Digital policing powered by analytics:
Actionable public safety insights
Unlocking information

Big data is disrupting all that we do.

According to a vast majority of survey respondents (89 percent) big data will revolutionize operations the same way that the Internet did. This makes analytics—the ability to discover, interpret and communicate meaningful data—a priority. For policing and law enforcement agencies, there are compelling reasons why they must rapidly manage and interpret increasing volumes of data more effectively.

Officers need accurate and timely information to enable real-time decision making in the field. Police agencies must keep track of citizen feedback to help build trust and confidence. And the right data at the right time enables intelligence-led policing, where officers are deployed proactively to help prevent and detect crime and make the most of critical resources.

To address these urgent demands, innovative policing and law enforcement agencies are recognizing the benefits of a single, scalable analytics platform that can enable early intervention and empower officers. Using this analytics platform approach, police agencies can offer a better service to citizens and equip frontline officers with more intelligence. They can combine old and new data to not only tackle crime today, but also anticipate and prevent crime tomorrow. Importantly, by adopting a analytics platform which is technology agnostic they can keep pace with an increasing tsunami of data, adapt to the changing nature of digital technologies, be flexible for the future and stay one step ahead of crime.
90% of global public service technology leaders are aware of advanced analytics. Of those, 71% are either piloting or implementing projects.\(^2\)
Many police departments are wrestling with disparate historical IT systems which contain vast amounts of untapped data and powerful insights which remain hidden, due to a lack of integration. For data to be converted to actionable insights, police and law enforcement agencies must overcome the following data challenges:

- **Fragmented data:** Internal data is highly siloed—even more so when it comes to using the data held by partners. Gaining a clear picture of a situation requires a largely manual time-consuming and labor-intensive process across multiple systems. Inundated with terabytes of data, officers are wasting time seeking out or processing information when they could be employed out in their communities.

- **Auditable data:** Without a clear and established audit trail, police departments are unable to track whether an officer followed the right protocols when making key decisions.

- **Accurate data:** Officers need to be confident that they have the right data, delivered at the right moment. Poor data quality, such as incomplete or duplicate instances of names or addresses, can create delays and hinder effective police action. Put simply, if officers do not have confidence in the data, they will not use it.

- **Timely data:** Even good data is of little use if it is not timely—and easy to interpret for officers on the front line. Due to the laborious process of compiling data, there is a risk that critical information is not available when decisions are necessary, such as responding to a domestic violence incident without knowing the location’s history. In turn, this could backfire on officers, forcing them to make decisions in an environment of incomplete information, and potentially risking the safety of officers and other citizens.

An analytics platform can draw on and interpret the right information in real time, enhancing the management of incidents and improving officer accountability and safety. Such a platform brings together information sources to provide frontline officers with a single view of the truth and the right intelligence, awareness and support to resolve incidents.

In today's digital world, data is multi-dimensional and affects all aspects of public safety. Police and law enforcement agencies need to collaborate and share data with other agencies while managing their resources more effectively. Officers need to easily integrate and analyze all types of data: text, images, videos, audio, sensors and other unstructured data and combine their own with that gathered from both open and partner sources. Citizens want to engage with the police—a convincing 96 percent of surveyed citizens said the public should play a role in police services—and they expect the police to be armed with the knowledge to tackle crime—79 percent said they want digital interaction as well as face-to-face.
What is an analytics platform?

An organization-wide analytics platform consolidates, interprets and manages data end-to-end from multiple police and law enforcement agency and partner source systems onto a single platform, in the cloud or on-premise. The ability for this platform to be technology agnostic is critical, to enable it to combine the right technologies to meet the agencies needs and to be flexible as technologies change over time. A single analytics platform can combine, manage and interpret data from multiple sources, including law enforcement systems, sensors and video, and provide real-time visualization to improve officers’ understanding and management of their operational environment.

Who benefits from an analytics platform?

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<tr>
<th>COMMAND</th>
<th>OFFICERS</th>
<th>THE PUBLIC</th>
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<td>🚒 Collects and analyzes information, helping to support faster and more informed decision making at every level.</td>
<td>📱 Real-time delivery of information and actionable insight via mobiles or handheld devices for better frontline intelligence.</td>
<td>🗺️ Highlights geographic crime trends to help better understand where resources are needed.</td>
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<td>📝 Audit trail of all interactions supports more effective policing, establishes best practices and improves officer accountability.</td>
<td>📜 Comprehensive search across all data sources means complete and high-quality data that inspires confidence and delivers insights at speed.</td>
<td>🎨 Understands citizens’ contact history and needs, enabling the police to provide a more personalized response.</td>
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<td>🎯 Improves agency interoperability through one integrated view of the information for a situation or problem.</td>
<td>📊 Combines and interprets all data types, structured and unstructured, for a single, 360° view of an incident.</td>
<td>📻 Provides predictive analytics to better understand emerging threats and risks, enabling citizens to be warned and proactively alerted.</td>
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Three powerful outcomes

In an Accenture survey, 90 percent of global public service technology leaders said they were aware of advanced analytics and predictive modeling. And of those that were aware, 71 percent were either piloting or implementing projects. Big data is shaping our digital cities of the future, helping them to use the data it captures as a resource and an asset to better serve citizens and support new job creation. In Singapore, advanced analytics has been used in the government’s Safe City program to deliver meaningful insights in real time, enabling a fast and informed response. Despite the benefits of these projects and positive analytics pilots in policing, police agencies are lagging when it comes to fully exploiting data. In an Accenture United States Police Chief Survey police leaders cited the need to better use analytics as a priority, but felt they lacked an understanding of how to use analytics effectively to drive their operations.

Using an analytics platform approach, police departments can run one integrated solution to consolidate, analyze and understand all their data, from any source, format or location with extreme speed, security and scale, using larger data sets than in the past to help agencies to:

**Intervene early**

To identify officer activity outside of peer group norms and build trust and confidence in the police department. In this way, police leaders can proactively address potential issues, inside and outside the department, before they become actual problems. For example, the Seattle Police Department is implementing an analytics platform to make data driven decisions based on analytics insights and bring the command staff’s attention to incidents, cases and complaints against officers. The platform helps to consolidate multiple source systems and analyze data pertaining to police calls and incidents, civilian interactions, use of force incidents, administrative processes, and officer training.

**Enable officers**

To help predict crime patterns and better identify the locations where precious resources are most needed using new technologies. Citizens welcome the use of digital technologies that are making it possible for the police to use analytics to solve crimes. More than 80 percent of citizens said they thought advanced digital tools—such as mobile devices, wearables, predictive tools, CCTV and identity devices—can support police work. In the United Kingdom, West Midlands Police are undergoing a digital transformation of their operations including the introduction of mobile technologies to support frontline policing efforts and to enable officers to increase the time they spend on patrol and in their communities.

**Protect citizens**

By better understanding potential hotspots and identifying vulnerable people to prevent them from being drawn into criminality. For example the London Metropolitan police piloted predictive analytics technology to identify gang members most likely to violently offend across 32 city boroughs. Although the software can be applied to other crimes—such as burglary or domestic violence—by simply changing the algorithm, the goal of this project was to provide the United Kingdom’s Metropolitan Police Service with an unprecedented level of insight and intelligence to help reduce gang-related crimes in the city. In France, local police officers used a video analytics platform to detect and assess in real time far more incidents at a street market in Lille which sees the population rise from 230,000 inhabitants to more than two and a half million people in one weekend.
Discovering data

Information is the lifeblood of good policing, but with disparate systems and poorly integrated sources, information is being hidden, or worse, lost. Police technology must be driven first and foremost by the needs of people, whether the officers themselves, members of the public or criminals. Using a flexible platform to combine sophisticated data integration and advanced analytics capabilities with a people-focused approach, police departments not only have access to the reliable information necessary to make informed, data-driven decisions, but also they can adapt to the changing needs of public safety planning and operations for the benefit of all.

"An integrated platform will enhance police operations and promote accountability. Important data relating to all aspects of policing will be captured and analyzed efficiently. This will improve police effectiveness and bolster public confidence."

Kathleen O’Toole
Seattle Police Chief
About Delivering Public Service for the Future

What does it take to deliver public service for the future? Public service leaders must embrace four structural shifts—advancing toward personalized services, insight-driven operations, a public entrepreneurship mind-set and a cross-agency commitment to mission productivity. By making these shifts, leaders can support flourishing societies, safe, secure nations and economic vitality for citizens in a digital world—delivering public service for the future.

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1. Source: Big Success with Big Data, Accenture 2014, 1,000 respondents from 19 countries that had completed at least one implementation were surveyed. https://www.accenture.com/us-en/_acnmedia/Accenture/Conversion-Assets/DocCom/Documents/Global/PDF/Industries_14/Accenture-Big-Data-POV.pdf

2. Source: Smart move: Intelligent technologies make their mark on public service, Accenture 2016. The survey included more than 774 IT public service technology leaders in nine countries: Australia, Finland, France, Germany, Japan, Norway, Singapore, the United Kingdom and the United States. https://www.accenture.com/us-en/insight-ps-intelligent-technologies


