local debates.

Figure 4. Police leaders expect a broadly stable funding position
Q. What do you think will happen to policing funding over the next 5 and 10 years?



Source: Deloitte survey of 14 chief officers from national policing organisations and police forces, conducted summer 2018

Future trends



Future trends

Facing new, but familiar, challenges

The pressures the police currently find themselves under show no signs of abating. A number of the big issues affecting policing today – for example, strained public finances and managing Brexit – will remain central for the coming decade, limiting the available funds and time for policing issues. And new issues will develop and emerge.

Our horizon scanning work draws on a range of publications including Deloitte's Gov2020 toolkit,⁷ Tech Trends 2018⁸ and the Future of Work.⁹ We combine this with insights from publications such as Daniel Franklin's Megatech¹⁰ to create a new framework for understanding the future. We conclude that many trends long underway will continue to reshape patterns of crime significantly and create new possibilities for policing responses to both crime and disorder.

Alongside continued trends, we should expect issues that affect policing in a cyclical fashion to recur. Recession, 'moral panics', controversy and largescale public disorder – will all feature at some point in the coming decades. The UK has experienced a recession on average once every 12 years in the post-war era,¹¹ a riot every 5 to 10 years, and a police legitimacy controversy (with or without police wrongdoing) at least every decade.¹²

We conclude that many trends long underway will continue to reshape patterns of crime significantly and create new possibilities for policing responses to both crime and disorder.

10 global mega-trends and their possible policing impacts

1 A growing and ageing society:

All things being equal, more people means more demand. In addition, those aged over 35 are much more likely to overestimate their likelihood of becoming a victim and to have elevated fear of crime. Young people are more likely to both become victims of crime and be perpetrators but most criminologists agree that demographic shifts have been a small rather than significant driver of shifts in crime rates and (contrary to population debate) there are some signs that current youth cohorts have a lower propensity to crime than previous generations.

2 A globalising economy:

Quicker, cheaper movement of goods and people create opportunities for illegal economies as well as legal ones. However, moving illegal goods and services will always have additional costs – and it is not clear that these costs are reducing as they are driven by policy and public sector investment. Instead, we should expect micro-fluctuations in specific markets as the costs of supply and shifts in demand affect illegal markets – for example, the end of a major conflict creating a glut of firearms and putting downward pressure on UK prices, or the continued rise of synthetic drugs increasing the mobility and unpredictability of drug supply.

3 Ongoing urbanisation: Cities are

‘target rich’ and provide more frequent opportunities for crime due to their relative wealth. The relatively anonymity of cities has also long been thought of as creating an upward pressure on crime. Network benefits that accrue to businesses might also benefit criminal networks. However, there is no consistent relationship between urbanisation and increased crime in developed countries in the post war era – suggesting that network benefits and increased wealth might be as relevant for crime prevention as criminal activity.

Urbanisation will pose a political challenge on how to allocate funding – with increasing challenges for servicing sparser rural populations appropriately, while still serving higher demand urban areas.

4 Technological acceleration and data abundance:

An increasing volume of human activity now takes place on digital channels, and the expansion of tracking and sensing technologies (including natural language processing and image recognition) is exponentially increasing the volume and accessibility of information on human behaviour. As our lives and finances shift online, crime will continue to mirror this, with fraud becoming a predominantly ‘virtual’ crime and all crimes having a significant digital footprint. This will create vast challenges for criminal investigation in terms of data processing – but it is also increasingly hard to ensure any human activity is untraceable. Even major cryptocurrencies, contrary to the common view, are traceable with the right expertise, and virtual transactions are certainly more traceable than cash. Abundant data is creating unparalleled opportunities to understand situations, ‘customers’ and the impact of different actions on the world, but it will also create challenges for information processing until data analytic techniques evolve.

5 New models of work: Policing will be part of broader trends in the labour market but has choices about how far to embrace flexible working/the 'gig economy', the 'four generation workforce' and other shifts.

6 The rise of individualism: There is a broad based sociological literature that argues that individualism will manifest itself in increased crime rates but this does not appear to be borne out by the data. There is an interdependence between individualism and social attitudes to sex, marriage/family, gender and identity which might lead us to expect recent increases in willingness to report sexual and domestic violence victimisation to continue – but this may in turn reduce individual vulnerability to exploitative behaviour.

7 Climate change: Extreme weather events will create additional workload for the police, with flooding becoming a recurrent issue for many parts of the UK. The summer 2018 spike in 999 calls during hot weather and the World Cup are interesting examples of potential impacts, though we should also expect social adaptation.

8 Resource scarcity: Resource stress and scarcity seems likely to have most impact on flows of migration and local and global conflicts relating to scarcity rather than any direct impact on policing.

9 National identities and separatism: Separatist movements exist across the United Kingdom. There is currently less sectarian violence associated with these movements than historically but it is not possible to say how these movements will evolve and how they will influence political and economic arrangements at borders, let alone crime patterns.

10 The rise of the market economy vs the state: Private investment in crime prevention already dwarves public investment. There are around 250,000 active licensed security staff in the UK compared with under 200,000 police personnel (officers and other staff), and private investments in security devices, consultancies and technologies are vast.¹ Many market analysts predict increases in private spending on security to accelerate. Some forms of private and community activism on crime have increased – examples include; Shomrin, My Local Bobby and 'paedophile hunters' – and this trend may continue as citizens are enabled and empowered by new technology tools. Seeing the tendency of the public to seek to investigate their own cases, the Dutch police are already seeking to direct and harness this 'self-service' effort within a police-led framework, rather than trying to stifle it.

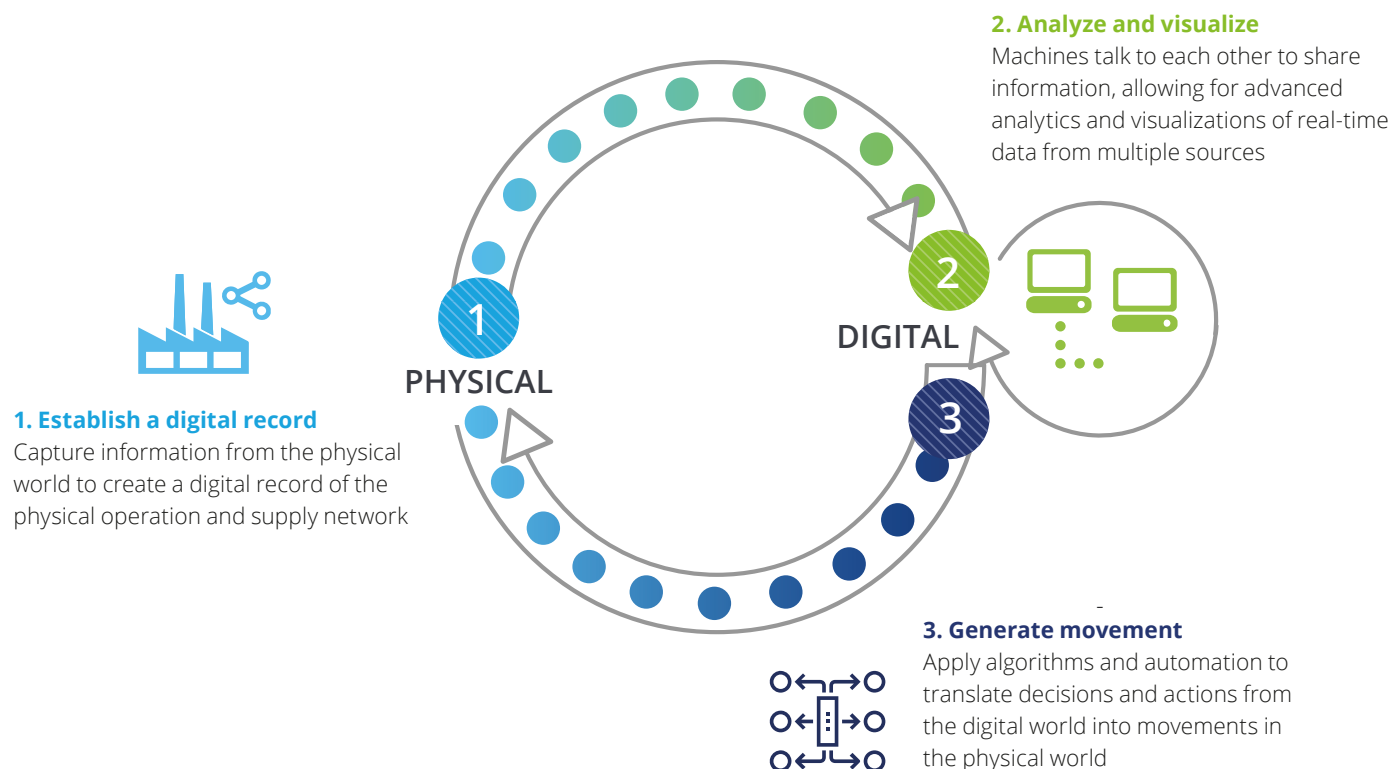
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Technology is probably the biggest driver of future change. We are entering a period that has been described as the Fourth Industrial Revolution, or Industry 4.0, an era in which exponential growth in data, sensing technologies, cyber-physical systems and analytic techniques will blur boundaries between the physical and digital world, and create hyper-connectivity. In cyber-physical systems:

- Real world experience is translated into data through sensing technologies, smart devices, and more traditional tools;
- This data is processed using advanced analytics to estimate the real world action required;
- Estimates of optimal next steps guide action in the physical world, not just by advising human decision-makers but by automatically directing action by internet enabled devices (Figure 5);
- Feedback loops are formed as consequences of automated activity are constantly re-evaluated and actions revised (see Figure 5).¹³

Figure 5. Physical-to-digital-to-physical loop and related technologies



Source: Center for Integrated Research

Such technologies will have a broad impact on our lives in general but new technologies also have both crime prevention and crime promoting potential – and it will be the police, policymakers, and businesses who determine who stays ahead in the crime ‘arm’s race’.¹⁴ To take one example, consider the potential criminal exploitation of Artificial Intelligence for:



Identity Forgery: AI methods can generate speech in a target’s voice given a sample and couple it with synthesized video of them speaking. This might then be used to commit fraud, or incite hate crime.



AI Snooping: Phones, PCs, TVs and Home Hubs provide the sensors for audio snooping inside homes, while drones provide video surveillance opportunities in public spaces. Speech Recognition can sift the resulting data for exploitable fragments (e.g. passwords or bank details, affairs being admitted to).



Driverless Weapons:

The driverless truck is close to the ideal urban attack robot for terrorists. GPS guidance could bring it to target, and Machine Vision could target pedestrians.

These crimes can be partially ‘designed out’, building on what we have learned about how to do this effectively over recent history. Yet the accelerating pace of technological and social change places a new emphasis on the speed of reaction. And the break-down of the boundaries between our physical and virtual world, and public and private spheres creates greater levels of systemic risk (Figure 5).

In terms of technology as a tool for safety, there are boundless opportunities that some police forces and businesses are already starting to exploit. Taking AI as an example, work is already underway to create new tools for encryption and cyber-security, better ways of identifying and measuring risk, and labour-saving information processing. As one chief constable told us “AI is the only way that forces will be able to deal with the volumes of evidence currently produced. The level of disruption will be huge, not just in policing but across legal professions.”¹⁵

Large parts of the future are unpredictable, of course. Even in the near term we have little certainty on some major issues.

A Labour Government might replicate its promise of providing 10,000 more police officers in its next manifesto – and follow through on it if elected, irrespective of government’s fiscal position. A different Conservative Home Secretary (or Prime Minister) might wish to consider the possibility of merging police forces. Questions (currently considered closed) might be reopened. Drugs policy, for example, is under increasing scrutiny after the Home Secretary’s decision to allow the medical use of cannabis in the UK and moves to legalise cannabis and other drugs in an increasing number of countries.

There is also major uncertainty about the likely pace of societal and technological change. Experts all disagree (sometimes wildly) on the likely levels and speeds of uptake for technologies like driverless cars. No one knows exactly when the next period of economic expansion – or the next recession – will arrive, and no one can predict our unknown, unknowns – or ‘black swans’ that could disrupt our best laid plans.

The long link between innovation, crime and adaptation

(Examples from Professor Paul Ekblom and Professor Ron Clarke)^{16, 17}

1. The Penny Black postage stamp was introduced in 1840 and withdrawn in 1841. This is because it was cancelled by red franking ink, which in 1840 was water-soluble, leading people to wash the franking ink off and re-use the stamp. The Penny Black was replaced by the Penny Red, cancelled by black ink, which could not be washed off.
2. The magnetic stripe on credit cards was secure until thieves discovered techniques for ‘skimming’, where data from the stripe on one card is copied without the cardholder’s knowledge and placed on another card (to be combined with the cardholder’s PIN number, obtained e.g. by ‘shoulder-surfing’ in the cash machine queue).
3. In the mid-1990s, mobile phone ‘cloning’ and ‘tumbling’ frauds were costing the US phone industry nearly \$1billion per year, until radio frequency fingerprinting and digital authentication technologies were introduced, virtually eliminating the problem by 1999.

Despite uncertainties, looking at current challenges for policing and future trends, we believe that there are **six new realities that the police must face head on.**

New policing realities

Despite uncertainties, looking at current challenges for policing and future trends, we believe that there are **six new realities that the police must face head on.** In the coming decades, policing will be:

1. Serving a fully digital world. Every crime now has a digital footprint; every police function harnesses digital technology, and data is one of policing's most powerful assets.

2. Outgunned by private sector and civil society. Private investments in crime prevention and investigation will vastly outweigh public investments by the state, and private crime fighting capabilities often exceed those in police services. Long-term trends in public finance, particularly the growing pressures of health and care expenditures, will ultimately constrain policing resources for a sustained period, even if there are short periods of relief.

3. Responding to a much faster pace of change in every arena. Constant business innovation creates new criminal opportunities but also new policing tools, while immediate social connectivity creates rapid spread of news and ideas on both sides of the crime arm's race.

4. Harnessing cyber-physical systems, with exponential growth of sensing technologies and connected ('internet of things') devices blurring boundaries between the physical and virtual world.

5. Using an unknowable volume of information and knowledge. Digitisation, data analytics and ongoing research and learning generate levels of knowledge that are so significant they cannot be entirely known by one individual, requiring decentralised decision-making and new sense-making and knowledge management capabilities.

6. Operating with near-total transparency.

Increasingly omni-present surveillance of the public and the police means that we should now assume all police actions in the public realm and many in private and virtual spheres are capable of immediate and future scrutiny. There will, however, remain pockets of policing (CT, undercover, cyber) where technology may assist in maintaining secrecy – requiring more sophisticated forms of scrutiny.

These new realities have profound implications for the capabilities required for policing in future – the skills, processes, structures, models of innovation and workforce motivation required to deliver on the police mission. We use the term Policing 4.0 to describe policing that has adapted to these realities, not simply embracing and reacting to the new technologies of the fourth industrial revolution but responding to the broader social and economic changes they interact with.

Police preparedness



Police preparedness

A service capable of changing

Police forces in the UK and overseas are already demonstrating their ability to respond to policing's shifting circumstances. Levels and types of change have varied across the UK and our research shows that funding pressure and a new, more local accountability model has been a **significant increase in the diversity of approaches in UK policing**.

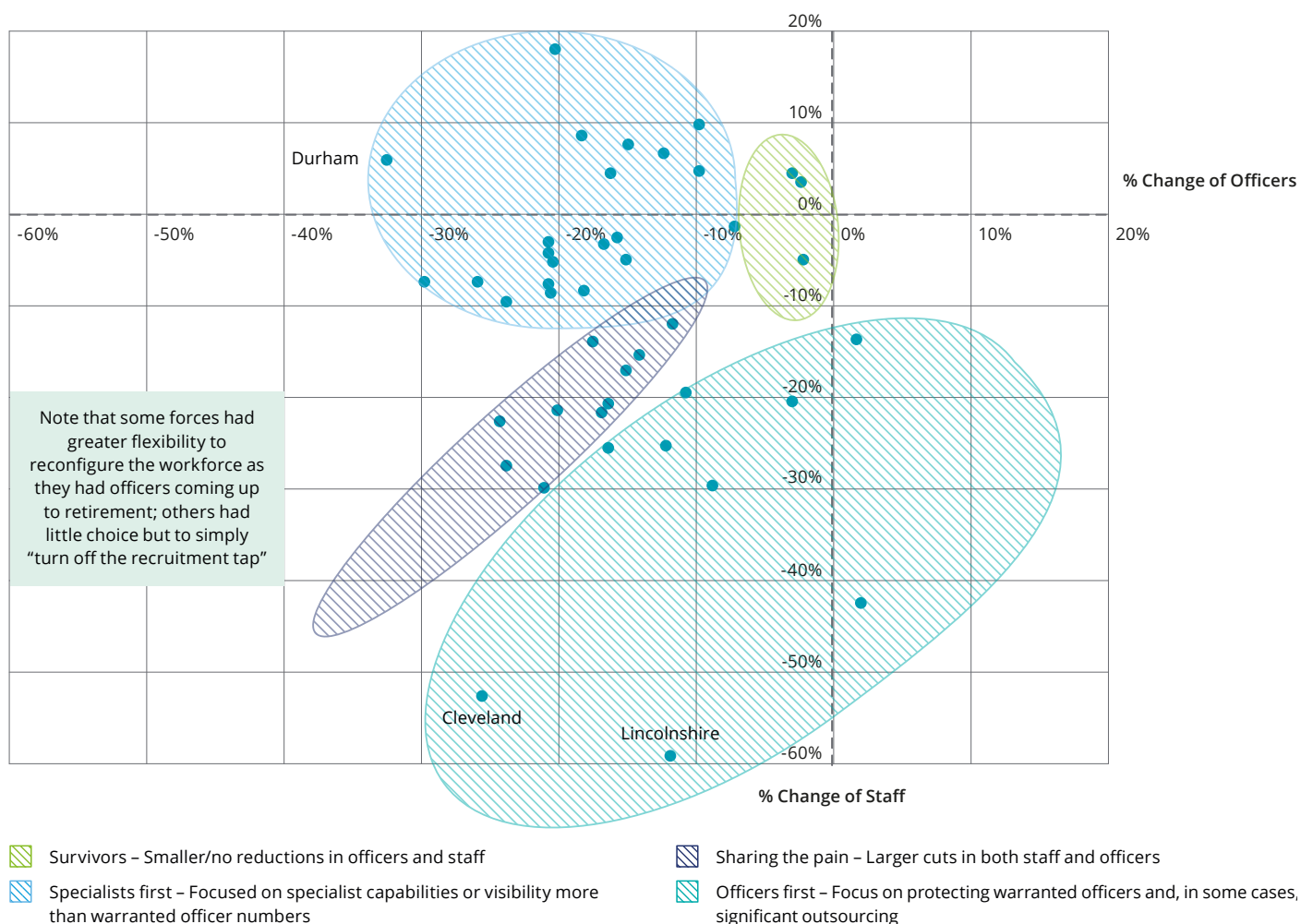
Divergence can be seen as a signal of success in implementing the vision for local policing set out in the 2010 manifesto and is found in a wide range of areas.

Different forces have not only been differentially affected by reduced central government grants, they have taken different approaches to mitigating their effects.

One PCC told us, "we have chosen to raise as much as we can from local taxation recently, partly because historically we hadn't been increasing the precept – but also because we've been one of the hardest hit by cuts".¹⁸ Another chief constable flagged ongoing debates with their police and crime commissioner over how much to increase local taxation to mitigate the effect of central government cuts.¹⁹

Forces have responded to reduced budgets in different ways too. With around 80 percent of police expenditure going on staff costs, almost all forces have had to reduce headcount. But some, for example the Metropolitan Police Force, have chosen to protect the number of warranted officers, while others, such as Durham, have not (see Figure 6).

Figure 6. Workforce shifts, England and Wales police forces (2007-2017)



Notes: Figures are provided on a headcount basis. "Police Staff" includes Designated officers, Other Staff and Traffic Wardens.
Source: Open data tables Police workforce – age, 2007-2017

Differences in approach have been influenced by the different starting points for spending reductions across forces. Police officers are officers of the crown so cannot be made redundant. This meant that those forces which had a larger number of officers coming up to retirement, such as Staffordshire Police, had more choice about how to remodel their workforce for a period of lower expenditure. However, it is also clear that the preferences of PCCs and chief constables have been a major factor.

Forces have also taken different approaches to developing their **operating models**.

In terms of **internal structures**, many forces, including the Metropolitan Police Service, have taken the view that as headcount fell it would be better to reorganise forces so that teams covered bigger geographic areas.²⁰ The Met merged several borough command units. Smaller forces such as Nottinghamshire have organised their entire force primarily along functional (rather than geographic) lines. In this model, chief officers' direct reports cover key policing functions (response, investigation, neighbourhoods and various support functions), rather than geographies. Such changes, sometimes supported by better mobile working, have allowed cost savings by enabling the closure of certain police stations. But changes have also been seen to support more straightforward mobilisation in response to largescale incidents and improved ability to manage peaks and troughs in local workloads.

There have been myriad efforts to develop **cross-force collaborations**, and to build **collaborations with other government agencies**. Some collaborations, for example the one between five forces in the East Midlands, pre-date budget reductions. Others have been initiated since 2009 in a direct attempt to save money while maintaining performance.

The range of collaborative arrangements is considerable and has created a complex patchwork of partnerships across the country. In 2018, the government approved the take-over of local fire service accountability by PCCs for several forces (where local opposition from incumbent local authority oversight was deemed surmountable) but most PCCs will not take on this role, including in areas where police forces and fire services already share headquarters buildings.²¹ Northamptonshire has focused on improving collaboration and co-ordination across fire, ambulance and police by sharing premises and training; while other forces have paid more attention to building links with local health services. Some forces share IT services with one neighbouring force, others with several.

Regional structures for dealing with issues such as organised crime have been developing, with most of the 10 Regional Organised Crime Units (ROCs) now having taken on 13 specialist capabilities that the National Police Chiefs' Council recommended they manage.²² The National Police Air Service set up in 2012 has 15 bases and is a national collaboration organised along different regional lines, with six PCCs and chief constables representing six different regions.

National programmes have been established to improve police use of technology and 'specialist capabilities', policing functions which forces need but cannot easily afford to have in force.²³ Most of these are funded predominantly through the £100 million per year Home Office Police Transformation Fund with a 'lead force' taking responsibility for each programme and a Police Reform and Transformation Board, set up in 2016, providing 'strategic oversight' and overseeing 'the structure, delivery and funding of the [national] police reform work'.²⁴

In terms of **prioritising demand**, the past five years has seen a number of police forces changing how they respond to public calls for service (999 and 101 calls) and how they prioritise investigative effort. Northumbria, for example, has implemented a model that triages cases based on an increasingly rigorous approach to assessing threat, risk, harm, victim vulnerability and solvability. Dialogue with those reporting less serious crimes allows operators to determine whether they want an immediate physical police response crimes such as driving off without paying for petrol – or whether they are happy to have the case dealt remotely. In this case, that might mean a business sending in CCTV footage and police following up on car number plates to secure case resolution. Hampshire's Resolution Centre employs similar methods and an independent evaluation of its impact on low level domestic violence concluded that "Providing a professionally-delivered response over the telephone to a carefully triaged subset of grade-3 domestic abuse incidents, which is subject to a high degree of supervisor monitoring and review... results in performance outcomes that exceed the standard provision of 'slow time' deployment."²⁵

Other forms of prioritisation have developed too. Leicestershire at one point tested the benefits of full forensic investigation at burglary locations by responding physically to those calls made from odd-numbered houses.²⁶ Forces like Durham try to respond to a very high proportion of calls with a physical response, believing each contact can be used to support broader police impact, for example identifying vulnerability, crime prevention opportunities or linked crimes. Still other forces have accidentally prioritised by failing to anticipate shifting patterns of demand and becoming overloaded – as when calls for service were left unanswered in some forces over the summer.

There have been significant shifts in **core policing approaches** in recent years. Neighbourhood policing has recently been subject to a thorough study by the Police Foundation.²⁷ This work revealed that neighbourhood officers who were not part of dedicated, ring-fenced teams were often being pulled into response work, leading to “a marked decline in traditional neighbourhood outputs and outcomes including: community engagement, visibility, intelligence gathering, local knowledge and preventative problem solving.” It also showed that even where a significant neighbourhood team remained less affected by ‘extractions’ for response work, different philosophies of neighbourhood policing were emerging. Some teams were directly focused on community problem solving and crime prevention, others focused predominantly on ‘vulnerability’ (dealing with individuals at risk and those posing a risk to others), and yet others focused on visibility or reassurance.

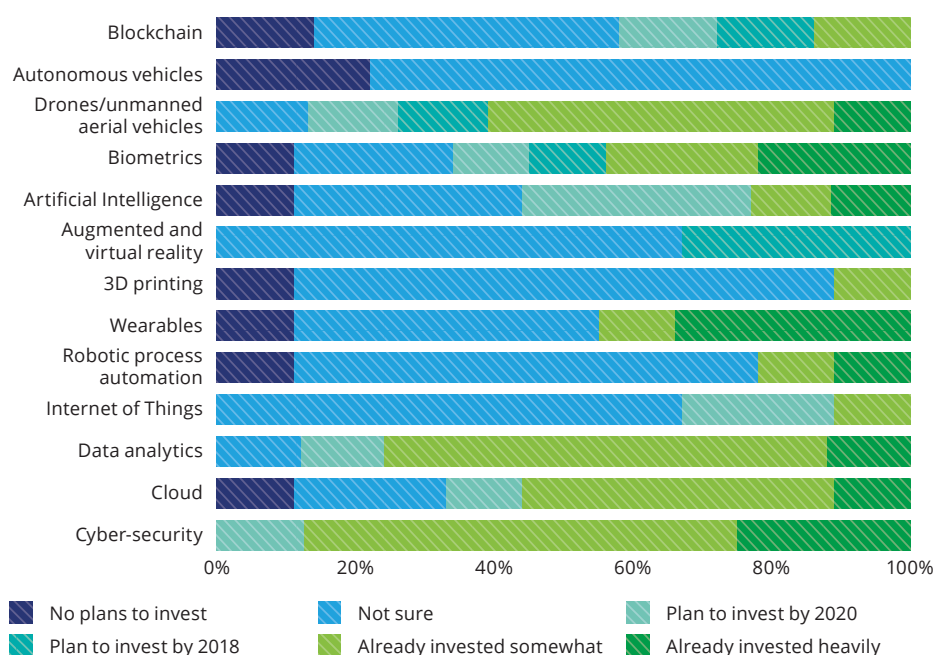
We found examples of similar variation in relation to response roles. Some forces have focused on ensuring response officers are well equipped to carry out early stage investigations, while others see response as a surgical intervention and ensure response officers hand over cases to specialist investigative functions as quickly as possible. Within investigative functions, levels of specialisation varied, driven partly – but not entirely – by differences in demand profiles and force size.

There have been major differences in levels of **technology adoption** across forces too. A majority of forces we surveyed were already investing in drones, cyber-security, cloud computing, data analytics and biometrics. But there were policing organisations using less popular technologies too, with one force using augmented and virtual reality in scenes of crime training, for example, and several forces trialling artificial intelligence.

There were several forces who had not invested significantly in new technologies – usually smaller and medium size forces. And forces varied in the maturity of their core ICT operation, and in which providers and software they used. It was very striking, for example, that one senior leader spent a significant amount of time bemoaning historic underinvestment in technology that had left officers having to enter crime reports on multiple systems, while another shared a detailed account of the technologies that allowed officers to be fully mobile in their work, rather than constantly returning to stations.²⁸ There were different levels of maturity in cyber operations too, a concern given recent exposures relating to vulnerabilities across the public and private sector.

Figure 7. Police organisations are experimenting widely with new technologies

Q. Which technologies are relevant to you, and which have you/will you invest in?



Source: Deloitte survey, responses from chief officer representatives from 9 UK police forces (excludes respondents from national bodies and those not speaking for their force/unable to complete technology questions)

A majority of forces we surveyed were already investing in drones, cyber-security, cloud computing, data analytics and biometrics.

There were impressive examples of **local innovation** in all areas. PCCs and chief constables are:

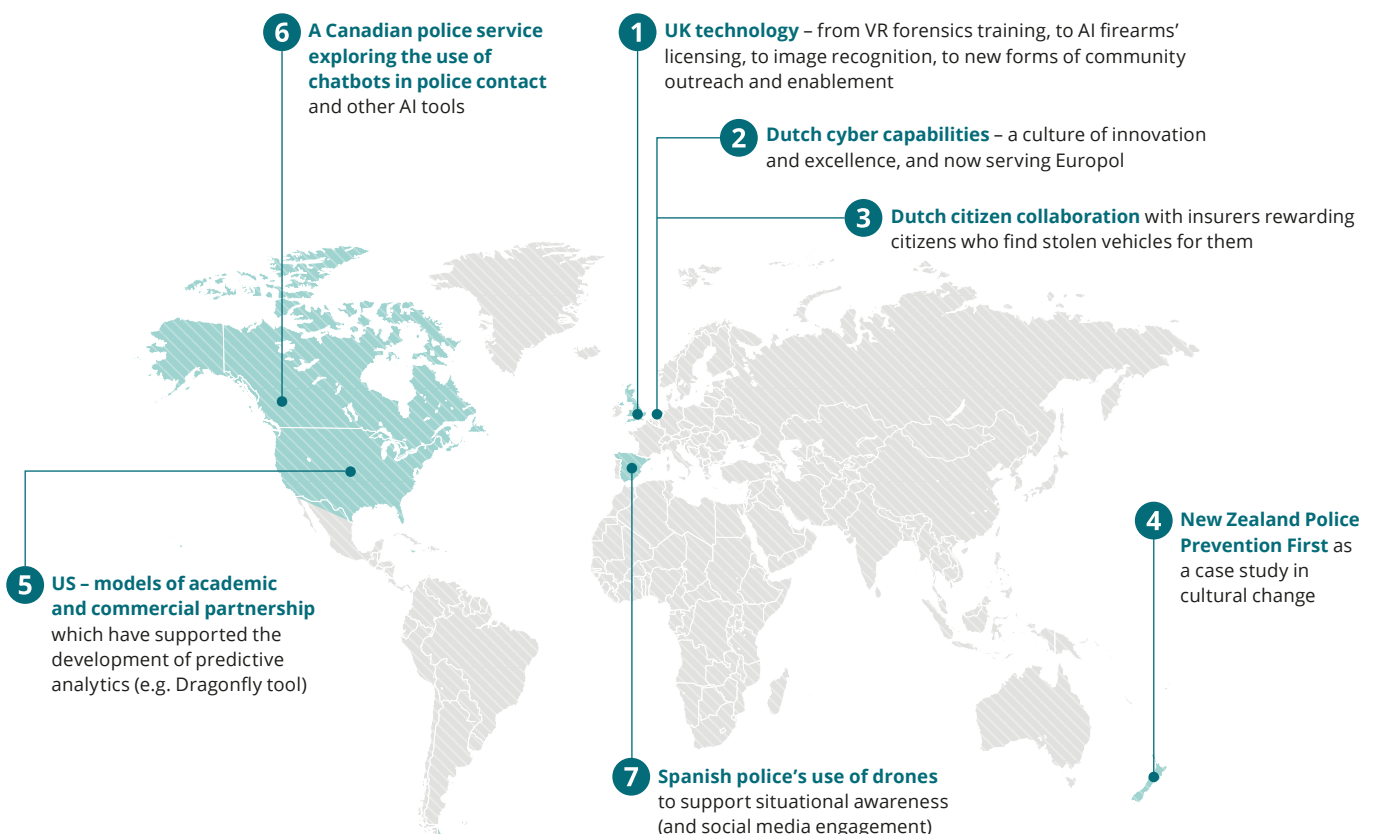
- Reducing demand by engaging with repeat/nuisance 999/101 callers (Police Now recruit initiative).
- Ensuring more effective responses to demand by developing closer relationships with mental health services (Wiltshire's embedding of mental health practitioners in control rooms, for example).
- Taking on difficult issues such as the approach to managing drug addiction (Durham and West Midlands moves towards heroin-assisted treatment and injection centres).
- Finding new ways of bringing in new skills in areas where policing has struggled to attract top talent (NCA specials and local cyber volunteers schemes, for example).
- Developing new approaches to diverting lower risk offenders away from custody and ensuring rehabilitation (Durham's Checkpoint programme or the Metropolitan Police Service or West Midlands' DIVERT and CARA, conditional cautioning and relationship abuse, schemes).
- Implementing new ways of engaging with the community online (for example, the use of OWL,²⁹ a digital platform for police and local authorities to maximise the impact of Neighbourhood Watch originating in Hertfordshire and now serving nine other forces).

None of these significant changes to policing have been made without effort and difficulty. They all demonstrate that the image of UK policing as unchanging and unchangeable – David Cameron's 'last great unreformed public service'³⁰ – is more misleading than ever. But the key theme of variation and divergence is stark. As Gavin Thomas, Chair of the Police Superintendents' Association of England and Wales has put it: "we don't have a British model of policing, we have 43 different models of British policing".

Internationally, there is even greater diversity. In every country, we found interesting examples of innovation that can be learned from – though limited evaluation of the impact of new approaches makes it difficult to determine which changes have most improved policing performance.

Figure 8. Case studies

Vast amount of experimentation, but tracking the impact of new initiatives is difficult as few are properly evaluated



Considerable success in coping with cuts

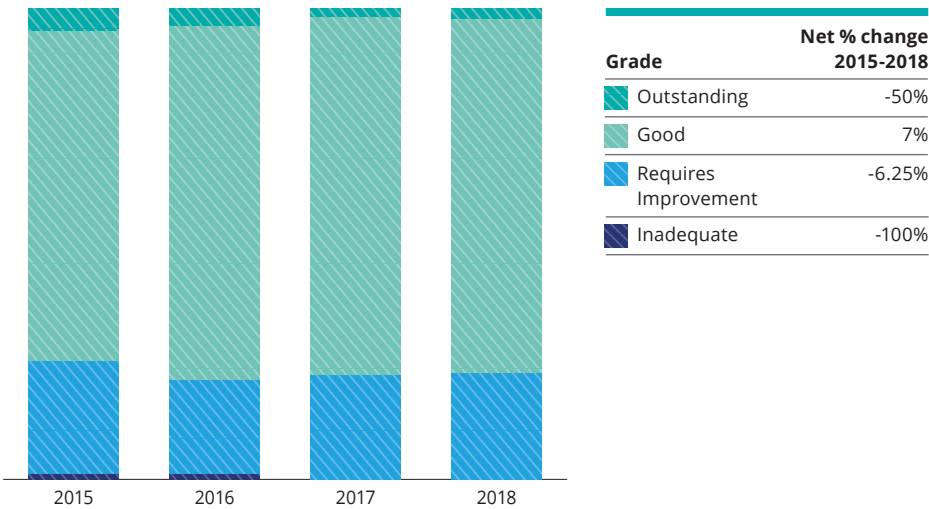
Aspects of police performance have stood up reasonably well to the bewildering array of policing challenges. Measuring police performance is not an easy task. Crime trends are influenced by many factors in addition to policing practice and measures of crime are highly imperfect.³¹ However, since 2014, Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) has rated police force's 'efficiency', 'effectiveness' and 'legitimacy', providing overall scores (inadequate, requires improvement, adequate, good, outstanding) to accompany detailed qualitative assessment by inspectors. This data shows a relatively stable performance picture. Indeed, last year HMICFRS judged that considerably more forces had improved their 'effectiveness' (nine) than had declined in 'effectiveness' (five).

Public trust and confidence in policing also remains relatively high and has increased by some measures. In 2011, 63 per cent generally trusted the police to tell the truth, compared to 74 per cent in 2017.³² There was a surge of public support for police following the bravery and professionalism of officers in the wake of 2017 major terrorist incidents.³³

Several interviewees said that financial pressure had been an incentive to improve performance. As one deputy chief constable put it, "We became more efficient and effective [in response to budget reductions]. It sharpened thinking and increased creativity."³⁴ But both HMICFRS and our interviewees have noted that forces have not all responded to equal effect. As one Labour PCC put it, "we have had a series of attritional cuts, and some are looking at it responsively and some are asking bigger questions".³⁵

Figure 9. Performance appears to have held up reasonably
No clear decline in overall inspection ratings

HMIC Peel Inspection 'Overall' ratings for police forces in England and Wales (% forces awarded each grade)



Source: Peel Inspection ratings <https://www.justiceinspectors.gov.uk/hmicfrs/peel-assessments/peel-2017/>

Or as HMICFRS has argued "In the face of significant pressure, marginal improvements are not enough. I am concerned that many forces still do not have investment plans or effective governance structures that will significantly change the way they operate... In contrast to this short-term approach, the best managers in the best forces invest time in planning not just one year ahead, but over three or four years ahead, and beyond."³⁶

Despite relative success, there were major signs of strain. At the time of our interviews (summer 2018), several chiefs reported that some 999 calls were going unanswered after a surge in demand linked to the hot weather and the world cup festivities. Falls in detection rates in many forces were hitting the headlines. And several forces were cancelling rest days and leave to ensure they could cope with summer workload, particularly to ensure order during President Trump's July visit.

Politicians and chief officers we spoke to were clearly concerned about their ability to maintain service levels in the context of continued budget constraints. The same deputy chief constable who spoke positively of the impact of budget cuts on efficiency and creativity also said "I would say we have gone too far [now]... but up until 12 months ago people were reluctant to say they couldn't cope."³⁷ A number of PCCs and chief officers were clearly frustrated, feeling unable to deliver the quality of service they hoped to with existing resources. The accountability dynamics in policing had also left some chief officers feeling they had little choice but to respond to new pressures (for example, an adverse inspection report on safeguarding) by shifting resource away from another area – then being criticised when performance in that area suffered. "You can only spread the bedsheet in so many directions", one commented, "and you can only pull it so tight before it tears and leaves holes".³⁸

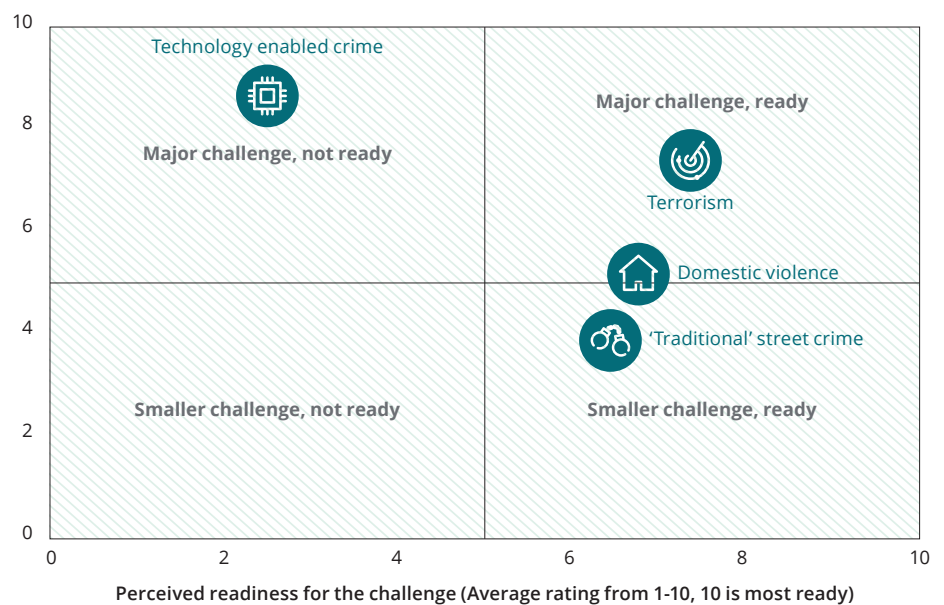
A service that is under-prepared in key areas

Despite some success in coping with austerity, our work shows that UK policing leaders feel they are at risk of falling behind in some of the areas. Our survey shows leaders do not feel well prepared to tackle technology-enabled crime, a concern given its increasing prevalence (Figure 10). They were more confident about tackling other crime types, although terrorism, domestic violence and 'traditional' street crime (such as robberies, assaults etc.) were still seen as significant challenges for the future.

Leaders expressed concern about policing capability – including in the areas that are most important for the future. Many private and public sector organisations struggle with digital transformation and adoption of new technologies, and our survey shows police is no exception – with the biggest area of concern being about policing's ability to harness technology (Figure 11). There were also anxieties about policing's capacity to deliver a co-ordinated response across local, regional and national entities – a worry given the growing mobility of offenders and the existence of complex global supply chains for illegal markets, including in drugs, human trafficking and firearms. Our interviews suggest that these issues are in fact linked, both being underpinned by the lack of data sharing and technology interoperability that is frequently highlighted by HMICFRS as a major weakness. As one PCC told us, "the public would be outraged or scared if they knew how hard it was for us to share data and how we struggle with it".³⁹

Figure 10. Police do not feel ready for their greatest challenge, technology enabled crime

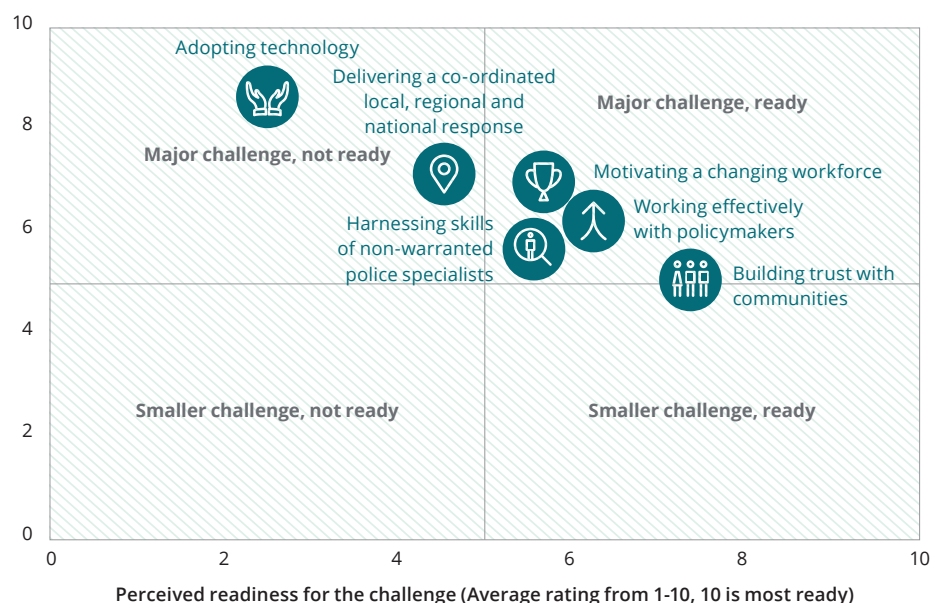
Perceived scale of the challenge (Average rating from 1-10, 10 is greatest challenge)



Source: Deloitte survey. Results are those from the 14 chief officers from national police organisations and police forces

Figure 11. Police leaders are least confident about their ability to harness technology effectively and to co-ordinated effectively across policing organisations and geographies

Perceived scale of the challenge (Average rating from 1-10, 10 is greatest challenge)



Source: Deloitte survey. Results are those from the 14 chief officers from national police organisations and police forces

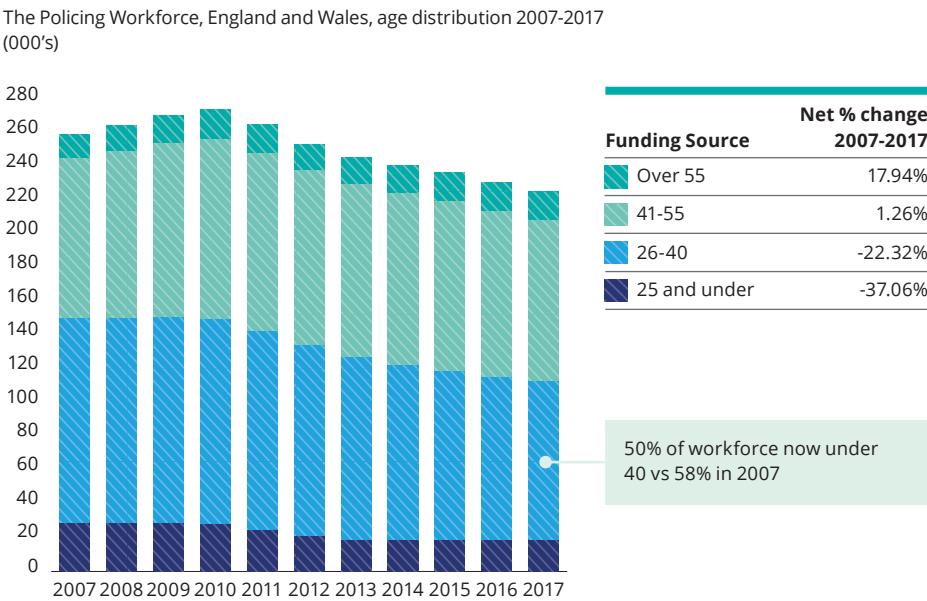
Interviews revealed that concerns about technology ranged broadly. On the use of social media, one chief constable commented, “we have been patting ourselves on the back for getting lots of officers on twitter, and that’s great, but quite often we’re talking to ourselves and not the public”.⁴⁰ A deputy chief constable said police were “a million times better at social media – but don’t know what we’re using social media for – for example, what effect it has when you tweet a picture of [a seized] knife and drugs.”⁴¹ The same chief officer said his force had started a conversation with young people about policing in their area, they soon realised “we didn’t have a clue about where and how they were communicating... We need to meet young people where they are [online]”.

When it came to information capture for evidential purposes, we heard concerns about the ability to store and access data from technologies such as body worn video. There were concerns about data quality and the ability to process and analyse data effectively – including to support complex investigations of online crimes. One leader talked of “frankly rubbish analysis, really basic... only a couple of forces are doing interesting things on routine [activities] and productivity”.⁴² Leaders generally agreed with HMICFRS that progress on developing digital investigation capability wasn’t being made quickly enough, either in terms of upskilling all officers or in terms of developing deep specialist expertise. And concerns about data sharing included the difficulties of securing public consent, system operability (absent any significant progress in building shared data standards), building an ethical framework and overcoming legal barriers to information sharing across government agencies. As Deloitte work on The Digital Policing Journey in 2017 put it, “Policing is still reliant on ‘old school’ infrastructure and processes: extensive networks of policing stations, manual processing, paper-based case files and forensic capabilities focused on physical evidence”.⁴³

Even though our survey suggests that leaders were reasonably confident about motivating the changing workforce, interviews show they are much less confident about recruitment and retention. The well-publicised national shortage of detectives is seen as symptomatic of a much more profound challenge in attracting staff to difficult roles given the diminished financial rewards in policing. As one assistant chief officer puts it, “policing isn’t always an attractive career to some of the people it needs”.⁴⁴ HMICFRS has also expressed concerns that few forces can demonstrate they fully understand the skills they have, or need, in their workforce.⁴⁵ And some of our interviewees raised another perspective. The challenge, they said, was not so much motivating the workforce in a traditional sense but “shifting the focus to skills and capabilities – which starts with dramatically improving personal performance and development conversations and PDRs”.⁴⁶

Policing has a huge opportunity to address current skills and capability gaps in the near future. The police workforce has grown considerably older as a result of austerity (Figure 12) as forces achieved spending reductions by stopping recruitment. In the last year, there were nearly 28,000 fewer police personnel under the age of 40 than in 2009.⁴⁷ But now new wave of recruitment is necessary to replace the increasing numbers of officers and staff approaching retirement. This provides the ability to bring in a workforce to bring in new recruits who in some – but not all – cases will feel more at ease with social and technological change. But it also creates a huge challenge in terms of protecting and maintaining knowledge and performance, and because of emerging generational gaps within the workforce.

Figure 12. Headcount reductions often delivered through recruitment freezes, resulting in older workforce



Notes: Figures are provided on a headcount basis. 'Workforce' includes officers, PCSOs and all other staff except special constables
Source: Open data tables Police workforce – age, 2007-2017

Deciding the future



Deciding the future

Tough choices are required to prepare for the future

To address these challenges and prepare for future shifts, police leaders and politicians nationally and locally will need to make difficult choices. As one chief constable said, “we need to make choices as a country about what type of policing we want and what we are willing to pay for”.⁴⁸ Yet policing also needs to build its capacity to drive sustained change or transformation, and to harness tools (old and new) that will help police protect and serve the public. Strategy without execution is delusion. The most effective police forces succeed not just because they can articulate clearly their priorities and policing approach, but because they build the new capabilities they need to achieve their goals and learn to respond to periodic public pressures productively – not constantly shifting organisational focus entirely but seeking to understand the genuine issues behind public or political concern.

A new decision making framework

To support the tough choices policing must now take, we have developed a framework to support leaders’ preparation for the future. Our framework is deliberately well aligned to and draws on:

1. HM Treasury’s 2017 *Public Value Framework*, which is being used as one tool to assess future spending decisions across government, including in the 2019 spending review process.⁴⁹
2. Deloitte’s Play to Win strategic choice cascade, which has been used successfully to guide decision making in a wide range of industries.⁵⁰

As in all public services the job of police leaders is to translate money into public value and outcomes and our framework identifies three key steps for achieving this:

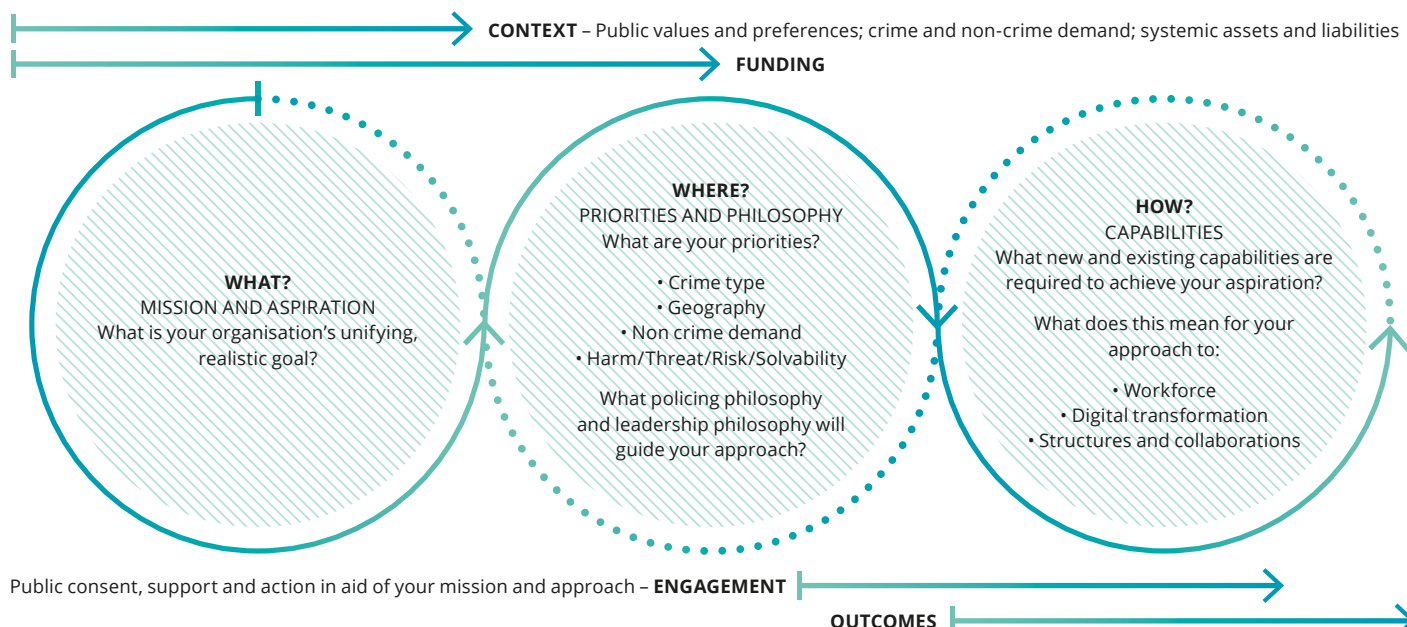
- Deciding, given the policing context, **what** your policing organisation does, its overall **mission and aspiration**.
- Deciding **where** it will prioritise efforts, both in terms of **priorities and philosophy**.

- Deciding **how** to ensure success by building the management systems or **capabilities** required, and ensuring the workforce can translate intent into effective day to day action.

At each stage, choices must face a reality check on whether ambitions can be achieved within the funding envelope. And they must also face what we call the citizen engagement test, assessing whether choices ensure the public consent, support and action that ultimately determines the success of any policing organisation.

Each choice area merits its own detailed investigation, examining how decisions are made currently, where and why decisions drive desired outcomes, and how to ensure successful decision-making and implementation. Deloitte will convene discussions on several of these choices over the coming year. In this report, we simply make some initial observations to explain the nature of choices required, the key options and some perspectives that may assist decision-making.

Figure 1. The key choices facing policing: A framework for decision making





Mission and aspiration

Like many public sector leaders, PCCs and chief constables can struggle to articulate their organisational mission and overarching goal – in part because of the complexity of policing and ongoing uncertainty about levels of impact the police have on different outcomes.

Some forces have made serious attempts to clarify their mission and aspiration in the past, which we can learn from. For example, the Metropolitan Police Service's (MPS) once aimed to make London the 'safest, global city' but has subsequently revised this goal in light of lessons learned. Police Scotland engaged in a serious and considered exercise to define its mission when it was formed through its Policing 2026 strategy.⁵¹

There are four key choices in relation to mission.

First, deciding the **breadth** of the police mission, in particular:

- a. Whether to pursue a narrow crime focus or a broader goal around safety and public protection.
- b. How far to focus on public perceptions (safety and confidence) as well as actual harms.

There is strong consensus in policing that the mission articulated in Peel's Principles of Policing ("to prevent crime and disorder as an alternative to the repression of crime and disorder by military force and severity of legal punishment") is a vital starting point. And there is support for the goals articulated in the police service's Statement of Common Purpose: "to make communities safer by upholding the law fairly and firmly; preventing crime and antisocial behaviour; keeping the peace; protecting and reassuring communities; investigating crime and bringing offenders to justice."

However, relative emphasis on these different aspects has varied over time and in different places, and has been an ongoing source of debate for many decades.⁵² For example, the Met's former aspiration articulated the city's goals in terms of 'safety', at the same time as the Home Secretary was arguing that the job of the police was 'to cut crime, no more and no less'.⁵³

Second, deciding the **level** of ambition to motivate the organisation. In the case of the old MPS goal, the aim was very ambitious. London is very unlikely indeed to become a safer city than Tokyo, Berlin or Madrid in the coming decade. As a result, many staff started seeing the goal as a rhetorical tool, rather than genuine loadstar to guide prioritisation and inform and reflect funding decisions – a reason the aspiration has now been amended.

Third, ensuring that goals **fit** with an overall public service vision and priorities. Using the MPS example, again, it is far from clear that Londoners would be willing to fund the effort necessary to make London the safest global city even if it were possible, given priorities in areas such as economic growth, employment, transport and housing. No policing organisation's mission or aspiration can be determined in isolation from the public, or decisions about other public service goals.

Fourth, considering **ethical** choices. There will always be a temptation for leaders, particularly those subject to direct electoral pressures, to promise great things to all interested parties and then find ways of managing perceptions to avoid disappointments. However, while this can sometimes 'work' politically – for a short period – there is strong reason to believe such an approach is counterproductive in the long term, and a fundamental reason for ongoing mistrust of politicians and our political system.⁵⁴

Having made these choices, of course, the key challenge is to make shifts in mission and aspiration meaningful, resulting in real changes to what is done. Big shifts in national approaches to defining the police mission have had some impact over the years but they have not necessarily driven the types and levels of prioritisation intended.

In the 2000s, a strong focus on performance measurement across a broad range of dimensions did not always drive the 'outcome focus' that was its original intention. The Police Performance and Assessment Framework did steer attention to 'volume crime' which was a source of public and political concern but also led to accusations of police hitting targets but missing the point when a focus on 'offences brought to justice' targets drove increased prosecutions for lower level and juvenile offenders.⁵⁵ In 2010, the national commitment to a police mission focused on cutting crime "no more and no less" co-existed with a growing pressure to focus on safeguarding of vulnerable people – with an increasing proportion of time many police leaders report spending on finding missing children and dealing with mental health crises.

Since the arrival of police and crime commissioners in 2012, there has been a more local element to priority-setting. In each different approach, we see a consistent problem: not being clear enough about the guiding aspiration for policing organisations, and an unwillingness to take accept a degree of risk by deprioritising some aspects of policing work in order to achieve more overall.

Suggested steps for defining mission and aspiration

- Review existing vision/purpose statement, and make a deliberate choice regarding position on the relative crime-safety focus, and consider starting positions for level, fit and ethical criteria.
- Set a bold, realistic and measureable objective. It will inevitably oversimplify and fail to capture the nuance of what you do but the process of defining it will force clarity on what is achievable with funding, and provide a framework for key resourcing decisions.
- Return to the choices on mission and aspiration iteratively. Where aspirations cannot be supported either by funding or capability test and adjust positioning and aspiration. It is time to answer the challenge laid down by one interviewee who stated "The police will never say we can't do it – won't be like 'we need x many people trained to x standard to do this many things.'"⁵⁶
- Recognise that the mission and aspiration of policing organisations cannot be decided in isolation from other political choices. Taking a system-wide view will allow the organisations best placed to drive particular outcomes and solve particular problems to take the lead, and organisations in a supporting role to be clear on what they can (and can't) do.

"All policing organisations are facing fundamental questions about their mission and aspirations in an age of austerity and rapid technological and environmental change. As we take forward conversations with police leaders in 2018 and 2019, we'll be looking to inform political and professional choices through data and evidence, and provide space and time away from day to day challenges to ask big, difficult questions."

James Taylor, Justice & Home Affairs Lead, EMEA, Deloitte

Understanding the policing context

Choices must be made in the context of a full understanding of public values and priorities, demand and the overall eco-system that supports the police mission.

Understanding public values and priorities is not easy. The ballot box can, of course, provide clues on public policing priorities but levels of voter awareness of PCCs' roles and platforms remain limited and votes often reflect party allegiance rather than specific views relating to candidates and their plans.⁵⁷ Survey findings are highly influenced by questions asked and framing, and rarely allow citizens to think about the complex trade-offs involved in prioritisation.⁵⁸ Public meetings do not always attract a broad cross-section of the community, and can be captured by the loudest and least constructive voices. Data on user experience can be helpful but tend to provide insight on narrower, rather than broader choices.

Citizens' juries, participatory budgeting and other deliberative democracy approaches, championed by the RSA and others, may offer an alternative route.⁵⁹ Recently used to great success to inform the Irish abortion referendum, deliberative processes require professional management and can be resource intensive – meaning they are best reserved for big, contentious decisions. But they would allow deliberation of crime priorities and of ethical questions such as appropriate levels of social surveillance. Done well, they provide not just insight but reassurance to those not involved in choices that the 'people like them' have made or provided input into decisions.

Understanding crime and 'non-crime' policing demand is not straightforward either. HMICFRS has recently asked forces to complete 'Force Management Statements' including forecasts of "patent and latent demand" and our interviewees generally described the process undertaken as "very useful".⁶⁰ The process is in its infancy, however, and as it evolves we would expect 'good' demand analysis to demonstrate:

- Understanding of threat, harm and risk to be addressed, not just volumes. Some forces had a head-start here, having been developing their approaches to measuring crime 'harms' for several years, using versions of the Cambridge Crime Harm Index (Hampshire, Cambridgeshire and other forces), the Canadian Crime Severity Index, or the prototype Crime Severity Score 7 put out for consultation by the UK Office of National Statistics (ONS). The July 2018 publication of the Home Office's 'Economic and Social Costs of Crime' report also provides a new starting point for all future analysis.⁶¹
- Understanding of the relationship between demand and police workload, workflow, and costs. All forces should, for example, have a clear understanding of the full resource need of a sexual offence from identification to prosecution, and likelihoods of progression through each investigative threshold.

- A system-wide view, not just a police perspective. Police demand reflects choices in other areas of public service (for example, social services opening hours, or levels of probation activity) but the police also receive early indicators of future justice system demand. As sophistication around demand modelling and workflow management grows, police should, for example, be able to inform crown and magistrates courts of likely volumes and types of cases.
- A recognition and assessment of uncertainty. Given the complexity of interrelated demand drivers, long-term predictions of future demand are more likely to be wrong than right so it is important that planning considers a range of scenarios and system resilience to different types of demand shift.
- The use of tracking and data analytics to constantly update planning assumptions and enable resource allocation decisions, harnessing real time visualisation tools to support this.

Data is a key resource, with companies often holding invaluable information on IP addresses, emails, phone numbers and *Modus Operandi* associated with reported attempts to defraud their customers.

Police forces are becoming increasingly aware of **broader crime prevention and harm reduction resources** in other public services, business and communities but in our view these are too rarely considered explicitly as part of strategic decision making. This omission causes difficulties, allowing the police to:

- Miss the fact that other public services are simultaneously making decisions about resourcing that might have a knock-on impact on police demand (for example, cutting mental health services or drug treatment).
- Duck discussions about which local public service is leading on driving specific outcomes.
- Underestimate the totality of crime prevention and investigative resource deployed by others.
- Ignore myriad opportunities to co-produce crime reduction with citizens and businesses, and to encourage private investments in security and prevention.

In some areas, police are already seeing private resources as assets they can manage – for example, seeing door security staff as a resource to reduce harms around the night-time economy and are implementing practices such as joint briefings and shared communication channels. Project GRIFFIN was set up in London in 2004 helped to ensure security staff supported counter-terrorism efforts and terrorism response. Yet there are many other resources that might be similarly harnessed, including business investments in cyber security and safe product design. Data is a key resource, with companies often holding invaluable information on IP addresses, emails, phone numbers and *Modus Operandi* associated with reported attempts to defraud their customers.

We see understanding the police landscape – in terms of public values, demand and broader crime prevention and policing assets – as a key capability police must develop in order to make better choices, and a pre-requisite for effective decisions about the mission and priorities of policing organisations.



Priorities and philosophy

Choices are required about where to focus in order to meet policing aspiration. The starting point for all prioritisation choices is a thorough understanding of the policing context (previous page) sets out steps for building this understanding. This supports a set of further choices about what is focused on, where, and when, and choices about the guiding philosophy or 'theory of change' that will guide decision making at all levels of the organisation.

In terms of **what** the police prioritise to achieve their mission, it is no longer viable to simply set priorities based on crime types. Most policing organisations have aspirations that are broader than crime, with 8 out of 10 force vision statements we reviewed even eschewing the word 'crime' in favour of concepts of safety, protection, and justice. The most successful policing organisations therefore **prioritise work based on harm and potential harm** – or what most in policing refer to as "threat, risk, harm and vulnerability". The challenge we have seen for forces implementing this approach is ensuring the approach spreads throughout the organisation, not just influencing dispatch decisions, for example, but informing the prioritisation of response work, investigation, criminal justice and neighbourhood teams as they manage their day to day workload.

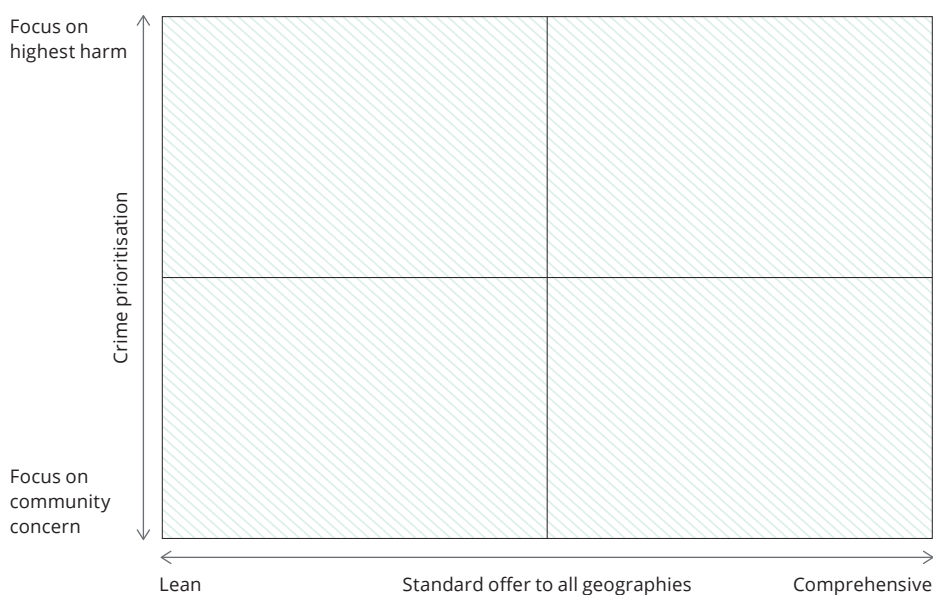
The other element determining what to prioritise is addressability or solvability. Policing organisations need to know what return they will get from their investment to work out when to start or stop work. If activity isn't supporting the overall aspiration, it needs to stop to allow more productive activity – a point that is easy to say but very challenging to realise in the context of emotive issues where the police need to maintain legitimacy and procedural justice. The difficulties are bought into particularly stark relief in relation to cases of historic abuse, including where suspects are now deceased. But there are less emotive prioritisation decisions made in policing every day, often made without an overarching framework to guide choices and sometimes without effective strategies for building public consent and support for choices.

Forces that make explicit decisions on thresholds for different types of police action have been better able to avoid two situations that police leaders saw as undesirable. First, the system getting "clogged up" when too much demand was accepted, leading to increasing caseloads (for investigation and response) and reduced focus, productivity and job satisfaction. Second, prioritisation by default, where newer cases were effectively 'queued' despite relatively high importance. Our work showed that a nuanced approach to prioritisation (based on ways of assessing threat, risk, harm, vulnerability and addressability) helps mitigate other risks too. For example, this approach allows teams to generate 'quick wins', solving less serious crimes quickly, while still focusing the bulk of resources on areas of highest harm and risk.

Most policing organisations have aspirations that are broader than crime, with 8 out of 10 force vision statements we reviewed even eschewing the word 'crime' in favour of concepts of safety, protection, and justice.

Figure 13. Policing priority choices

A simplified view of prioritisation choices



Most forces told us that it was no longer viable to achieve visibility in communities to the same extent as in 2008.

In terms of **where** to focus (geographical prioritisation), the key decision is how far to focus on providing a broad universal offer to communities rather than a needs/ risk-based approach to resourcing. Most forces told us that it was no longer viable to achieve visibility in communities to the same extent as in 2008. However, there are political and pragmatic reasons to ensure clear decisions are made on what the base universal offer can be given resourcing, as demonstrated by the Metropolitan Police Service's commitment to dedicated ward officers. There are also new forms of visibility and service, enabled by the internet and officer mobility and telecommunications, which can increase policing's reach and can form part of a powerful and more efficient universal offer. Choices will, of course, vary based on funding but also the priority attached to maintaining public support and the vulnerability of political position (Figure 13).

In addition to these questions, forces can benefit from defining **when** police provide resources too. Most police forces have significantly improved how far they ensure that staffing matches times of peak demand.

All prioritisation choices must support the delivery of the mission. For example, if a police force is focused strongly on violence against the vulnerable, even neighbourhood policing team's priorities should still be oriented towards and articulated in terms of the contribution to this goal. It is also vital to avoid self-tasking outside of a clear framework for prioritisation, as there is an inevitable tendency in all organisations to see immediate, presenting demand and pressures – and ignore more hidden needs, including those outside one's domain of expertise.

There is surprisingly little open discussion within forces about **policing and leadership philosophies**. Yet the leaders we spoke to in this research clearly placed different emphases on crime reduction, broader social harm reduction ('vulnerability' and other social guardianship), and justice outcomes. And their views were shaped less by differences in the communities they were serving than by personal opinions and assessments of 'what works' to achieve policing outcomes.

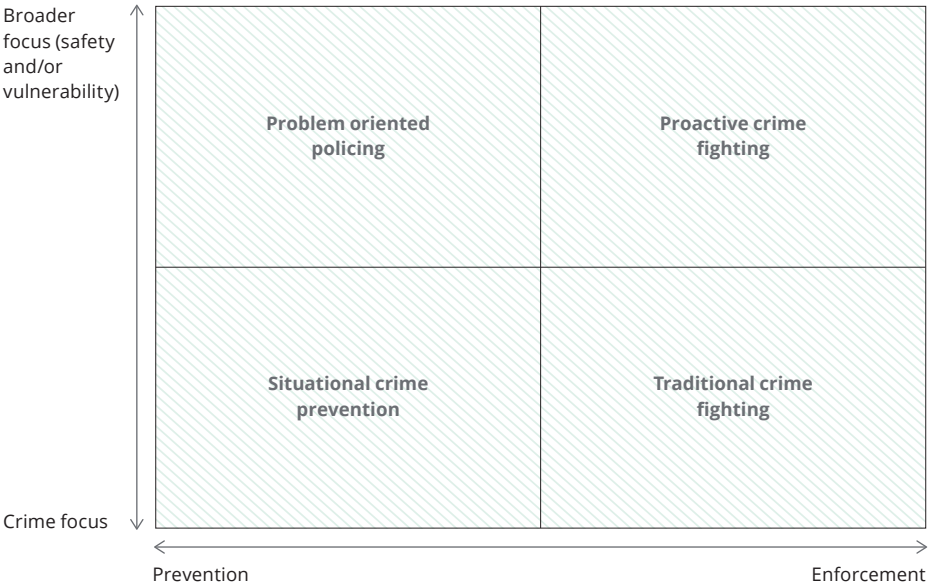
Deloitte is often involved in supporting board discussions relating to resourcing decisions and it is striking how often these come down to different views on policing approach. Whether you invest in forensics capability or neighbourhood policing, for example, is shaped by the value you attach to the investigative versus preventative aspects of policing work – as well as your perception of the effectiveness of different approaches (and teams). Whether you pursue police diversion schemes, or invest effort in supporting effective prosecutions in court will depend on your views on the impact of tougher sentences and the capacity for state activity to facilitate rehabilitation.

There is strong evidence to support decision making in all these areas, much of it codified and captured by the College of Policing's What Works Centre for Crime Reduction.⁶² *Criminal*, the book written by one of the authors of this report, also highlights the vast body of research that demonstrates the relative effectiveness of policing approaches focused on reducing opportunities for crime, rather than investing in tougher sentencing.⁶³ However, there remains sufficient uncertainty to allow leaders to hold contrary positions on key questions. As one PCC told us, "X in X force is really all about victim support plus a tough, enforcement approach and pushing for longer sentences but that's completely the opposite to other forces".⁶⁴

Differences in philosophy can relate to values and priorities as well as interpretation of evidence – for example, the relative importance attached to justice or crime outcomes. But they are also influenced by framing. For example, those leaders who think of cost effectiveness solely in terms of policing costs and benefits (rather than downstream costs in courts and prisons) are more likely to favour investment in enforcement activities. We found many police leaders had strong policing philosophies which shaped their decision making. One PCC said to us, "we should be aspiring to be like the fire service, which is much smaller than it used to be because of success in preventing fires".⁶⁵

Differences in philosophy influence PCC and chief constable decision making and wider decisions made on a daily basis across the organisation. And differences in philosophy within senior teams and across the organisation can lead to misunderstanding, conflict and the subtle overriding of decisions – leading to diffusion of effort and impact rather than a productive conversation about evidence, community expectations and internal capacity. We often heard of "philosophical challenges between PCCs and chief constables" but also observed significant differences of view within chief officer teams.⁶⁶

Figure 14. Policing philosophy choices
A simplified policing philosophy taxonomy



Suggested steps for determining priorities and philosophy

- Use threat/risk/harm/addressability/solvability and similar concepts as the main prioritisation tool – rather than focusing straightforwardly on broad crime types or specific communities.
- Use real cases and situations to expose to decision-makers the hard realities of the choices being made and to flush out the organisational and cultural challenges that particular prioritisation choices will create.
- Set a clear minimum offer available to all geographies and groups in terms of public visibility and service standards, recognising that:
 - New forms of visibility and connection (for example, online channels) are as important as officer visibility on the street.
 - People have different needs, assets and preferences.
- Consider priorities in the context of what partners – in government, business and the community – are doing and can do.
- Develop deliberative mechanisms to engage all parts of the community in difficult choices and trade-offs and build legitimacy for decisions, including in relation to questions such as whether to focus on current or historic cases and levels of surveillance allowable in pursuit of other outcomes.
- Take time to discuss and build ‘questioning consensus’ about the core policing philosophy of your organisation – ensuring staff at all levels of the organisation are part of this process and building understanding of how your philosophy will guide decisions, with – and in the absence of – hard evidence.
- In our view, it is important that throughout these steps, resources are maintained for ‘hard-edged’ prevention work to reduce future demand, which requires tougher prioritisation decisions regarding how you will respond to presenting demand. There is overwhelming evidence that problem-solving, situational crime prevention approaches can have a significant effect on demand, and failure to invest in these will lead to a vicious cycle of reacting to growing demand. Framing priorities in terms of harms to be reduced, or assets to be built – rather than focusing on ‘presenting demand’ will help with this.

To demonstrate the power of aligning around a clear policing philosophy we note that Durham, the only force currently graded Outstanding overall by HMICFRS, has had considerable success in embedding a problem oriented policing approach across the force. Even more striking is the international example of New Zealand’s Prevention First model. Launched in 2009, it offers an example of sustained cultural change in policing, led from the top and based around a strong guiding philosophy that has influenced frontline hearts and minds, not just senior teams. The transformation programme focused on retraining staff to focus on crime prevention and developing strong partnerships with other public service partners, academia and business, including to harness new technologies. The community-oriented focus of this programme was recently publicised through a highly successful, light-hearted ‘do you care enough to be a cop’ recruitment campaign – a far cry from past recruitment campaigns that emphasised danger and investigative aspects of police work.⁶⁷ In New York and then Los Angeles, the recently retired police chief Bill Bratton’s brand of Broken Windows’ policing, though much debated, provided a framework for action that supported impressive reductions in crime and disorder.

Just as forces need to build alignment around a clear policing philosophy, they need to make choices about their leadership philosophy. As in all sectors, police leaders do not lead or manage in the same way. As one chief constable told us, “there are still a lot of leaders who grew up with ‘reds and greens’ [the implication being they have a more ‘command and control’ managerial approach, focused on accountability] while others are very different”, being more focused on employee empowerment and creativity.⁶⁸ Again, there is evidence regarding the pros and cons of different approaches – but there are areas of disagreement about what works here too.



Capabilities

Once aspirations and priorities are clear, the question is how to build the capabilities that support success. This requires a wide range of choices relating to workforce (size, skills, reward etc.), processes, structures and collaborations, technologies, and other management systems. Too often in policing, attention is focused solely on officer numbers and proportions of the workforce assigned to different tasks – ignoring the importance of other factors for productivity. After all, in the 15th century, nearly sixty per cent of the English labour market had to work in agriculture to meet the country's food needs, but in 1900 when England still produced most of its own food this was down to 15 per cent and today, when it still produces over half its own food, it is nearer one per cent.⁶⁹

Priority capabilities will vary depending on a force's mission, priorities and policing approach. An organisation focusing heavily on ensuring those who commit crime serious are brought to justice will clearly prioritise investigative capabilities more than one focused on reducing common crimes that affect all citizens quality of life. However, it is clear that there are core capabilities that forces have rightly prioritised over the past few years, and a newer set of capabilities that are increasingly important.

The five core capabilities we have observed are: public contact; emergency response; local and specialist investigation; safeguarding; and detention and prosecution. Most forces have made or are currently making significant changes to how these critical areas of policing are being delivered. Changes are comprising workforce, structures and technology – with a small number of core technologies emerging as a critical enabler to UK policing. Enhancing mobility has been a common thread across nearly all changes, albeit one implemented with mixed success to date.

However, we draw attention to five new or emerging capabilities that might equip policing to cope with the new policing realities we identify above. All will continue to be enhanced by advances in mobility.

1. In a fully digital world, embraced in many different ways by civil society, the police need a far more sophisticated means of interacting with citizens. In this world, it is necessary to shift from customer contact to **citizen relationship management capabilities** – enabling a broader range of citizens to contribute productively and receive tailored services.

2. These trends equally apply to the police workforce. When these trends are combined with the level of change already experienced in policing, and the volume and complexity of change being driven locally and nationally in the coming years, it is clear that policing also needs to invest in **workforce relationship management capabilities**.

3. In a world where vast resources lie outside policing direct controls, where the police are outgunned by the private sector, the police need **exceptional relational, influencing and collaborative working capabilities**. Capabilities that mobilise communities, partners and business crime fighting and harm reduction potential.

4. In a world of rapid, exponential change, and with an increased prevalence of cyber-physical systems, the police need sensing, noticing and regulatory capabilities to identify new criminal methods, networks, system vulnerabilities, and crimes as they develop and develop pre-emptive responses. These capabilities are likely to form a critical part of a wider **digital investigative capability**. A capability required to address the existential crisis in traditional investigative techniques in the face of the tsunami of data confronting even the most basic investigation.

5. In a world where policing is serving a fully digital, connected world, a central question for all policing organisations will be how to build **data management and analytical capabilities**, to enable better decision making in all operational and non-operational policing roles. An increasing proportion of Deloitte's work it is focused on helping police forces to harness data analytics and machine learning algorithms, which can be applied to diverse areas of policing activity to allow staff to focus their attention on areas of greatest risk and uncertainty while simplifying or automating other areas of decision-making.

In second order, in terms of scale and uniqueness to policing, it is also clear that in a world of unknowable volumes of knowledge, policing requires stronger knowledge management capabilities and the ability for policing leaders to ensure that those with specialist knowledge are involved where their knowledge is most needed. And in a world of near-total transparency, policing will also need strong ethical decision-making capabilities and powerful public engagement approaches, and proportionate approach to reputational risk.

Core, age-old policing capabilities need to be developed for a changing society. One of our interviews highlighted the challenge of equipping all officers to be "platinum level communicators", but noted this will increasingly mean ability to communicate in person and through digital channels and to deal with diverse communities. The same interviewee noted the sense-making and situational skills required to keep the public safe and prevent harm in a bewildering variety of situations.⁷⁰ "The traditional model of providing training and guidance in a subject specific training course with 30 pages of guidance doesn't really work", she said. "By the time people find themselves needing the information they've forgotten it and they're in a situation where they can't just sit down and read for half an hour!"⁷¹

Some core policing skills are irreducible. Policing will always rely on the professional judgement, experience and empathy that characterises policing at its best. But there is clearly huge potential to build real time situational support through technology, and to select for and develop the attributes that make for success in the real world. And there is similar potential to equip neighbourhood officers with problem solving methods, tools and skill-sets that build community engagement and prevent crime.

The Policing Vision 2025 set out by the National Police Chiefs' Council and the Association of Police and Crime Commissioners touches on some of these key capability gaps. What we would emphasise however is that there remain choices about which capabilities to invest most in. With finite resources and officer and staff bandwidth, workforce, digital, and structural change must be focused around the policing organisation's guiding aspiration and policing approach. A police service heavily oriented around prevention may decide to develop a core capability around influencing businesses and the public, investing in social marketing skills and behavioural science. A police service with a focus on national security might – as Europol has – become a data-driven organisation, blending data science capabilities and policing knowledge to enable precision targeting of threats.

To build the capabilities most needed for the future of policing, we believe there are at least three key areas where big choices are required: on workforce; digital transformation investments; and structures and collaboration.

Workforce

We have seen that workforce approaches are changing in every sector, and the police will inevitably be affected by shifting expectations and norms in the nature of work and careers.⁷² As policing develops new and existing capabilities, it will therefore need to develop its approach to the workforce – pursuing considerable shifts in the design of jobs, recruitment, training, development, reward, motivational approaches.⁷³

The approach taken will depend on a number of interconnected choices, all of which policing has been grappling with for decades, as have most public sector professions. These are:

1. Manpower heavy vs digitally enabled:

Perhaps the key choice facing policing, heavily shaped by political decisions and public understanding of policing, is how far to focus on manpower or enablement. Many chief officers we spoke to were clear that, despite the ongoing political focus on officer numbers, the key issue for them is productivity. As one chief constable told us, “my ambition is to go from 80% to 65% staff costs, to have officers who are properly supported by technology and equipment, and brought in support”.⁷⁴

2. Rule-based vs needs based:

Policing, like most public sector professions, retains a relatively rigid national framework for policing roles and reward structures. This has benefits in terms of the cohesiveness of the workforce and public attitudes towards police but it also creates challenges for attracting talent from other sectors. Some of the skills most needed for the future, including data science, technology and transformation capabilities are among the most in demand in the labour market, leaving most police forces either under-powered or bringing in these skills via consultancy arrangements. When such skills are built internally, they are often lost to other organisations that can offer more money, higher status, and clearer pathways of progression. Is policing willing to pay a chief data scientist more than a chief constable?

3. Specialist vs generalist: A degree of specialisation is clearly required for some roles, such as forensics, but policing organisations must still choose between developing a wide range of clear specialist roles and career paths or more generalist workers, equipped with training and tools to perform in a wide range of roles and situations. There are multiple trade-offs involved in choices here. A generalist model (involving a high proportion of officers equipped with a broad set of ‘core’ policing skills – public order, response, basic investigation, community) can sometimes provide:

- Greater resilience to occasional peaks in demand.
- Reduced deployment and planning challenges.
- A more varied and rounded career that allows officers and staff to find their areas of aptitude.

A specialist model, meanwhile, is seen as the route to:

- Driving productivity and quality by ensuring those doing any job have more experience in it.
- Increased satisfaction for those who do not enjoy, or cannot perform, all aspects of police work.

There are ways of breaking some trade-offs, of course. Careful measurement of peaks and troughs in demand can avoid over-estimating levels of public order capacity required, and models such as the use of reservists, as in West Yorkshire, can protect resilience with fewer generalist officers.⁷⁵ There are also tools that can equip generalists to tap into a smaller number of specialist skills and resources when needed.

4. In house vs outsourced: There are choices to be made about the benefits of a more homogenous service with low transaction costs compared with the advantages of outsourcing in terms of tapping into advanced/specialised capabilities and economies of scale. Forces are actively exploring the benefits of outsourcing both for back office functions, 'middle office' areas such as control rooms and for specialist capabilities in areas such as data science and cyber investigation, where police terms and conditions often act as a barrier to securing talent. The Dutch police have harnessed significant outsourced capability in order to build its world leading cyber investigation capability harnessed by Europol and others. Most UK forces outsource large elements of their IT capability. And there are major back and middle office outsourcing programmes in Lincolnshire and Cleveland that policing hopes to learn from. There is a strong emerging literature on the service characteristics that make some services and functions more amenable to outsourcing, but evidence suggests that success depends significantly on the capability to design and manage markets and contracts and to build collaborative relationships across contractual boundaries.⁷⁶ This is seen by leaders we spoke to as a key weakness in policing, and is the subject of a national improvement programme.

5. Job for life vs gig economy: Many of our interviewees noted that changes to police pensions, pay and conditions were already beginning to change the extent to which policing was a job for life, with leaders anticipating that an increasing proportion of officers leaving policing mid-career for private sector roles, and highlighting the new entry routes for experienced professionals at inspector and superintendent level. There remain clear choices, however, about whether policing can or should resist broader trends towards more flexible and varied careers, in order to retain talent trained at some expense to policing.

Several police forces are exploring the ability to tap into skills and capacity that is less able to work full time or can be called on to deal with peaks in demand, for example by enabling call centre operatives to work from home and fit shifts around child care requirements.

6. Inclusive vs two-tier: Many police forces still suffer from an undervaluing of specialist skills that do not require a police warrant, despite considerable efforts to create a more cohesive service. Different workforce regulations, representation (staff are unionised, and not eligible to join police officer associations), and often backgrounds exacerbate a division seen in many industries. "There is still a significant disconnect between front and back office – to a surprising degree", one interviewee told us. "When police staff leadership goes wrong – the replacement tends to be an officer, but that doesn't of course automatically solve the problem – as a superintendent will rarely have the experience or capacity to manage the complexity of a force IT or HR function".⁷⁷ Major programmes are still largely run by 'gold groups' comprising those with operational rather than business change backgrounds. There have been some important improvements in this situation, including as a result of staff being included in strategic command course and other senior officer development opportunities. However, there is still insufficient recognition of the fact that specialist staff in areas like fraud, digital investigation, and an array of other areas are in reality part of policing's 'front line', even if their roles do not require warranted powers. There are other linked choices. How far should policing ask individuals to manage their own careers – for example, seeking out an investing in their own training and development opportunities, driving their own career choices – versus being provided with clear career pathways with compulsory training at various stages?

This debate is central to debates about the College of Policing's new Police Education and Qualification Framework, which sets out how policing will become a graduate only profession and incentivise and enable higher education for all officers. How far should policing focus on driving short-term productivity versus long-term well-being – and what 'deal' is made to compensate if the former? How far should policing rely on volunteers versus full time professionals? How far should leaders focus on potential recruits versus the existing workforce? How far should policing seek to be representative of and come from the communities it serves?

In every area, there are lessons to be learned from the diverse array of practice that has developed in the UK and internationally. For example, a Bavarian police recruitment campaign targeted immigrant communities and removed citizenship requirements for police joiners provided applicants spoke fluent German and had five years residency, while the Metropolitan Police has set a requirement that applicants have lived in London for three of the last six years.⁷⁸ But choices should be determined by the capability requirements that will support delivery of policing priorities. Given number of choices relating to workforce and the sensitivity of decisions for the public and the police, it may also be sensible to focus on the few big decisions that will have most impact on the capability policing most needs for the future.

Suggested steps for determining workforce model

- Start from an assessment of capability needs and gaps to deliver on the policing mission and aspiration, then identify the key skills, numbers and types of staff, and development models required.
- For each key capability, define approach to key workforce choices and trade-offs we outline.
- Create a broader definition of frontline policing, to recognise the importance of non-warranted officers to core policing work.

“Private sector enterprises use technology to maximise the time their workforces spend on delivering core services and meeting customer needs. The services of consumer business have been transformed by predictive analytics, digital customer interaction channels, dynamic scheduling of field forces, mobile communications and remote access to core information systems”.⁸¹

**The Digital Policing Journey,
Deloitte 2015**

Digital transformation

New capabilities require new processes, underpinned by significant volumes of data and technology. The key choice for policing is how seriously it invests now in the work that will enable the workforce to be more productive, allowing them to get better outcomes in less time. Digital design methods can yield rapid benefits (and in-year savings) but some investments in digital transformation are longer-term, and few will succeed without the organisation signalling their commitment through using the most capable staff to guide and deliver programmes. Digital transformation is not ‘just back office stuff’ but the critical enabler of ensuring each response officer can deal with more cases per day, with less stress; that neighbourhood teams know and can engage their communities effectively; that allow an investigator to identify a vulnerable victim and secure a prosecution.

There are, of course, choices about where and how to invest. Our work shows that management of processes and information are linked and central issues – in policing but also every profession. Despite the best efforts of individuals to perform, processes can feel disjointed to users and staff. One senior officer spoke to us about their experience of reporting a suspect vehicle as a citizen and receiving multiple disconnected follow-ups from different parts of his force.⁷⁹ Another spoke to us about the fact his officers had to “triple or quadruple key” incident information (typing broadly similar reports into multiple different systems) owing to the proliferation of legacy systems.⁸⁰

Duplication, waste, ineffective hand-offs and frustration for staff – and the public – are all underpinned by poor data collection and management. Victims, witnesses and suspects will often be asked for the same information repeatedly and systems are generally poor at tracking individuals – with prolific criminals often having multiple records held in different systems within a force, and even less join-up across geographies. The public are not always able to share information using the digital channels they have become familiar with from private business, though this is rapidly changing both through local efforts to build online channels and work on the new ‘Single Online Home’ for policing, a national website that can be tailored to local needs.

Policing could more easily get away with poor data when the job was simpler and better resourced, with locally based teams knowing more of the people they interacted with. But today bigger spans of influence, rapidly shifting populations and a concern for what happens in the private and virtual spheres mean information needed for the job surpasses what is known by any individual. Data is therefore an increasingly central policing tool both for intelligence and investigation purposes, crime prevention and customer service. But it remains poor partly because those entering data struggle to see – or quickly benefit from – how it is used. There are limited rewards for producing information of value and feedback loops for those who enter data poorly are long or non-existent. Feedback that allows redesign of systems to make them easier for police to use are often even longer.

The key choice for policing in relation to digital process redesign is simply how much to invest in redesigning and implementing 'change' in police processes, versus focusing on business as usual and tolerating current inefficiencies. But there is also a question of where to focus effort.

In our view, policing is largely missing at least four key digital tools or processes that are relatively well developed in other sectors. These tools have potential to help policing organisations deliver on their aspiration but forces face choices about where to invest most heavily:

1. Citizen relationship management

(CRM) processes of the type that would allow police to build an accurate rich picture of those they interacted with, based on both police interactions and other data drawn in from various other sources (public sector agencies, open source channels etc.). This is the technology that would allow a 999 operative to know if the person calling them has called 100 times before, or is particularly vulnerable, or an arresting officer to know a suspect is wanted in connection with another offence in another part of the country. This could extend to a way of managing relationships with businesses that are both victims of and have capacity to prevent crime, and to building clear relationship owners for industry and business groups. In this way, policing can understand who its most active, valuable citizens are, as well as better understand people at and of risk. A handful of forces have some capability in command and control centres to identify callers' call histories and other basic information. However, there is huge potential to harness insight and better target and personalise responses through a broader and more robust CRM approach, which harnesses open source information (drawing from social media and other channels) and data from across the policing information ecosystem.

2. Workforce relationship management technology

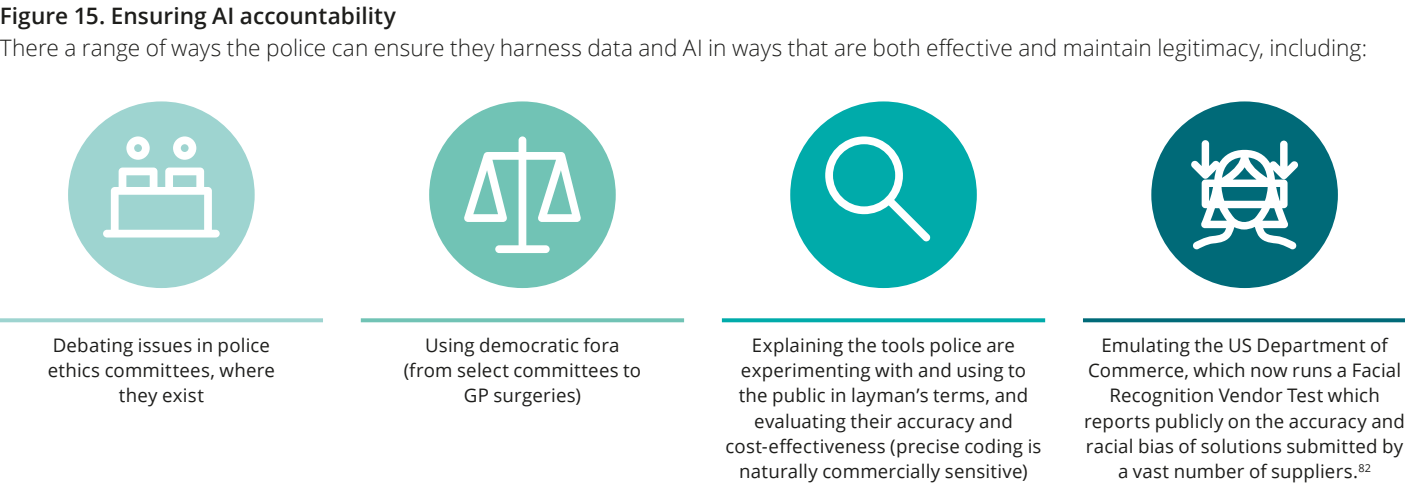
of the type that would allow effective communication and information sharing within policing. As complexity of policing increases, a tool that has a similarly rich picture of police officers and staff is required to enable tailored conversations with the workforce. The volume of new activity – developments in tools, technology, procedural guidance, legislation – and intelligence is such that the workforce is unable to easily determine what they need to know, and do with information. And it is more important than ever, as caseloads and the pace of change have increased, to protect and support workforce wellbeing.

3. Mobile working tools. Many forces, for example Leicestershire, have made exceptional progress in enabling officers to carry out their work in any location. This has allowed officers to reduce time spent travelling and dealing with administrative work – but also supports effectiveness in the field by ensuring officers at scene are equipped with the information they need to perform.

4. Data analytic capability, which enables the automation of routine processing and the generation of insight on a vast range of policing problems. Current police processes in areas such as vetting and barring, evidence disclosure, and licensing decisions, are highly manual and require staff to review vast amounts of information in multiple formats and systems, often concentrating equal attention on all cases. Yet new technologies can now pull out information that is salient from unstructured data sets using natural language processing and analytics, allowing human operators to focus their attention where it matters. And by creating feedback loops relating to the quality of decisions made, both humans and machines can learn which information is salient to decisions, and levels of manual effort gradually reduced.

Deloitte's teams are starting to see results using AI – and expect results to improve as the core components of many AI tools (for example, natural language processing technologies) benefit from huge private sector investment. There are still issues to overcome for some areas of automation, including data quality and data sharing, as well as cultural challenges (see Figure 15). There also remain choices about how police forces choose to develop and adopt automated solutions, including how to address ethical and accountability questions. Image recognition technologies require public debates on trade-offs between liberty and security. But in all areas the police will benefit from public scrutiny of algorithms to ensure tools work within national legal frameworks. There are a range of mechanisms and the right approach to scrutiny will vary (Figure 15).

In our view, policing is largely missing at least four key digital tools or processes that are relatively well developed in other sectors.



Structures and collaboration

The developments in police structures and collaborations noted above suggest that the structural basis of policing is in flux. Many forces feel too small to develop specialist capabilities of various types – both ‘front office’ capabilities such as air support or complex fraud investigation and ‘back offices’ capabilities such as data analytics and data science. The smaller forces we surveyed about their use of technology are markedly less advanced in their adoption of new technologies, and are most likely to have developed collaborative arrangements with other forces.

Our interviews highlighted both the wide range of collaborations now in place and how hard it is to make collaboration work. The centre of gravity and accountability in UK policing is now local which means leaders must be assured that their communities benefit directly from collaboration, not just policing overall. Many plans for collaboration to build shared capabilities or drive efficiency have therefore fallen apart after considerable investment to assess potential new models – in many cases, because a new chief constable or police and crime commissioner cannot see the same level of benefit as a predecessor.

As one chief constable put it, “PCCs and Chiefs can still derail collaborations rather easily”.⁸³ Work on private sector mergers suggest that they work best with either total values alignment and commitment or when they are, in effect, takeovers. But many policing collaborations fall into a tricky middle ground (Figure 16).

A strongly local accountability model has also led to a struggle to do work to the benefit of policing as a whole at a national level. The Police Reform and Transformation Board now oversees 17 national policing programmes but their funding arrangements are fragile, as they are supported by the Police Transformation Fund rather than a long-term budget.

While waiting for Home Office/Treasury decisions on the latest budget allocations, some programmes have only been kept going due to investments by individual forces; others have slowed being unable to make commitments.⁸⁴ In addition, governance is complex, though maturing, and this creates challenges for speed of decision making and delivery. And there are still areas of uncertainty about where the balance of responsibilities between national, regional and local policing organisations which are difficult to resolve absent a clear national steer – for example, in relation to various aspects of cyber crime and complex fraud.

The police are already making choices at a local level about how to collaborate and structure themselves, and their choices reflect local circumstances and possibilities. The Metropolitan Police Service, for example, has not entered major collaborations with neighbouring forces having the scale to develop a wide range of specialisms without doing so. Police forces that are relatively co-terminus with local government organisations naturally have greater opportunities to build collaboration in a place. Nonetheless, we feel there is a debate to be had about the future of police structures (Figure 17).

In our view, the current accountability dictates that many choices about structure and collaboration should be determined locally based on context and local priorities. However, there is a clear need for a central authority, most likely the Home Office, to ensure that critical national programmes are set on a stable and long-term footing in terms of finance and governance. And there is an urgent need for police forces to develop their ability to ensure that they can extract value from national investments, avoiding the twin risks of perceiving them as hostile or irrelevant to their plans.

Suggestions for deciding structures and collaborations

- Assess which of the capabilities required to deliver on the police mission cannot be delivered efficiently or effectively within your organisation.
- Assess a broad range of options for addressing any gaps and issues, including buying services from the market or neighbouring forces.
- Limit structural changes and formal collaborations to areas where there is very clear alignment and an emphatic business case.
- Set critical national programmes and structures on a more secure footing.

Figure 16. Attitude to structural change and collaboration has a critical impact on success

No single police force will have the luxury of being the “acquirer” in any merger, therefore a fully collaborative approach is the only way forward

Deloitte M&A survey found

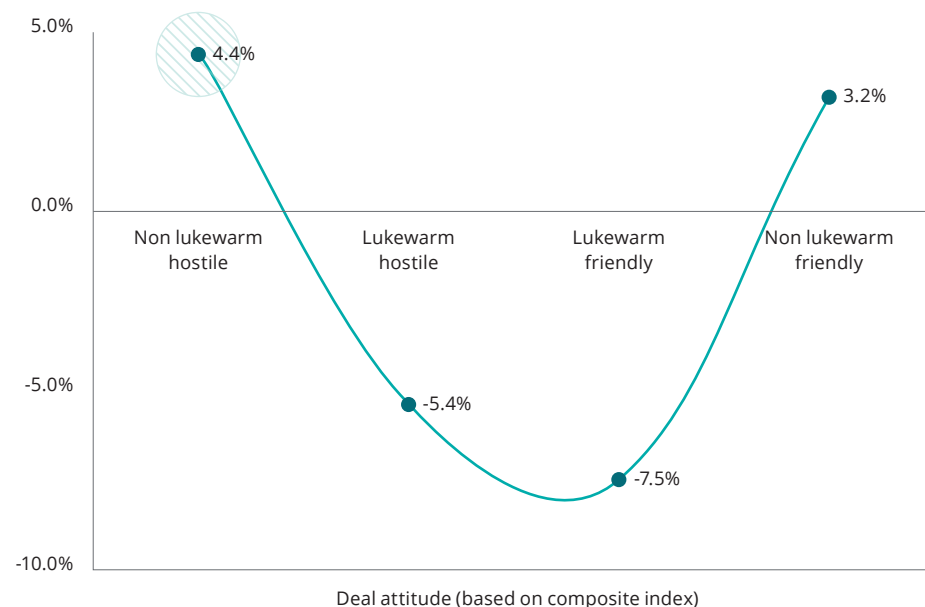
- 60% of the 105 deals in the survey were characterised as ‘lukewarm’.
- 86% of these ‘lukewarm’ deals destroyed value, whilst only 26% of truly hostile/friendly deals did so.
- Better returns were achieved in hostile transactions, despite there being on average a higher deal premium paid.

Survey Method

- Sample of UK transactions over \$250 million spread across various sectors over a twelve year period.
- Transactions classified on eleven qualitative and quantitative criteria supported by structured interviews.

Two year variance of stock returns, categorised by initial deal attitude*

Two year % variance of stock returns compared to peer group



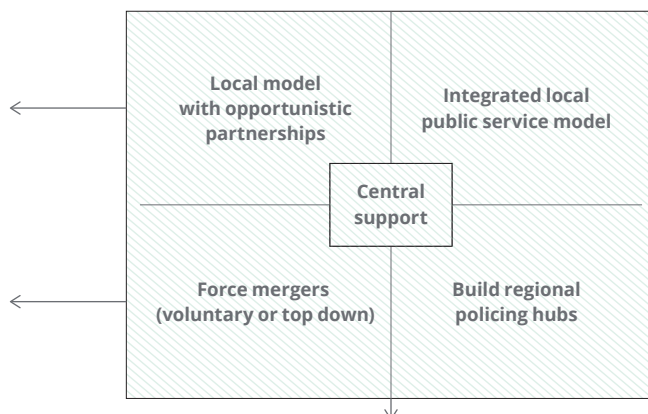
* Deloitte/Cass Business School Research – copyright restricted

Figure 17. Structure and collaboration choices

A simplified view of options

Involves: Tactical partnerships with police, public sector and private sector partners
Most suited to: medium and larger forces without alternatives

Involves: structural reform
Most suited to: smaller forces with politically aligned PCCs



Involves: Sharing capabilities and assets with other local public services
Most suited to: city regions with integrated local public service governance

Involves: reallocating capabilities and funds to existing regional hubs, and strengthening democratic accountability
Most suited to: small and medium sized forces

Involves: choices about scale, scope and governance of national support capabilities but strong case for setting finance of critical national programmes on a firmer footing

Conclusions



Conclusions

Making choices about so many vast, complex and interrelated topics is clearly daunting. But there are many reasons for optimism that society and policing will adapt to rapid societal and technological change, and the arrival of the fourth industrial revolution and linked societal shifts.

British policing has, after all, dealt with similar shifts previously – the advance of electric power and mass production that reshaped society in the early twentieth century (the second industrial revolution), and the arrival of computing and the digital revolution that has been occurring since the middle of twentieth century.

The future of policing can be one that harnesses, clear thinking, data, person-centred design and cyber-physical systems to deliver on the police mission. It can build on the best qualities of British policing and enhance policing's connection – with the communities it serves, the individuals, charities and businesses that can contribute so much to public safety, to the wider criminal justice system and public service partners. It can develop the new capabilities it needs, learning from leaders in policing in the UK and internationally, and other sectors and industries.

Making a success of Policing 4.0 requires the work to start now, however. This report captures some of the insights and ideas of UK policing's leaders and adds some perspectives from our own experience. But it is up to everyone involved in policing to ensure that policing protects its best qualities while being ready to reinvent itself for a new age.

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Notes



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Designed and produced by The Creative Studio at Deloitte, London. J16316