Modernizing MDM for a data-driven business

The way data is collected, stored, analyzed, distributed, and used has undergone a huge shift over the past few decades. The Internet of Things (IoT) continues to expand, technology continues to evolve, and more organizations are utilizing Big Data and cloud applications than ever before. Staying relevant will be dependent on an organization’s ability to leverage data, new applications, and data sources—and a critical component of a modernized data strategy will be implementing new master data management (MDM) capabilities.
The need for MDM modernization

Historically, MDM has been viewed as a back-end hub in the “hub and spoke” architecture, where utility was tightly linked to integration capabilities. However, MDM is being increasingly used to help deliver business value across the customer journey:

Enable quote-to-cash processes with governed product master data to keep up with the pace of new product/feature introduction

Inform pricing/discounting decisions during quoting and/or renewals, based on customer lifetime value, current usage/adoption and past buying patterns across channels

Provide customer knowledge for white space analysis, leading to personalized engagement and cross-sell/up-sell opportunities

Holistic view of customer interactions and NPS scores across products/services, supplemented by sentiment analysis of social media and provided to customer success teams to engage with customers posing risk of attrition during renewals

A modernized MDM platform is also required to enable critical back-office processes such as:

Perform trusted financial and management reporting by offering business units/functions the ability to create, enrich, and approve financial master data and hierarchies (e.g. chart of accounts, cost centers, etc.)

Provide a “clean room” facility using multi-tenant cloud MDM with Big Data storage for analysis of customer overlap and other analytics prior to M&A

Supporting complex regulatory policies that continue to evolve (e.g. GDPR, global trade compliance, denied party screening, etc.)

Enabling the back-office with governed product master data to support product profitability reporting

Provide a common template of master and reference data mappings to support core transformation projects and M&A by insulating downstream processes from upstream system/data changes
In short, modern MDM and its differentiated capabilities can help organizations with:

**Customer Engagement & Experience**
Better engage with customers through real-time interactions aided by relevant and accurate information

**Increased Business Value**
Realize more business value by helping business users make faster decisions through collaboration and visualization

**Operational Efficiency**
Reduce TCO by operating more efficiently with an intelligent and scalable architecture

## Components of a modern MDM platform

Despite significant investments in MDM technology and resources, many companies fail to realize the benefits. This can be a result of many factors, like a data explosion that leads to productivity issues or new business needs that emerge in a digital world. There are specific features that can provide this required functionality and qualify an MDM platform as modern:

**Visualization and Smart Search**
Front-office is becoming more “data aware” and is increasingly engaging in data stewardship responsibilities such as managing customer hierarchies or complex product taxonomies. A highly configurable/intuitive UI and input-based dynamic search capabilities help with business adoption of these tasks.

**Microservices Architecture**
As the number and variety of business capabilities and data domains supported by MDM increases, the case for MDM to be built on a microservices architecture becomes stronger—for example, a reference data microservice can be different from a customer data microservice, both of which can expose different APIs and scale differently or be enhanced without impacting the other.

**Cloud/Hybrid Environment Enablement**
Organizations are increasingly moving to the cloud for various business applications. Hybrid MDM solutions are required to provide interoperability across common cloud platforms in the value chain and on-premise applications. It enables users of cloud solutions to leverage their data and data management assets better and eases the transition to cloud for on-premise-based organizations.

**Business and Governance Process Orchestration**
Business users need to collaborate effectively across the enterprise when it comes to creating and managing master and reference data. This data drives key business processes such as marketing campaigns, pricing, and customer and vendor compliance. Modern MDM capabilities like highly customizable workflows, voting/ranking/chat features, mass maintenance, and machine learning-enabled guided workflows that recommend potential actions to users can greatly enhance productivity.

**Machine Learning and AI**
IT and business functions can gain enhanced operational efficiency and a reduction of operating expenses through automation of traditional data management tasks. Machine learning-driven automated stewardship reduces data management efforts and costs by constantly learning from, and emulating, the actions of a human data steward.

**Richer/Deeper Relationships**
Customer-facing personnel and marketing analysts can explore relationships and get a richer view of a customer’s product portfolio for mass personalization. Understanding complex customer hierarchies is critical in making pricing decisions during deal management. To meet business needs, MDM should be able to handle extremely high volumes on a Big Data platform and leverage NoSQL/key-value stores to provide richer and deeper network relationship views for intuitive exploration.

**Digital Insights**
Business users need to be able to better understand the influences from new digital footprints across social media, blogs and ecommerce sites to get in front of customer issues and engage in real-time market feedback. This calls for an intelligent analysis of customer sentiment from these sources and integrating it back to a Customer 360 portal to deliver the right action at the right point of interaction.
MDM and the cloud

As mentioned, one of the critical elements of a modern MDM strategy is the ability to integrate and maintain data integrity across the mix of an on-premise and cloud application landscape. Leveraging the cloud enables MDM to perform as a nimble hub. It can provide faster business access, collaboration, and the on-demand scalability required to add new cloud sources or data-as-a-service (DaaS) feeds for data enhancement. The cloud strategy should not be underestimated in its importance. It should define the overall MDM modernization strategy and is central to providing better business value and reducing total cost of ownership.

When starting the journey to the cloud, organizations need to take into consideration all the data distributed across business units, regions, applications, data feeds, and data lakes. It’s not always necessary or wise to overhaul all data storage and move it to the cloud, and many organizations prefer to implement a hybrid approach, with some applications and data sets hosted on-premise and others existing in the cloud.

An important component of an end-to-end MDM platform is the ability to manage data repositories, whether in-cloud, on-premise, or in hybrid environments. MDM provides a quick and easy way to find, prepare, cleanse, enrich, master, govern, and protect enterprise data.

Combining MDM with cloud and data lake strategies can drive a wide range of positive outcomes from data professionals and business users, including the ability to:

- **Understand customer needs and patterns in just seconds**, using a graph-based processing engine to match and relate data that delivers a more comprehensive view of customers and other business-critical entities
- **Improve self-service empowerment**, facilitating access to trustworthy data without reliance on IT
- **Maximize extensibility to new data sources**, creating custom metadata scanners for fast and easy access to custom data sources, such as legacy databases or bespoke applications
- **Maximize extensibility to new applications**, supporting a metadata repository for easy access to custom web portals, workflow-based systems, and reports
- **Enable smarter data discovery**, automating identification and classification of business entities
- **Quickly achieve customer 360 view**, reducing TCO by leveraging cloud capabilities
- **Provide automatic concurrency scaling**, meeting fluctuating data volume and computing demands triggered by an increasing number of inbound/outbound interfaces that support various business processes
Modernizing MDM for a Data-Driven Business

Key considerations for MDM modernization

Ten years ago, few could have foreseen the emergence of data lake technologies, the impact of social media, the demand for BYOD (bring your own device) capabilities, or the rise of the “citizen data scientist.” The challenges we will face in the next 10 years are even more unknown, as the pace of change is accelerating. In such an environment, perhaps one of the most critical considerations when thinking about MDM is the flexibility of the platform to adapt and expand.

Whether moving into true enterprise MDM for the first time, consolidating multiple masters due to M&A activity, or considering an upgrade from an older MDM platform, organizations can now take advantage of next-generation capabilities through recent innovations in MDM.

In addition to ensuring that the MDM solution provides the advanced capabilities mentioned, a few points to consider during your modernization effort are:

Define a pragmatic and phased MDM roadmap that delivers incremental business value by moving the solution up the maturity curve (e.g. domains mastered, DQ/integration capabilities, business processes enabled, etc.).

Focus on addressing master data governance roles/responsibilities and business process changes required to ensure that MDM investments continue to deliver expected value once solution is operational.

Assess if the MDM solution integrates seamlessly with enterprise and cloud apps, and with capabilities such as reference data management, metadata management, data governance, and external data providers such as D&B.

Leverage operational metrics and dashboards to monitor data quality trends, policy compliance levels, exception remediation rates, and adherence to SLAs defined for fixing master data specific to transaction processing fallbacks.

Ensure that the MDM solution meets your InfoSec policies and has certifications that include application, data-centric, and cybersecurity controls in place to protect your data at rest and in motion.

Another element of MDM modernization to consider is that MDM initiatives can be daunting in size and complexity, as they can require substantial investment in terms of resources—specifically money, people, and time. Fortunately, MDM software has kept pace, and newer MDM architectures such as domain-specific applications and end-to-end capabilities (those that combine data integration, data quality, business process management and data as a service) have helped lower initial costs. Flexibility in implementation styles can also enable organizations to customize their MDM installation and expand as needed. What was once considered optional is now table stakes for organizations moving to customer-centric, modern digital ecosystems.
The MDM journey with Deloitte and Informatica

Over a decade of experience delivering the industry-leading MDM technology

Deloitte works with clients to provide guidance and assistance across the entire MDM journey— from strategy through execution to managed operations. We can help companies improve business performance and derive value from their data assets by leveraging MDM technology, including Informatica Cloud and Informatica MDM. We differentiate ourselves by delivering MDM solutions that are customized to meet each client’s unique business needs, and we can help maximize ROI from their MDM investments.

Deloitte’s MDM Elevate is an accelerator that augments Informatica’s data management tools with Deloitte’s industry-leading practices and cognitive data management assets. The pre-configured solution allows clients to unlock several benefits that are typically constrained or prohibited. Benefits like the application of big data processing, machine learning, and graph visualizations can be enabled and establish a foundation that makes the total customer view a reality.

Together with Informatica, Deloitte’s MDM solutions are designed to scale and evolve with modern architectures. We help our clients to increase adoption of master data across the enterprise and deliver value directly to business users without sacrificing data security and compliance.

Companies who have employed MDM solutions to support customer centricity initiatives are better able to:

• Create an authoritative, 360-degree view of MDM entities for collaboration and consistency across internal teams, business units, departments, geographies, and ecosystems

• Grow and retain customers, capitalizing on cross-sell and up-sell opportunities with greater personalization and relevance

• Build more robust personas and more precisely segment and target customers, boosting marketing campaign performance

• Improve employee productivity by exposing accurate business entity information and leveraging templates that speed time-to-market and offer operational efficiency

• Reduce the long-term cost of information delivery by optimizing ongoing enterprise data management

• Streamline mergers, realize M&A synergies faster, and reduce risk to reap maximum returns

• Power Big Data analytics initiatives with clean, consistent data to extract actionable information from the data and improve critical decision making

Building a modernized MDM platform to capture the value of marketing data offers IT organizations many benefits, including:

• Enabling a self-service culture of analytics and innovation

• Reducing boundaries and improving collaboration between IT and the business

• Strengthening enterprise scalability and security

• Managing governance and setting strategies for success

• Taking your MDM journey to Big Data and the cloud, and understanding when—and how—to use a hybrid approach
The Deloitte and Informatica alliance

The Deloitte and Informatica alliance combines Deloitte’s experience in information management with Informatica’s industry-leading software. We bring an extensive set of capabilities that involve reporting applications, portals, information delivery, and basic, as well as advanced, analytics—all grounded in a deep understanding of the business issues that drive the industries and sectors we serve.

Our goal is to help companies unlock the value buried deep within their data. With more than 3,000 practitioners experienced in Informatica products globally and a network of member firms that reaches 150 countries, we have the scale, scope, and capabilities to help clients make it happen.

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**Informatica**

Informatica is entirely focused on data because the world runs on data. Organizations need business solutions around data for the cloud, Big Data, real-time and streaming data. Informatica is the world’s number one provider of data management solutions in the cloud, on-premise, or in a hybrid environment. More than 7,000 organizations around the world turn to Informatica for data solutions that power their businesses. For more information, visit www.informatica.com.

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