The Fifth Cityforum Digital Policing Summit

Capability, Capacity, Confidence

A summary report following a round table discussion

Tuesday 12th November 2019
Amazon Web Services (AWS), 1 Principal Place, Worship Street, London EC2A 2BA

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Foreword

As ever it is a pleasure and privilege to have chaired the Fifth Cityforum Digital Policing Summit.

My thanks go to those who draw such high-quality presenters, watched by a high-quality audience that generated challenging and progressive debate.

This paper truly captures the breadth of the day that questioned that so critical aspect of personal capability - the most expert tools in inept hands are worthless. It progressed to consider the environment in which we are seeking to deliver these tools with the complexities of public sector and private sector governance, the speed for decision making, the number of decision makers and ultimately the uncertainty of funding.

And still out of the maelstrom the day concluded by highlighting those very expert tools that are being developed for what will be an adept workforce.

Giles York
Chair, Digital Policing Board

Introduction

Enabling safer communities in a new era of complex demand.

For the third year we are pleased to sponsor this report to positively encourage debate and knowledge sharing around digital transformation.

The police service is operating in a new era of complex demand with rising terror threats, a growth in cybercrimes, an explosion in digital evidence and the growing need to protect the most vulnerable in our communities.

Technology can present solutions to many of the challenges faced. Indeed, since we first sponsored this report, many positive steps have been achieved towards collaboration and technology adoption.

However, increasing volumes of data are putting rising pressure on call takers having to manually check multiple, disparate systems and data sources, acting as human integrators which may lead to inconsistent application of risk-based prioritisation. Platforms are siloed and create inefficiencies and potentially multiple points of failure. Point products with independent life cycles are increasing integration complexity and cost.

To meet the need for faster and sustainable change Motorola Solutions has created the first and only mission critical ecosystem built for emergency services to provide the technological foundation for Safer Communities. Its platforms bring together mission critical devices and infrastructure, video security and analytics and the Command Center Software end to end applications suite. All supported by service offerings to keep technology performing at peak, ensuring everything is current and secured against cyber threats.

Having the right technology is not, in itself, a complete answer to the issues that the police service faces. However, having the right partner, and access to the right technology will go some way towards creating the solutions that will help us all.

Motorola Solutions is working with forces in the UK now, helping them to effect the technology transformation that we must all embrace in order to remain relevant and effective.

Motorola Solutions is pleased to have sponsored this report to positively encourage debate and knowledge sharing around digital transformation. With over 90 years experience of supporting the public safety community internationally more than 50 years history with the emergency services in the United Kingdom, we believe we are best placed to help meet evolving public safety needs. To find out more about our solutions contact Fergus Mayne, fergus.mayne@motorolasolutions.com

Fergus Mayne
UK Country Manager, Motorola Solutions

Visit us at www.motorolasolutions.com/ukpublicsafety

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Fifth Digital Policing Summit – Capability, Capacity, Confidence

'Technology is a queer thing. It brings you gifts with one hand, and stabs you in the back with the other' (CP Snow)

'….The recent rapid development of technology means it plays a significant and central part in almost everything we do. Policing must embrace this new world and adapt to the new threats and opportunities it presents for 21st century policing.

The internet is changing the way the public are using technology; the ways they want to engage with policing and their expectations of the services they wish to receive…..'*

The Fifth Digital Policing Summit was held in East London on a wet blustery day in November 2019 to review progress on the digital ambition set out in Policing Vision 2025. The focus was on practical delivery questions including

- Delivering a 'one-system' approach

- Implications of the promised uplift in policing numbers

- Delivering real benefit to the public from digital

- Data sharing and public confidence

- Innovation and technological disruption

Closer collaboration between forces is bringing benefits

From the speakers there was optimism that closer collaboration between forces is bringing benefits to policing technology in England and Wales, but not fast enough. Information Technology (IT) is still immature and holding policing back. The planned increases in police numbers should provide a spur and an opportunity to increase the pace, to change the culture and to make greater public impact.

Policing structures in England and Wales do not encourage quick or centralised national decision-making. But a process of 'survival-of-the-fittest', incremental improvements and convergence on core systems means that the majority of forces in England and Wales now use interoperable versions of Niche or Northgate for records management. Data quality and a multiplicity of ageing legacy systems are continuing challenges and a drain on resources. The Information Management and Operational Requirements Coordinating Committee (IMORCC) has a key role in providing

* Policing Vision 2025 hhttps://www.npcc.police.uk/documents/Policing%20Vision.pdf

coordination and driving the national strategic direction endorsed by Police Chiefs. Decision-making needs to be faster and forces must stop hoarding sovereignty, but still be consistent with principles of subsidiarity – i.e. decisions should be taken, and things done at the most appropriate level (local, regional or national). Some still say that the 43-force model is unworkable, and that more centralised direction is required to achieve transformation in the use of technology. The opportunities are visible, but data driven policing is still in the foothills.

The new post-Millennial generation will have expectations of employers and their technology

The promised uplift of 20,000 police staff means recruiting more than 50,000 new staff over the next three years to keep pace with losses from the workforce. To put this in perspective in four years-time about 40% of staff will be people not currently in policing. This is a 'once in a lifetime' opportunity to change culture and to build a different, more diverse, and more contemporary mix of technology and communication skills. It is essential to get the skills mix right. There is a new post-Millennial generation knocking on the doors of employers (the 'iGen'). As they join, policing newcomers must be equipped with modern, effective and user-friendly technology. Procurement methods may need to change. The Accelerated Capability Environment (ACE)[†] in the Home Office has shown that capability can be developed rapidly (typically within 12 weeks) to deliver early impact. Use of pilots, testing and iterative development within safe environments means ideas can be pursued quickly and with agility. The safe and trusted collaborative environment provided by ACE could also provide a model for greater engagement with big data companies and academia to investigate other forms of collaboration in data driven investigation. But procurement at scale remains chronically slow and is perceived to favour incumbents. The culture and incentivisation of procurement departments needs to change to encourage them to join the revolution rather than find ways to slow it down. Policing also needs help to become a more intelligent client, and to learn to work more effectively with suppliers so that they understand better what policing is trying to achieve and can deliver shared outcomes within long term strategic partnerships.

Discussion of policing's use of technology & data must take place within an ethical framework & with the broad support of the public

Ethics and the need for public trust and support underpinned the discussions of technology and the use of data. Physical policing presence and visible action remain important for public confidence. Policing by consent and with the support of the public are as current and important in the digital era as when first captured in Peel's principles nearly 200 years ago. But there is

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† Accelerated Capability Environment (ACE); https://www.gov.uk/government/groups/accelerated-capability-environment-ace

substantial scope for improving the on-line presence and visibility of policing, and to build public understanding and acceptance. The law provides the outer boundary for what is permissible, but the legislative framework is struggling to keep up with changing needs and technologies. The Computer Misuse Act dates from a time when computers were a rarity in public life.

'But change is law and no amount of pretending will alter that reality' (Socrates)

Data & analytics can make policing more efficient as well as more effective

Data and analytics can be the 'golden keys' to unlocking efficiency and effectiveness in policing. The public surely expects technology to be exploited for public safety and might be shocked by the reality. They also expect there to be appropriate safeguards and oversight, and failures of technology will attract criticism. The Soham murders in 2002 illustrated the fatal consequences of inability or failure to share information. Modern technology including artificial intelligence makes it possible to use data to intervene earlier to protect the vulnerable and to identify offenders. Data can be federated and democratised (made available to all who need it, wherever and whenever they need it). Apps available to staff in some forces are bringing effectiveness and efficiency gains. Interventions can be earlier and better directed leading to improved public benefit and safety; and the 'digital twin' provides real-time information on staffing and resources. Automating processes can release staff time to more productive use. In some cases, the technology is also leading to improved data quality and highlighting training needs. It remains important, however, for to public confidence that in its operational use the technology is seen to be augmenting or assisting, rather than displacing human decision-making.

Caution about the pace that is achievable

Whilst technology has the potential to bring much increased public benefit, its introduction is rarely without risk, particularly if the ground has not been adequately prepared with users and with the public. There was caution, therefore, from policing about the pace that is achievable with new technologies and capabilities. They need to be measured against legal provision, but legislation struggles for currency as technology evolves ever faster. And there is an absence of a digital ethics framework and fully independent process for ethical review.

Facial matching technology has led to scores of arrests and contributed to public security and safety. But whilst appearing to have broad public support it has also been subject to legal

challenge. Public consent is more readily achieved for the specific and the practical than for the abstract. And it is precious; it can be quickly lost and only slowly regained. This would be a good time to start a conversation intended to educate the public and policy makers about the benefits of technology and data, and about the safeguards and constraints on its use. Government has hinted at support for this. Codes of practice exist, and oversight is provided by regulators – but the regulatory space is crowded, complicated, confusing and even a touch competitive.

More needs to be invested for the longer term

Calls for a public dialogue are not new, but nor is it a straightforward thing to achieve. How to obtain greater insight into public attitudes, and to judge appetite and expectations for technology might be a topic for a conference in itself. There is experience to be gained from other public services including the NHS. Mistakes in the use of data or technology become news; long term benefits and gains may be less visible or just taken for granted. The public assumes, probably, more police use of technology than is actually the case. There is information available through Force Management statements, the reporting of the Inspectorate, research and other forms of public consultation. But there is little evidence thus far of ministerial or political interest in promoting the debate about the potential benefits to public safety, and the balance of risk to liberty and privacy.

'…the police need to invest for the longer term, particularly in technology, to become more efficient. It is essential that the police are given the means to do this. For example, body-worn video, fully-functional hand-held mobile devices, facial recognition and artificial intelligence, and the connected systems and infrastructure to support them, are all things in which police forces must invest for the long term….'[‡]

It is now 17 years since the Soham murders but still there are difficulties in sharing data seamlessly across force boundaries because of a patchwork of different capabilities, systems, standards and technologies. The annual State of Policing Report (extract from 2018 report above) by the HM Inspectorate of Constabulary and Fire & Rescue Services (HMCFRS) has reported regularly on the need for better data sharing and use of technology. Achievement of interoperability and common standards requires some pooling of sovereignty across the 43

‡ State of Policing 2018 https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/state-of-policing-2018.pdf

forces in England and Wales. This could be achieved through some form of binding qualified majority, as proposed by the Inspectorate in its draft Network Code.

'Let him who would move the world first move himself' (Socrates)

The 'digital exhaust' of criminality can be exploited for surveillance & insight

On the investigative side things are also changing. Over the last seven years policing has built its capability to deal with serious and organised cyber-crime to the point where there are over 1000 people working in forces, Regional Organised Crime Units (ROCU) and at the National Crime Agency (NCA). This means more investigations, but more is also being done to prevent digital crime and to protect people and organisations and reduce its impact. On a pessimistic view, end-to-end encryption, 5G, the internet of things, block-chain, artificial intelligence and the dark web all increase the 'attack surface' and threaten to make criminality easier and investigation more difficult. Others take a more positive view. It is possible to exploit the unavoidable and increasing quantity of digital data that criminals generate about their private lives and activities (their 'digital exhaust') to provide effective surveillance and insight, and to give digital the edge over traditional means of surveillance. Mapping digital behaviour and associations can reveal hidden patterns and support intervention and investigation. Data can also be used internally to improve police efficiency, and to strengthen training and accountability – 'these blue data innovations mirror the surveillance technologies developed to police society, including crime mapping, heat lists, real-time monitoring, data mining, probabilistic suspicion, and predictive targeting'.[§]

'The only good is knowledge and the only evil is ignorance' (Socrates)

Problems need to be understood before they can be solved

Technology is changing the world and Policing has much to learn from the mistakes and successes of other service organisations in the UK. Advice from other sectors includes the avoidance of innovation theatre, magical thinking and attachment to shiny new equipment which can all create unrealistic expectations. Introducing new technology that does the job less well than previous methods, on the premise that it will get better, is a path

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[§] **The Rise of Big Data Policing: Surveillance, Race, and the Future of Law Enforcement;** Andrew Guthrie Ferguson 2017

of doom (the 'march of progress' fallacy). There is no better way to discourage the workforce and to lose public trust than to over-promise and under-deliver; but ambition also is important. It is a reminder of the obvious point (but sometimes overlooked) that a problem needs to be understood before it can be solved; and it must be possible to explain in understandable and measurable ways how the proposed answer will solve the problem. Things do not have to be new or different. The answer to some problems may lie in the data that is already available. ANPR data could be used more effectively to tackle County Lines and possibly other forms of crime. Overall, success requires effective digital leadership who understand enough about the digital world. And it requires persistence and courage to shift the less visible part of the iceberg below the water, which represents the culture, values and resistance to change of those engaging with the technology.

There are lessons for policing from other service sectors. Some such as banking spend many times per member of staff what policing spends – but do not always get it right. Innovation can become detached from its context and encourage magical thinking, where heroic assumptions are made about the benefits of a technology. It is not unknown for systems to be introduced that do the job less well than their predecessors on the premise that it will 'get better'. This will demotivate users. Good decision-making in technology as in anything else, means getting the basics right and assuming nothing – recognise and understand the problem, use the evidence and explain how the proposed solution will solve the problem. In some cases solutions may lie in data that is already collected and held. New is not necessarily better; and some technologies like blockchain may provide solutions to problems that have yet to be identified.

'Excellence is never an accident. It is always the result of high intention, sincere effort, and intelligent execution; it represents the wise choice of many alternatives – choice, not chance, determines your destiny' (Aristotle)

A Cityforum Summit

Fifth Digital Policing Summit – Capability, Capacity, Confidence

12 November 2019
1 Principal Place, Worship Street, Shoreditch, London, EC2A 2FA **Agenda**

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Chaired by: Chief Constable Giles York Sussex Police; *Chair* Digital Policing Board NPCC

09:00 – 09:10   **Welcome:**   Mr Neil Beet *Business Development Manager, National Security & Public Safety* AWS
            Ms Veronica Scott *CEO* Cityforum Limited

09:10 – 10:45   **Session One:**   Delivering a one system approach in response to digital – how do we architect this for the future? Are there implications for the 20,000 workforce uplift?

            Mr Martin Hewitt *Chair* NPCC
            Commissioner Ian Dyson City of London Police; *Chair* IMORCC
            Chief Constable Peter Goodman Derbyshire Constabulary; *National Lead Serious & Organised Crime & Cybercrime*
            Ms Katy Bourne *Chair* APCC; *PCC* Sussex Police
            Mr Allan Fairley *UK Public Safety Managing Director, Health & Public Service* Accenture

            Followed by a round table discussion

10:45   **COFFEE**

11:00 – 12:45   **Session Two:**   Understanding and exploiting the real benefit of digital for public benefit – in what areas, how far and how fast? What is needed to build a framework to share data so that it is accessible to those who need it while maintaining public confidence?

            Chief Constable Andy Marsh Avon & Somerset Police; *National Lead Bodyworn Video & International Policing*
            Chief Constable Matt Jukes South Wales Police
            Sir Thomas Winsor *Her Majesty's Chief Inspector of Constabulary* HMICFRS
            Mr Stephen Mold *PCC* Northamptonshire Police; *Chair* Police ICT Company

            Followed by a round table discussion opened with comments from Mr Wayne Parkes *National Enabling Programme Director; Chair* National Police Technology Council and
            Mr Paul Byrne *Chief Product Officer* Capita

12:45   **LUNCH**

14:00 – 15:50   **Session Three: Innovation, technological disruption and delivering effective solutions to real problems**

Guest speech:
Innovation Labs as Innovation Theatre
Mr Martin Walker *Banking & Finance Director* **Center for Evidence-Based Management**

Followed by comments from:
Ms Hacer Evans *Director Digital Policing Programme* **NPCC**
Ms Alex Cummins *Head of Innovation* **Law Enforcement Team, Home Office**
Mr Simon Clifford *Director of Digital and Data* **Police ICT Company**
Mr Simon Christoforato *CEO* **Vivace**

Followed by a round table discussion with Mr Charlie Llewellyn *Public Safety Solution Architect* **AWS**

15:50 – 16:00   **Conclusions: Key lessons and actions from the day**
Led by Chief Constable Giles York

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Cityforum has been contributing to public policy debate since 1990. The organisation comprises a small, trusted, independent group of experienced individuals, respected for their intellectual honesty, knowledge and extensive contacts spanning the private, public and not-for-profit sectors at all levels. In addition, it works closely with a large network of associates, providing depth, breadth and genuine expertise and practical experience. They include a former Cabinet Minister, a retired Member of the Episcopal Bench, public service officials, military, police, intelligence and security specialists, senior medical figures and business executives, academics, journalists and publishers. They contribute in London and elsewhere to Cityforum events and to the studies we undertake, including interviewing at all levels in organisations and sectors of interest.

From its inception working with the Bank of England on the Basel Accords; with the Reserve Bank of South Africa on the transition from apartheid; hosting and planning with the Scottish Government the Adam Smith Bicentenary; Cityforum has been active in an increasing number of areas that now include collaborations in security, policing, crime and justice, emergency services, critical national infrastructure, cyber, privacy, health and social care, transport, financial services, regulation and energy.

It researches and publishes reports and develops and hosts events in the UK and, where invited, around the world. As part of its bespoke advisory and strategic guidance service the organisation also acts as a 'candid friend' to senior public-sector executives, and undertakes studies and reviews, providing sound impartial advice and specialist judgement to assist in meeting the enormous challenges faced by the public service today.

With over 25 years shaping strategic thinking, building understanding and adding value within and between diverse groups, the organisation has a proven track record. Its highly regarded round table discussions and smaller conclaves are well known both for bringing together an enviable mix of decision makers and practitioners and for stimulating new thinking in response to some of the most difficult contemporary public policy challenges.

Cityforum has a particular interest in working with the police and holds three or four Round Tables a year on strategic, technological, human resources, value for money and strategic communication questions affecting the service. It also undertakes specialist advisory and monitoring work for individual Police and Crime Commissioners (PCCs), and Chief Officers. This has been particularly useful when PCCs require studies to be undertaken by a seasoned group of specialists who operate methodically and quickly, and have particular skills in interviewing at every level in the organisations requesting assistance. Its reports are succinct and written in readable English rather than in management speak loaded with acronyms.