MDM Is Critical to Maximizing CRM and Customer Experience

Published: 12 December 2018 **ID:** G00374156

Analyst(s): Bill O'Kane, Michael Moran

One of the most urgent digital business priorities — optimizing the customer experience — hinges on optimizing and leveraging master data. Data and analytics leaders must prioritize and apply master data management to ensure that CX initiatives deliver their fullest business value.

Impacts

- Attempts to create a full, accurate, 360-degree view of the customer will remain incomplete and off-target without effective master data management (MDM).
- MDM enables customer relationship management (CRM)/customer experience (CX) initiatives to integrate many data sources, such as commercial data brokers and social networks, cutting licensing costs, improving data quality and creating insights into customer behavior and intent.
- MDM enables data and analytics leaders to streamline and enhance an array of customer-facing marketing, digital commerce and customer service processes.

Recommendations

Data and analytics leaders responsible for executing data and analytics strategies for CRM and CX programs should:

- Drive a comprehensive, master data approach to customer engagement by identifying ineffective or inconsistent interactions that can be optimized through MDM.
- Optimize your customer view, and minimize inappropriate interactions, by leveraging MDM to integrate diverse data sources such as social networks, underutilized “dark data” or commercially available data enrichment offerings.
- Streamline and enhance CRM and CX operations by using MDM to create a single, holistic view of customer data that can be used in rationalizing and integrating these operational processes.

Strategic Planning Assumption

Through 2020, CRM leaders who avoid MDM will continue to derive erroneous results that damage the customer experience, resulting in a 25% reduction in potential revenue gains.

Analysis

Customer-focused initiatives remain one of the top five digital business priorities for Gartner clients.[1] Effective master data management (MDM) programs are vital to the success of these initiatives. CRM and other customer-facing applications contain many customer master data attributes. But these applications typically do not promote the quality and reusability that is needed for the rest of the organization to benefit from them. For example, few of these applications prevent the creation of duplicate customer records out of the box.

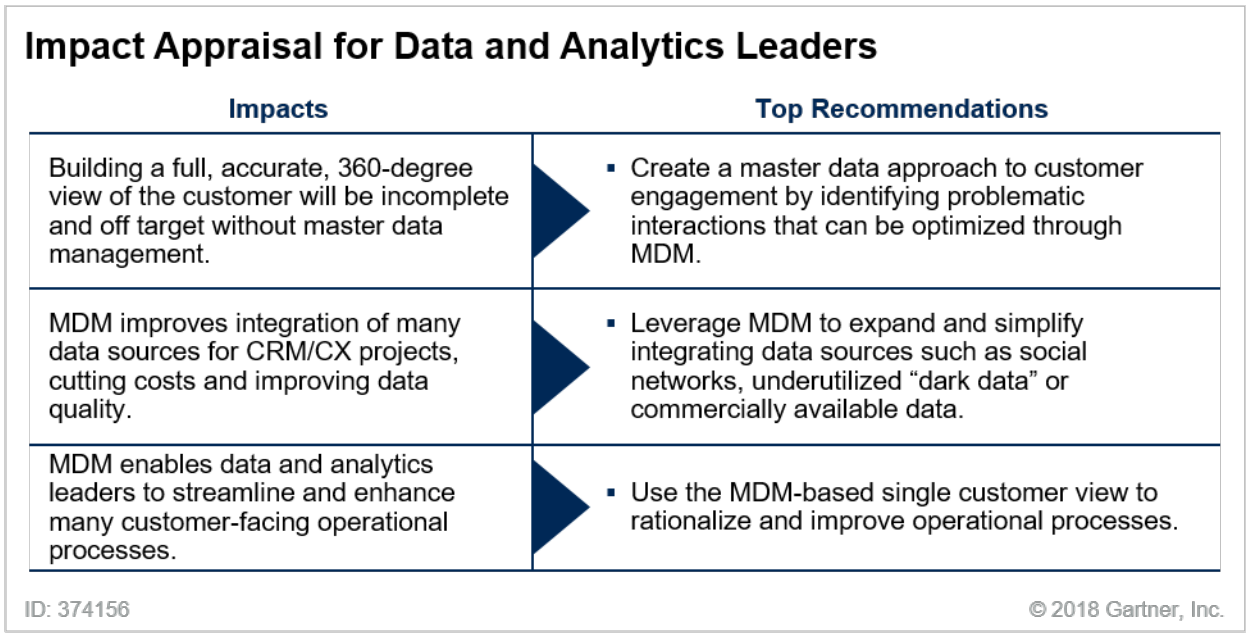
CRM systems are spread across different business domains such as customer service, sales and marketing. This results in two factors that undermine customer initiatives: data becomes trapped in application siloes; and the view of the customer is incomplete and/or inaccurate.

MDM directly attacks these problems. MDM enforces consistent business rules around data quality of master data attributes. It also adds a service layer to facilitate real-time integration with various operational systems, including customer-facing applications such as CRM. Applying MDM as an organizational discipline resolves such critical problems as inconsistent definitions (both implied and explicit) of “customer” across CRM and CX silos, and across operational systems that contain analogous customer data. Increasingly, data and analytics leaders are using MDM to cleanse, integrate and orchestrate data for enhanced CRM and CX business outcomes across multiple processes, systems, departments, lines of business and geographic regions.

All of these MDM capabilities are increasingly important in the diverse CRM environments — with multiple CRM applications or instances — that characterize many organizations today. Effective MDM programs prevent inaccurate or incomplete customer master data being created.

Figure 1 outlines the most important impacts and their corresponding recommendations for data and analytics leaders supporting CRM and CX projects.

Figure 1. Impacts and Top Recommendations for Data and Analytics Leaders



CRM = customer relationship management; CX = customer experience; MDM = master data management

Source: Gartner (December 2018)

Impacts and Recommendations

MDM Is Critical in Creating the 360-Degree Customer View for Optimal CX

The "single" or "360-degree" view of the customer requires combining all the operational master data pertaining to the customer — and often also to the product and service — from all data silos where it currently resides. Only by doing so can data and analytics leaders enable improved customer engagement across all customer-facing channels, including marketing, sales, customer service and digital commerce. For example, Gartner client inquiries on MDM often begin with a client anecdote about losing customers through poor customer service. There are two typical reasons for these losses:

- Flooding customers with irrelevant or inappropriate emails and text messages that could have been avoided with an accurate, in-depth knowledge of their purchase history and patterns.
- Being unable to prevent multiple sales or service staff from contacting the same prospect or customer about the same issue, problem or opportunity.

Master data, and its management, is essential to enable this in-depth understanding of the customer's entire relationship and interactions with the company, at any point during the customer's journey.

> Master data is the consistent and uniform set of identifiers and extended attributes that describe the core entities of an enterprise, such as customers, prospective clients, citizens, suppliers, sites, hierarchies and the chart of accounts.
>
> Master data management is a technology-enabled discipline in which business and IT teams work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of their enterprise's official, shared master data assets.

The gathered master data is checked and cleansed within each data source and across multiple sources. The highest quality values are then selected across all data sources for each master data attribute. The result is a "single version of the truth" for the master data, often encompassing both the customer and product master data domains.

This single version can be integrated in different ways with those data elements specific to the transactions and interactions in the operational systems. This integration serves both operational and analytical consumption use cases. For detailed guidance on the differentiation and relative levels of information governance of customer master and nonmaster data, see "Governance of the MDM Design Process" and "Gartner's Three Rings of Information Governance Help You Prioritize Different Types of Customer Data."

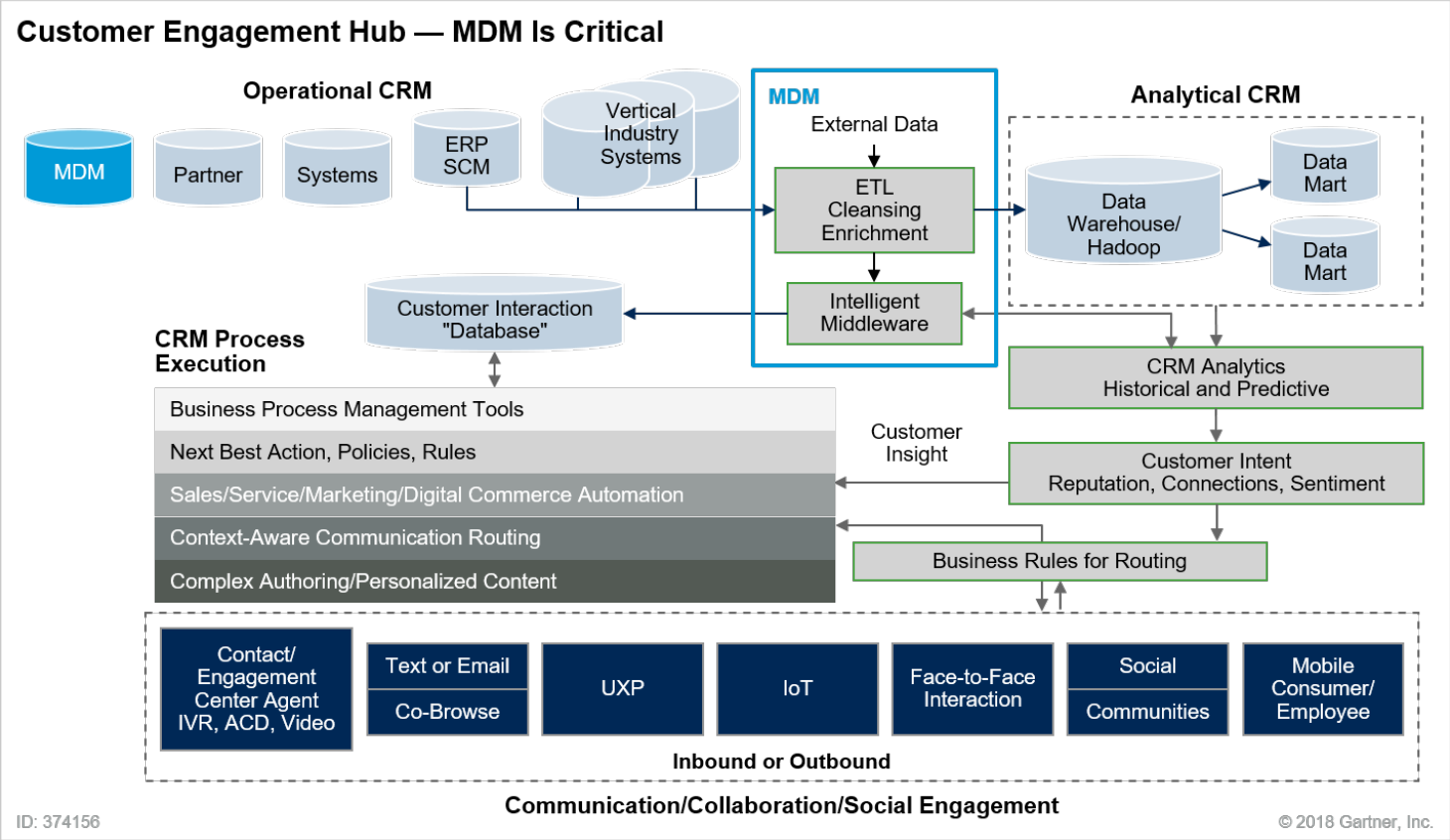
Use MDM to Drive Better CX Through a "Customer Engagement Hub"

One way to put this logical view into action is by using Gartner's customer engagement hub concept (see Figure 2). Here, MDM is a persistent customer master data hub, integrating multiple source systems and data categories. The integration typically is via a real-time, service-oriented architecture (SOA) environment, with the MDM hub acting as a peer to the other mission-critical operational systems, such as ERP, SCM and CRM.

The hub enables accurate, high-quality data for two broad tasks:

- CRM process execution and the attendant customer interaction "database."
- Analytical CRM systems and applications to create insight about customer behaviors and intentions.

Figure 2. Customer Engagement Hub — MDM Involvement Highlighted



ACD = automatic call distribution; CRM = customer relationship management; ERP = enterprise resource management; ETL = extraction, transformtion and loading; IoT = Internet of Things; IVR = interactive voice response; MDM = master data management; SCM supply chain management; UXP = user experience platform
Note: Customer engagement hub contains copies of master, application and other data. Source: "Bridge Silos of Customer Engagement, or Risk Killing Your Customer Experience."

Source: Gartner (December 2018)

A typical engagement hub use case is for operational systems that create or maintain customer master data to check the physical MDM hub database for current instances of the customer data being entered or changed. These systems typically including one or more CRM systems. The systems then alert the end user or customer data steward to block creating duplicate customers or erroneous master data values. This process proactively protects the quality of the customer master data, an essential feature of the 360-degree view. The same process also insulates against the disruptive proliferation and high churn rate of digital marketing technologies.

A variant of this approach is to implement the MDM discipline through application data management (ADM) tools. In this case, MDM technical capabilities are implemented directly in a business application such as CRM or ERP. MDM vendors construct these capabilities for specific applications.

> Application data management (ADM) is a technology-enabled business discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, governance, semantic consistency and accountability for data in an application or suite, such as CRM, ERP or SCM. Application data is the consistent and uniform set of identifiers and extended attributes of the data maintained and/or used within an application or application suite. Examples of such entities include customers, suppliers, products, assets, sites, and prices. ADM tools solely perform data management functions for use in a specific business application's or application suite's data.

Leveraging the Holistic View of Customer Activity

Once this holistic, multichannel view of the customer's activity has been accurately assembled, the only limit to its usage is the imagination and creativity of business and IT management working as a team. A few examples:

- Buying patterns can be accurately aggregated across product types to enable creative cross-selling and upselling, resulting in higher customer lifetime value.
- Identification of customers more likely to cease doing business with the organization in the near term is facilitated, so that they can be engaged earlier for retention purposes.
- Customer segmentation becomes far easier and more accurate, giving organizations a better understanding of their customers and their likely patterns of behavior.

Moreover, the MDM hub supports these operations during real-time customer interactions. It also supports the various analytics platforms, such as data warehouses or data marts, to facilitate larger-scale customer analysis efforts. The final step in leveraging these efforts is turning insights into customer actions to drive improved CX.

For more information on the vast array of available CRM analytics capabilities, see "Hype Cycle for Customer Experience Analytics, 2018."

Recommendations:

- Create a comprehensive master data approach to customer engagement by identifying ineffective or inconsistent interactions that can be optimized through MDM.
- Assess your operational systems, such as CRM and ERP, to determine which MDM implementation styles are possible. Select the most appropriate style(s) for that environment (see "Select the Best Master Data Management Implementation Styles for Your Needs").
- Construct a business case for an MDM implementation based on the expected CX benefits that can be tracked, documented and measured (see "How to Create a Business Case for a Master Data Management Program").
- Collaborate with the business, including marketing, sales, customer service and digital commerce, to identify new sales and service opportunities that may be enabled or optimized by the availability of an accurate, holistic view of the customer.

MDM Simplifies Integration of All Kinds of Data Services for the Customer View

Multiple data sources enable the organization to create a more complete picture of customers' buying behaviors, preferences and intentions. For convenience, these sources can be grouped loosely in "buckets," but the groupings can overlap in practice.

Commercial Data Sources

MDM implementation can be instrumental in optimizing the use of commercial data in three ways:

- MDM typically results in a single physical repository of customer master data, which can be serviced with a lower license commitment to commercial data providers than a siloed environment can be (see "Select the Best Master Data Management Implementation Styles for Your Needs").
- Assuming the MDM hub database has the best possible data quality, the rate at which the organization's customer data matches the commercial provider's customer data (aka the "hit rate") increases significantly compared to one operational system's data.
- MDM can be used to eliminate existing customers from purchased prospect lists, resulting in reduced marketing costs and improved customer satisfaction. Similarly, the cost of updates to internal data from external sources will be lower, as it will be unnecessary to pay for redundant updates.

Social Data Sources

Increasingly, companies use social and other data sources such as clickstream to help them understand customer sentiment and behaviors. This understanding can be in aggregate for areas such as customer segmentation or issue resolution, or at the individual level for personalized campaigns and offers. But the indiscriminate use of such data leads to three potential problems:

- Less-than-optimal master data quality (a set of issues virtually identical to those previously described with commercial data enrichment).
- Exaggerating either positive or negative customer sentiment.
- Inability to establish acceptable levels of trust for data sources that are outside the organization's control and governance (see "How to Incorporate Social Data for CRM Into Your Quest for a 360-Degree View of the Customer").

MDM counters these problems in several ways. It enables the correct identification of unique customers both within and across social networks, thereby eliminating sentiment exaggeration. It also enables the correct linking of social data to the master profile, thereby enabling the profile, in turn, to be correctly associated with the other data categories discussed here.

Big Data Sources

Increasingly, major vendors of customer MDM solutions package their big data offerings with their MDM software. Their reason for doing so is that they now realize that MDM is critical for big data success, just as it has been for more traditional, structured data enrichment. Big data sources — such as mobile-generated GPS location data for customers and internally generated, underutilized "dark data" such as archives of customer emails — encounter the same issues identified for social and commercial data sources.

Recommendations:

- Optimize your customer view, and minimize inappropriate interactions, by leveraging MDM to integrate big data sources such as social networks, underutilized "dark data," or commercially available data enrichment offerings.
- Evaluate your current use of commercial data enrichment services to determine whether they are delivering measurable business results through increased revenue or reduced risk.
- Collaborate with business stakeholders to identify opportunities for using social data in areas such as sentiment analysis (individual or aggregate), targeted offers, issue resolution and buyer relationships.
- Evaluate MDM software solutions on how, and how well, they integrate traditionally structured master data with big data sources such as social networks or with data enrichment capabilities.

MDM Enables Data and Analytics Leaders to Streamline an Array of Customer-Facing Processes

Data and analytics leaders who are systematically implementing MDM often discover that they now have the chance to consolidate and dramatically improve an array of customer-facing functions, including marketing, digital commerce and customer service processes.

Here are two examples:

Customer data stewardship

- **Innovation** — It is increasingly common for enterprises to build a newer, smaller customer data stewardship team to support functions such as customer data changes that are submitted via the web or phone, as part of its MDM program.
- **Outcome** — For teams that directly support CX, they now can rely more on this data as provided, rather than spending time and resources attempting to maintain it themselves.

Marketing ownership of 360-degree view

- **Innovation** — Marketing, particularly in business-to-consumer organizations, is taking more ownership of the 360-degree view of the customer to help drive better customer engagement.
- **Outcome** — Ultimately, marketing seeks to develop improved CX with the brand by reducing the time that customer-facing staff spend figuring out the next-best action to take with a customer, sometimes even automating these processes where appropriate.

MDM makes these changes feasible by providing for this data a single point of access and storage, depending on the MDM implementation style you select (see “Select the Best Master Data Management Implementation Styles for Your Needs”). The data then publishes automatically — typically in real time via SOA — to the appropriate operational data stores, such as CRM, and to analytics platforms, such as marketing, that require the trusted version of this data.

Creating an MDM approach across business functions such as marketing, digital commerce and customer service means that the 360-degree customer view now becomes available to the entire organization, regardless of the customer process implemented. The result is CX consistency. Using the different MDM implementation styles creates the option of whether to continue allowing master data entry via those operational systems (and from different staff) in addition to the MDM system itself.

Empowering Operational Teams via MDM

Once this customer data consolidation and rationalization is complete, data and analytics leaders can leverage it to empower these operational teams in new ways:

- Give the 360-degree view of the customer, tailored to the particular business function being supported, directly to customer-facing employees. Examples include a team building marketing campaigns and offers, which may need to be delivered at any customer touchpoint.
- Shift responsibility for selling low-margin maintenance items to customer service teams (equipped with sales training) during service interactions or even in active phone and email campaigns. This shift frees up the sales teams to concentrate on higher-margin sales to new and existing clients.
- Enable cross-selling and upselling — based on insights from relevant analytics — by using marketing techniques such as segmentation based on static data values and providing incentives to purchase new items based on previous purchase sequences.

Recommendations:

- Streamline and enhance CRM and CX operations by using MDM to create a single holistic view of customer data that can be used in rationalizing and integrating these operational processes.
- Analyze the ROI of any operational changes under consideration as part of the MDM program (see "Creating a Business Case for Master Data Management"). Propose two to three areas for improvement and build your business case around those, as one project alone may not justify the entire expense of implementing MDM.
- Reconstruct staffing and training models to support the newly optimized functions. Train customer-facing staff on how to utilize new MDM-enabled capabilities (both automated and heuristic), based on trusted customer information and the insight created from its analysis.

Acronym Key and Glossary Terms

ADM	Application data management (ADM) is a technology-enabled business discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, governance, semantic consistency and accountability for data in an application or suite, such as CRM, ERP or SCM. Application data is the consistent and uniform set of identifiers and extended attributes of the data maintained and/or used within an application or application suite. Examples of such entities include customers, suppliers, products, assets, sites, and prices.
CRM	Customer relationship management is a business strategy that optimizes profitability, operational efficiency and customer satisfaction by implementing customer-centric processes.
MDM	Master data management is a technology-enabled discipline in which business and IT teams work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of their enterprise's official, shared master data assets. Master data is the consistent and uniform set of identifiers and extended attributes that describe the core entities of an enterprise, such as customers, prospective clients, citizens, suppliers, sites, hierarchies and the chart of accounts.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

“Customer Relationship Management and Customer Experience Primer for 2019”

“Technologies for CRM and the Emerging Customer Engagement Hub”

“Develop a Strategic Plan to Integrate Your Customer Engagement Hub”

“Use the 7 Building Blocks of MDM to Achieve Success in the Digital Age”

“Magic Quadrant for Master Data Management Solutions”

“Hype Cycle for CRM Customer Service and Customer Engagement, 2018”

Evidence

[1] CRM and CX software sales growth rates continue to outpace growth in overall enterprise software spending (see “Forecast: Enterprise Application Software, Worldwide, 2016-2022, 3Q18 Update”).

The customer was identified by CEOs as one of the top five highest strategic business priorities for 2018 and 2019 (see “2018 CEO Survey: CIOs Should Guide Business Leaders Toward Deep-Discipline Digital Business”).

In the third Gartner Chief Data Officer (CDO) survey, conducted in 2017, more than one-third of respondents identified increasing customer intimacy and/or customer experience as one of their top three measures of success in their role (see “Survey Analysis: Third Gartner CDO Survey — How Chief Data Officers Are Driving Business Impact”).

More on This Topic

This is part of an in-depth collection of research. See the collection:

- The Future of Data and Analytics Is Now

GARTNER HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
USA
+1 203 964 0096

Regional Headquarters
AUSTRALIA
BRAZIL
JAPAN
UNITED KINGDOM

For a complete list of worldwide locations,
visit http://www.gartner.com/technology/about.jsp