



Enabling Data for Modern Law Enforcement: Better Efficiencies and Effectiveness

In the digital era, law enforcement and public safety agencies have access to volumes of valuable data: information on operations, locations and trends derived from service calls, patrol reports and more. Such data can improve law-enforcement efforts, enhance public trust and strengthen citizen safety — when agencies know how to accurately collect and analyze it.

Modern digital tools can aid in this effort. They can help agencies utilize data from a multitude of sources to identify crime hotspots and build on community policing initiatives. With modern data-management capabilities, agencies can predict trends and stay one step ahead of criminals and other public safety threats.



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Challenge: Data Is Hard to Find, Use and Share

A number of challenges may prevent law enforcement from using data effectively.

- **Data quality:** “Data can be corrupted. It can be tremendously duplicated. It can be incomplete,” said Michael Anderson, Chief Strategist for Public Sector at Informatica, whose technology solutions enable the transformative power of data. To improve public safety, “you’ve got to have data quality,” he said at a recent [virtual event](#).
- **Data governance:** Governance is key to “setting those guardrails and addressing ethical issues” that may arise, said John McMahon, Deputy Chief and Chief Information Officer for the Los Angeles Police Department. Without governance mechanisms, the integrity, availability, usability and security of data is imperiled.
- **Data-sharing:** “Being able to share this data is fundamental to the government’s role in protecting its people,” said Matthew Melton, Senior Business Development Manager for Justice and Public Safety at Amazon Web Services (AWS). Yet technical and legal barriers complicate data-sharing across systems and agencies, making it difficult to achieve a comprehensive, multi-jurisdictional view.

Solution: Modernized Data Management

To make better use of data, agencies can leverage modernized tools and capabilities, including:

- **Cloud-based management and governance:** With advanced cloud data management and governance capabilities, agencies can integrate data and get a 360-degree view across departments, in both on-premises and multi-cloud environments. Incoming data can be readily ingested and analyzed for better investigative insights.
- **Artificial intelligence:** Public safety agencies “are faced with data coming at them from all different sides: unprecedented amounts of digital evidence, digital data, sensor data,” Melton said. AI and analytics empower law enforcement to gain real-time situational awareness across a vast inventory of smart-city applications and infrastructure data.
- **Automation:** Given the massive volume of data, “you shouldn’t have to sort through all that manually, because then you spend 80 percent of your time just trying to find the information,” Anderson said. With automation, agencies can manage the data deluge more effectively and generate investigative insights faster.

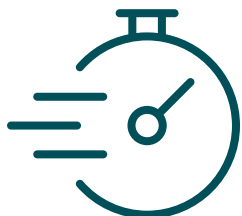
“When the officers can get that information in real time and make real-time decisions ... that is how policing in America is going to have to operate in the future.”

– John McMahon, Deputy Chief and Chief Information Officer, Los Angeles Police Department



How to Get Started in Modern Data Management

Modernized data management tools can elevate the public safety mission and make agencies more proactive. Several key best practices help agencies make effective use of these game-changing data capabilities.



Use real-time information:

Speed-to-decision is crucial in law enforcement: Rapid insights drive timely action, and modernized tools offer the real-time data access required to meet that goal. With advanced cloud data-management and automation capabilities, agencies can connect the dots faster, integrating people, location, behavior and other data to provide context and a complete view of information — as it happens.



Automate discovery and data preparation:

To make effective use of data, law enforcement agencies need the ability to validate and enrich it. They need to standardize and catalog all data — including structured data, such as information contained in spreadsheets, and unstructured data, such as PDF documents and social media posts — with context and glossaries. Where legacy approaches make this tedious and time-consuming, agencies can leverage AI and machine learning capabilities to automate the process.



Use cloud-based modern data architecture:

Modernized data solutions allow agencies to rapidly ingest petabytes of data and integrate data to and from files, databases or streaming sources. By taking advantage of this opportunity to ingest and cleanse data at scale, agencies can support new, complex integration patterns and achieve high-performance, reliable and near-universal connectivity for mission-critical processes. A modern data architecture allows agencies to meet increased demand during emergencies more cost-efficiently, and it empowers them to better collaborate.



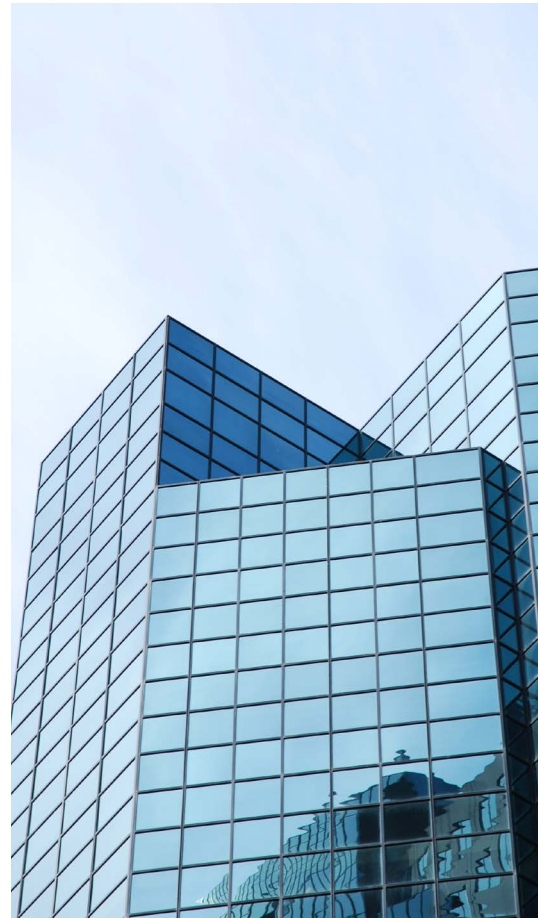
Establish a single source of truth:

In order to support effective data governance for mission-critical collaboration, agencies must have a single source of truth. To establish that, they can tap the power of a modernized data solution to master and relate data from an array of sources — combining transaction, interaction and other citizen data types. This allows agencies to manage billions of records across all sources in both on-premises and multi-cloud environments.

Case Study: How Data Supports Effective Public Safety

To understand how data management works in action, we can consider the following use case for a large city police force.

- **Challenge:** Like many law enforcement agencies, this department relies on manual processes, with written crime reports using word-processing software. That makes it hard to synthesize the data and make it available for analysis in support of more effective operations. When data does get digitized, it goes into on-premises systems that are complicated and costly to maintain.
- **Solution:** The department implemented Informatica's Intelligent Data Management Cloud (IDMC), hosted on AWS. It used the platform to make data visible and available, tapping the speed and scale of cloud computing to leverage AI in support of automation.
- **Outcomes:** With a modernized platform, the department is on the road to being able to push out relevant data — in seconds — to key stakeholders in a readily digestible format. The system can surface trends in real time and get those insights out to the people who need them most: police on the street. All this will speed decision-making and enable the department to meet its public safety mission more proactively.



How Informatica and AWS Help

Informatica's Intelligent Data Management Cloud (IDMC) platform delivers a single, 360-degree view of crime data associated with a person, place or object. Powered by AI, it unifies and democratizes data to advance mission outcomes. And by hosting IDMC on AWS, agencies can drive better business decision-making, using the power of the cloud to support effective data cataloging, integration, quality and analytics.

To learn more:

Informatica: www.informatica.com/state-local-govt

AWS: <https://aws.amazon.com/stateandlocal/justice-and-public-safety/>



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