

Improve Agency Effectiveness and Reduce Risk with a 360-Degree View of Data

Creating Support for Evidence-Based Decisions with Trusted Data

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#### The Best Decisions Come from Good Data

#### Data is at the heart of decision-making. Good data-data that is accurate, complete, and current-is essential for making wise, effective decisions.

In many government agencies, however, IT infrastructure investment has focused more on tools that use data, such as applications and analytics, rather than on enterprise data management tools that ensure data is of high quality. As a result, these organizations tend to struggle with poor access to data, low-quality data, reduced interoperability, and insufficient scalability to gain value from today's new data volumes and types. They also lack essential data context and the data required for measuring, monitoring, and managing mission performance.

Without the budget or support to update their technology systems, public sector organizations often struggle to meet their mission objectives. Incomplete, incorrect, and disparate views and sources of data make it difficult to gain an accurate assessment of situations, personnel, and services. And some agencies are stymied by lengthy manual processes for collecting, storing, and analyzing relevant data and plagued by inexact, weak analysis.

Too many organizations have only a foggy view of critical data entities—such as agency personnel, assets, locations, and supply chains—and how they evolve over time. Departments find it impossible to gain a complete or trusted view of these data entities or how they relate to one another. For example, military agencies need to know not only which personnel are assigned to each base and unit, but also the family members (or ecosystem personnel) stationed with them. Without both pieces of data and the relationship between them, agencies cannot ensure that proper housing, childcare, and related services will be available to service members when needed. Agencies need a complete 360-degree view of trusted data to:

- Help policymakers and leaders make informed decisions that assist citizens, enable warfighters, and protect and serve the country
- **Support operations,** using data-driven insights that help de-risk the supply chain, put the right people in the right roles at the right times, and decrease costs
- **Provide effective services** that make optimum use of taxpayer dollars and agency resources

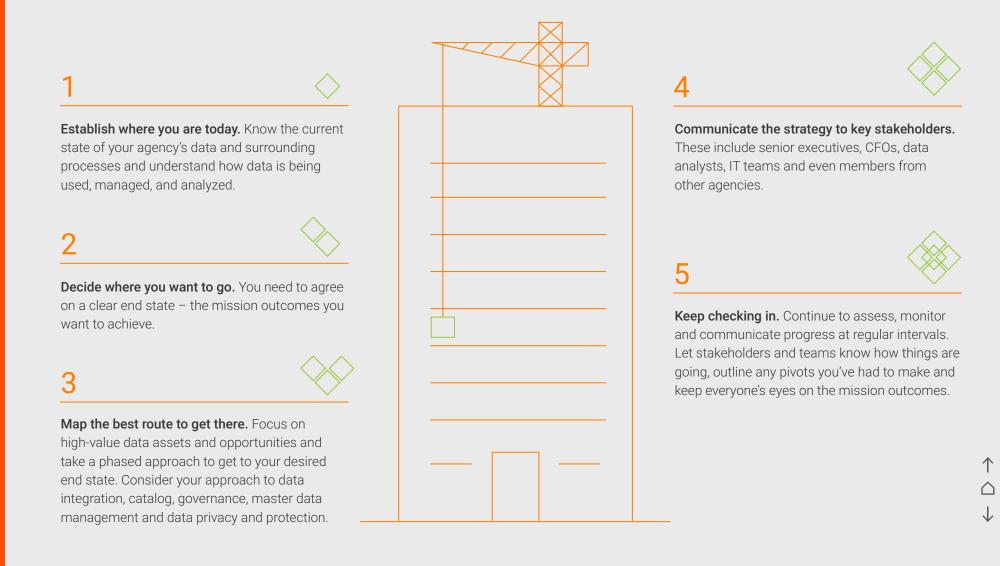
This eBook discusses the master data management (MDM) capabilities needed by business and IT decision-makers in defense organizations and in civilian government at federal, state, and local levels. It discusses how a comprehensive MDM strategy and solution can address the key challenges facing today's public sector organizations, and it offers guidance on the critical capabilities needed in modern data management solutions. This document also reviews primary use cases for MDM technology in real-world agencies.

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# Building the Right Data Strategy

Before we get started, take a quick review of your current capabilities and decide if these 5 steps are part of your current data management practice. They should be.



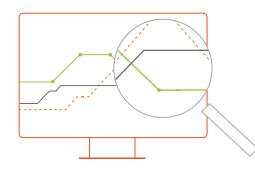
# Modern Master Data Management Unleashes the Value of Your Data

To make better decisions, improve operational support, and provide effective services, agencies are developing a comprehensive master data management strategy. With MDM, operational functions and technology work together to ensure that data assets are uniform, accurate, properly governed, accessible, and accountable.

The right MDM solution can act as the glue that binds agency systems and information together—creating a single source of truth and providing trusted, authoritative, and complete data that is consistent across programs, services, and agencies. It can help you locate, access, and utilize trusted data exactly when and where it is needed. The most sophisticated MDM solutions address the full data lifecycle for multiple data domains—offering data stewardship, data quality, data enrichment, data integration, business process management, and data security capabilities, all driven by embedded artificial intelligence (AI) to enable data insights. MDM technology helps agencies gain:

- A single view of business and mission-critical data—even from disparate, duplicate, and conflicting sources, spanning multi-cloud and on-premises systems—that helps create authoritative knowledge about information assets, including structured and unstructured data
- Trust in their data by providing transparency into data provenance, traceability, and auditability by capturing a record's lineage and history over time
- A 360-degree view of critical relationships that help you identify connections or correlations between people, suppliers, assets, missions, locations, and more

- An end-to-end picture of your master data, including all related interactions and transactions, providing insight into all critical entities in the right context
- Support for all multi-domain MDM requirements, avoiding separate hubs for each domain, which inhibits the ability to master the critical relationships across these entities
- Improved data quality, which provides agencies with accurate, complete, and trusted information



### Key Master Data Management Capabilities

#### When evaluating MDM technologies, look for a solution that incorporates automation and intelligence, helping you:

- Create value quickly and easily with proven methodologies and advanced features. Advanced solutions include AI, machine learning, and graph databases to help manage today's volumes of data at the required scale. Automation, powered by algorithms that learn from IT and business users' decisions, increases efficiency by fine tuning how records are matched and made available across the organization.
- Onboard citizens, organizations, assets, or personnel centrally, with a configurable, business process-driven workflow for agencywide collaboration. This capability should streamline and standardize how you add new people, partners, or suppliers across regions, functions, and agency units while eliminating duplicate, incomplete, and inaccurate records. Seek tools that let you automatically search, verify, validate, match, and merge information

through role-based dashboards, providing a more efficient and secure way to capture, review, and approve new records.

- Standardize and cleanse data to ensure it is fit for use. High-quality data is the foundation for high-quality analytics and AI algorithms. Select an MDM solution that is part of an integrated platform, which offers data quality capabilities that allow you to profile, catalog, standardize, mitigate, govern, measure, and monitor the quality of your data.
- Build more complete records of people, places, and things. Choose a solution that captures consent regardless of channel. It also should offer contact data verification for addresses, e-mail, and phone numbers and data enrichment features to supplement customer information, both at time of entry and on an ongoing basis. You should be able to seamlessly integrate demographic and firmographic data to citizen, supplier, business, and other profiles and manage relevant hierarchies.

The Value Master Data Management Delivers for Your Agency



The power to see past, current, and new data— all in one place—giving the most complete view possible of any person, asset, or entity



The ability to make sense of your data and relate it to the things that count—using embedded AI to turn siloed data into holistic, contextual insights



**Increased compliance with mandates,** with reduced risk and greater value from data



A clear path to trusted data,

which helps public sector leaders make evidence-based decisions

# Key Master Data Management Capabilities (continued)

#### Manage critical information strategically.

Advanced solutions help you consolidate business-and mission-critical data from across your agency, including third-party applications. You should be able to strategically manage data from one location to reduce the amount of bad data throughout your agency. Look for a solution that lets you connect the data to build a view of the relationships between data assets. This insight can also help you improve organizational collaboration and stewardship when managing information across agencies, functions, and regions.

Share the data confidently. Fuel your operational, multi-cloud, and analytical applications—such as those from SAP, Salesforce, Palantir Technologies, Tableau Software, and others—with trusted information about personnel, locations, and supply chains. With accurate, relevant, and governed data, your analysts receive the information they need in the applications they rely on, which helps them deliver a great citizen experience. The right solution can easily share your data across

programs and with other agencies—avoiding hours or weeks of manual data collection, review, and publication.

- Engage with citizens, employees, and third parties more relevantly. Look for configurable, role-based dashboards that will enable teams to easily understand, plan, and engage with citizens and employees. These tools should offer the context users need to deliver a differentiated experience in a single trusted source without having to access multiple systems. For example, an agency-centric view could display a citizen's contact information, status, previous interactions with the agency, relationships, preferences, and next-best actions.
- Identify important relationships visually. A solution should help you understand how citizens, locations, and employees are connected by exposing the relationships among the people, places, and things that matter most to your agency. Your agency will benefit from visualizations and graph-based technologies that aggregate and filter the links

between citizens, workers, other agencies, and other information.

- Explain how things are related to one another. Advanced solutions incorporate AI, machine learning and natural language processing to offer rich context, helping agencies understand what drives mission value and optimal outcomes. This insight can help your agency meet its KPIs.
- Take advantage of an integrated, modular platform. A comprehensive MDM solution requires a strong foundation of data and application integration, data quality, data cataloging, data governance, and data security. And more likely than not, it will also require the ability to master data across legacy and modern technology systems, including multi-cloud and on-premises environments. An integrated data management platform can deliver much greater deployment and administration efficiencies, as well as lower total costs of ownership.

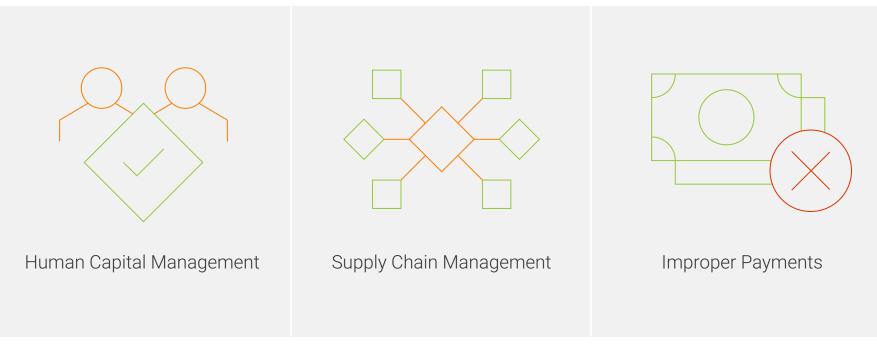
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# Connecting Your Mission Goals to the Data Strategy

Mission Strategy	Processes Affected	Data Strategy Components
Increase decision-making speed and accuracy	<ul> <li>Supply chain</li> <li>Budget</li> <li>Operational planning</li> <li>Talent management</li> <li>Resource allocation</li> </ul>	<ul> <li>Build a 360-degree view of the data</li> <li>Abstract data from applications</li> <li>Develop predictive models for key variables and metrics</li> </ul>
Protect and secure data	<ul><li>Governance, access</li><li>Information assurance</li><li>Policy compliance</li></ul>	<ul> <li>Perform data discovery</li> <li>Support continuous risk assessment</li> <li>Securely share data</li> <li>Detect anomalies</li> <li>Analyze user behavior</li> </ul>
Improve citizen satisfaction with services	<ul><li>Citizen service</li><li>Citizen support</li></ul>	<ul> <li>Create citizen-centric processes designed with privacy in mind</li> <li>Build a 360-degree view of the citizen</li> <li>Mine social data for citizen sentiment for key variables and metrics</li> <li>Make websites easier to view and access</li> </ul>
Improve regulatory compliance	<ul><li>Financial management</li><li>Governance</li><li>Cybersecurity</li></ul>	<ul> <li>Establish a data inventory and enterprise data governance</li> <li>Identify high-value and high-priority data</li> </ul>

# Key Use Cases: How Leading Agencies Use MDM to Optimize Operations

Achieving a 360-degree view of data assets is critical to your agency, because it provides a master record that enables accurate views for downstream operational, analytical, and AI capabilities.



The following sections describe several use cases that require advanced MDM solutions.

#### Human Capital Management

Agencies interact with and handle resources for numerous people—everyone from contractors and retirees to active-duty military personnel and their families. Each person needs services and resources, at the right time and in the right place. For example, military personnel are deployed to various bases, along with their families. Yet some agencies find it difficult to ensure that the paychecks of personnel are delivered to their new location. Others struggle to secure an available spot for children in daycare facilities on the right date. Failing to meet these basic needs creates hardship for personnel and increases the risk of turnover and poor retention.



MDM solutions ensure that the appropriate data is available to support these interactions. The technology makes it easier to associate different types of data with each service member, employee, or citizen—such as geographic location, military entitlements, or privacy requirements. Advanced solutions help agencies know which personnel are rated or certified to operate certain vehicles or equipment. They can also include skills data that allow agencies to efficiently assign skilled personnel where they are most needed.

# Human Capital Management

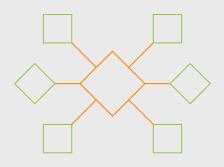


#### Success Story: Defense Agency Supports Powerful Analysis

**Mission:** A national defense organization strives to protect the nation and its citizens by providing global vigilance, reach, and power. To support its mission, the agency collects huge volumes of data to enable precise analysis and rapid decision-making. **Challenge:** The organization was not always able to provide essential mission and business context to its analytics and data science efforts. The agency needed to enable governance and stewardship of its metadata, as well as the ability to document the technical specifications of physical data. It also needed to document the technology specifications of all physical data assets and where they reside. **Solution:** The organization deployed an integrated data platform to provide cybersecure, cloud-based tools that help its users connect, find, share, and learn from agency data. Building on its new data platform—including data governance and enterprise data catalog solutions—the agency is creating a modern enterprise information model that supports ready access to trusted, protected, well-governed, and actionable data.

# Supply Chain Management

Agencies responsible for supply chains must manage master data related to assets, materials, suppliers, transportation and fleet vehicles, and locations. MDM technologies can help agencies reduce manual supply chain management tasks, increasing efficiency and offering new insight into the full value chain. With more accurate, complete master data, these agencies can better reduce supply chain risk, which can be measured by overall spend, performance, and favorable contract terms across programs, locations, and functions. Supply chain issues affect both civilian and defense organizations. For example, civilian safety agencies need to manage processes for prescription drugs or medical devices. In this environment, the entire supply chain requires insight into dependencies and risks associated with a failure to deliver necessary materials or pharmaceuticals. Recent examples of supply chain risk include a lack of available personal protective equipment (PPE) at some medical facilities treating COVID-19 and difficulty securing the supplies and medicines needed to quickly assist localities during the pandemic.



In defense organizations, supply chain issues are critical to support warfighters and protect personnel. Subpar supply chain management can create immediate and long-term problems. For example, a lack of logistical support has left some agencies with excess idle time as parts, skills, and other resources are located to maintain aging tanks, planes, ships, and other equipment. Supply Chain Management

#### Success Story: Federal Health Agency Attains 360-Degree View of Global Supply Chain

**Mission:** A national US agency is responsible for protecting the public health by ensuring the safety, efficacy, and security of products used by humans and animals. To manage the global development and supply of products within an increasingly complex regulatory environment, this agency needed clearer visibility into the lifecycle of every product under its purview, from premarket to post-market and from supply chain to manufacturing and distribution. **Challenge:** The agency faced a significant data management challenge and required a holistic view of a global product supply chain, including manufacturing facilities. The agency has 170,000 regulatory submissions per year, 88,000 firm registrations and product listings, and more than 2 million adverse event reports to keep track of. Any delays could impact the provision of important products to the market.

**Solution:** The agency looked into a data strategy through master data management software that would provide a single, consolidated and reliable view of mission-critical data. Such data could include individuals and organizations, facilities and locations, products and ingredients, and events as well as other key domains. With this strategy, the organization was able to gain a 360-degree view of the global supply chain with a singular, trusted view. This empowered the agency with the ability to trace any potential harm in products, respond to changes in supply and demand more quickly, and ultimately promote and protect public health.

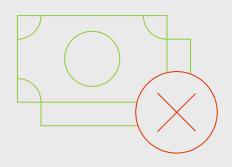
#### Improper Payments

According to the US Government Accountability Office, the federal government issued USD \$175 billion in improper payments in fiscal year 2019. These payments may have been made to the wrong person, in the wrong amount, or for the wrong reason.

By reconciling and reducing duplicate or redundant records, MDM solutions help agencies better control payments, ensuring they are made to the right people at the right time in the right amounts. The technology helps eliminate duplicate records, accounts, locations, and addresses, converging accurate data into a single, authoritative, and trusted record. With the right MDM solution, you can determine the correct recipients, whether for "business-toconsumer" payments in which organizations pay funds directly to individuals, or "business-tobusiness" payments where agencies receive and distribute funds to other organizations.

MDM solutions help increase the accuracy and effectiveness of do-not-pay lists, which agencies use to identify individuals who are ineligible to receive funds. For example, news reports indicated that some funds from the recent CARES Act relief bill were sent to deceased citizens. More complete, precise data and visibility across data sources—such as state death registries and national income tax filings could help prevent such costly errors. Because they offer 360-degree insight into recipient data and the relationships between them, MDM solutions can also improve contract management by preventing contract awards to ineligible bidders and detecting fraud. Federal organizations can gain oversight into payments made to state programs and monitor whether state agencies make proper payments. And states can use MDM solutions to identify contractors prohibited from bidding on work, even when those businesses attempt to hide their relationships by becoming subsidiaries of other firms.

#### Improper Payments

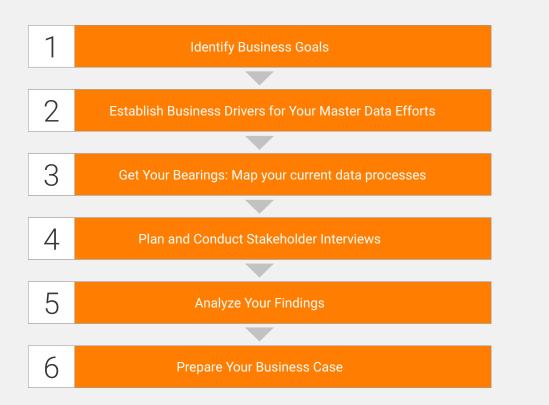


#### Success Story: State Unemployment Agency Reduces Improper Payments

**Mission:** A workforce agency supports, promotes, and improves the welfare of people who earn wages, seek jobs, or have retired from the workforce. The state agency helps businesses, communities, and the state's economy by providing an unemployment insurance program. For laid-off workers, the program enhances economic stability by providing temporary income support. **Challenge:** The agency wanted to reduce the number of improper payments made to individuals and other entities, whether they were made in the incorrect amount, to ineligible recipients, or as duplicates of previous payments. To reduce financial waste and increase program integrity, the agency needed to develop a comprehensive program to reduce improper payments—one that included powerful information technology. **Solution:** The agency used a combination of improved information gathering, standardized communication with program participants, and modernized IT systems to meet its goal of reducing improper payments to less than 10% of total unemployment insurance payouts. The IT enhancements included the use of national databases to check the accuracy of reported wage information, predictive analytics to identify claims with a high likelihood of resulting in an improper payment, and master data management tools to ensure that information is timely and up to date.

# Steps on the Master Data Management Journey

Follow these six steps to get started on our master data management journey:





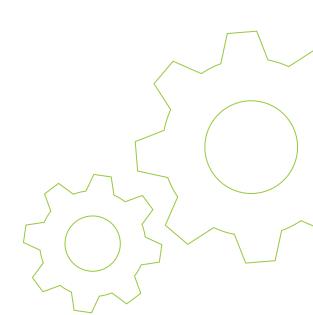
#### How to Get C-level Buy-in for Your MDM Initiatives

Step-by-step guide to planning a master data management strategy and winning executive sponsorship

#### **READ MORE**

# Power Your Agency with Trusted Data

The right MDM solution can help you create a single, authoritative source of data that enables complete views within your agency, across programs, and among other organizations. For many agencies, simply getting started by engaging IT and the business is the key to success. We recommend that you begin developing your master data management strategy using the data and areas of your agency that you know best. From there, you can pursue the concepts of business discovery, profiling, and MDM as a core part of a holistic governance program to operationalize your data.



# Learn More

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For more information on getting started with your MDM initiative, visit us <u>online</u>.

# About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in enterprise cloud data management, we're prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

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