

Brought to you by



Informatica

Intelligent Master Data Management

for
dummies[®]
A Wiley Brand



Capture the
value of MDM

Discover the art of an
intelligent MDM solution

Address business
challenges

2nd Informatica Special
Edition

Lawrence C. Miller

About Informatica

Informatica (NYSE: INFA) brings data to life by empowering businesses to realize the transformative power of their most critical assets. When properly unlocked, data becomes a living and trusted resource that is democratized across the organization, turning chaos into clarity. Through the Informatica Intelligent Data Management Cloud, companies are driving bigger ideas, creating improved processes, and reducing costs. Powered by CLAIRE, Informatica's AI engine, it's the only cloud dedicated to managing data of any type, pattern, complexity, or workload across any location — all on a single platform, with a simple and flexible consumption-based pricing model. Informatica. Where data comes to life.

For more information, call (800) 653-3871 (+1 650-385-5000 outside of the United States), or visit www.informatica.com.

Connect with Informatica on social media:

 [linkedin.com/company/informatica](https://www.linkedin.com/company/informatica)

 twitter.com/Informatica

 [facebook.com/InformaticaLLC](https://www.facebook.com/InformaticaLLC)



Intelligent Master Data Management

2nd Informatica Special Edition

By Lawrence C. Miller

for
dummies[®]
A Wiley Brand

Intelligent Master Data Management For Dummies®, 2nd Informatica Special Edition

Published by
John Wiley & Sons, Inc.
111 River Street
Hoboken, NJ 07030-5774
www.wiley.com

Copyright © 2023 by John Wiley & Sons, Inc.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Trademarks: Wiley, the Wiley logo, For Dummies, the Dummies Man logo, A Reference for the Rest of Us!, The Dummies Way, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates in the United States and other countries, and may not be used without written permission. Informatica and the Informatica logo are registered trademarks of Informatica. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc., is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: WHILE THE PUBLISHER AND AUTHORS HAVE USED THEIR BEST EFFORTS IN PREPARING THIS WORK, THEY MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES REPRESENTATIVES, WRITTEN SALES MATERIALS OR PROMOTIONAL STATEMENTS FOR THIS WORK. THE FACT THAT AN ORGANIZATION, WEBSITE, OR PRODUCT IS REFERRED TO IN THIS WORK AS A CITATION AND/OR POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE PUBLISHER AND AUTHORS ENDORSE THE INFORMATION OR SERVICES THE ORGANIZATION, WEBSITE, OR PRODUCT MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING PROFESSIONAL SERVICES. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR YOUR SITUATION. YOU SHOULD CONSULT WITH A SPECIALIST WHERE APPROPRIATE. FURTHER, READERS SHOULD BE AWARE THAT WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ. NEITHER THE PUBLISHER NOR AUTHORS SHALL BE LIABLE FOR ANY LOSS OF PROFIT OR ANY OTHER COMMERCIAL DAMAGES, INCLUDING BUT NOT LIMITED TO SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES.

For general information on our other products and services, or how to create a custom *For Dummies* book for your business or organization, please contact our Business Development Department in the U.S. at 877-409-4177, contact info@dummies.biz, or visit www.wiley.com/go/custompub. For information about licensing the *For Dummies* brand for products or services, contact BrandedRights&Licenses@Wiley.com.

ISBN: 978-1-394-19882-5 (pbk); ISBN: 978-1-394-19883-2 (ebk). Some blank pages in the print version may not be included in the ePDF version.

Publisher's Acknowledgments

Some of the people who helped bring this book to market include the following:

**Project Manager and
Dummification Editor:**
Carrie Burchfield-Leighton

Acquisitions Editor: Traci Martin

Sr. Managing Editor: Rev Mengle

Sr. Client Account Manager:
Matt Cox

Special Help from Informatica:
Prash Chandramohan,
Monica Mullen, Patti Garon Lee,
Michelle Schallhorn

Table of Contents

INTRODUCTION	1
About This Book	1
Icons Used in This Book.....	2
Beyond the Book.....	2
CHAPTER 1: Recognizing Why Every Business Needs to Master Its Data	3
Understanding the Third Era of Data.....	4
Addressing Your Business Challenges with MDM.....	5
Developing Your Strategy.....	10
CHAPTER 2: Being Masterful at Master Data Management	13
Dispelling the Myths of Mastering Data	14
Solving for Poor Quality of Data	16
Deciding How Your Data Will Be Used.....	17
Reviewing the Process of MDM	18
Delivering Trusted Data to the Business	19
CHAPTER 3: Knowing What to Look for in an Intelligent MDM Solution	21
All-in-One Capabilities.....	21
High-Quality Matching	25
Future Proofing Your Intelligent MDM Solution	27
Scalable for growth.....	27
Built on microservices architecture.....	28
Adding metadata intelligence.....	29
AI and ML	29
CHAPTER 4: Planning for Success	31
Making an Impact Internally and Externally	31
Identifying the Business Drivers.....	32
Organizing for Success	34
Prioritize for Future Needs.....	35
Measure and Report Business Impact.....	36

CHAPTER 5: Ten Intelligent MDM Success Stories..... 37

Amgen..... 37

Providence St. Joseph Health..... 38

Avnet..... 39

Elektro-Material (EM) 39

Luxury Automotive Group..... 40

Rent-a-Car 40

De Mandemakers Group (DMG)..... 41

Coop Allenaza 3.0..... 42

Ivy League Business School 42

JLL 43

Introduction

Data fuels digital transformation and is one of the most strategic assets for every business. Yet organizations everywhere struggle with disparate, duplicate, and conflicting information from numerous data sources across the enterprise. The growing volumes, new data sources, and increased velocity of data pose new challenges. Capturing, mastering, and managing data is the best way to get a single trusted view of business-critical data across the enterprise.

Master data management (MDM) is the powertrain that ties your systems and information together. It's the single source of truth for your data-driven digital transformation. MDM provides trusted, accurate, complete data to power your customer experience program, marketing and sales operations, mergers and acquisitions, omnichannel retailing, supply chain optimization, governance efforts, compliance initiatives, and more.

About This Book

Intelligent Master Data Management For Dummies, 2nd Informatica Special Edition, consists of five chapters that explore the following:

- »» The business drivers for mastering data (Chapter 1)
- »» The challenges of MDM (Chapter 2)
- »» Important capabilities in an intelligent MDM solution (Chapter 3)
- »» Planning for success with MDM (Chapter 4)
- »» Ten real-world examples of intelligent MDM (Chapter 5)

In this book, you discover how to maximize the business value of your enterprise data with intelligent MDM.

Icons Used in This Book

Throughout this book, I occasionally use special icons to call attention to important information. Here's what to expect:



REMEMBER

This icon points out information you should commit to your non-volatile memory, your gray matter, or your noggin — along with anniversaries and birthdays!



TECHNICAL
STUFF

You won't find a map of the human genome here, but if you seek to attain the seventh level of NERD-vana, perk up! This icon explains the jargon beneath the jargon.



TIP

Tips are appreciated, never expected — and I sure hope you appreciate these tips. This icon points out useful nuggets of information.



WARNING

These alerts point out the stuff your mother warned you about (well, probably not), but they do offer practical advice to help you avoid potentially costly or frustrating mistakes.

Beyond the Book

There's only so much I can cover in this short book, so if you find yourself at the end of this book thinking, "Where can I learn more?" take a look at the following resources:

- » www.informatica.com/products/master-data-management: The Informatica website provides a lot of information about the full suite of Informatica products and solutions.
- » blogs.informatica.com/category/product/mdm: The Informatica blog is full of articles and news about MDM and many other data topics, as well as industry-specific insights.

- » Looking at important data trends
- » Addressing business challenges
- » Creating a master data strategy

Chapter **1**

Recognizing Why Every Business Needs to Master Its Data

The underlying premise of a master data strategy is to create a single source of trusted data for the organization to, among other things, improve customer experience, accelerate decision making, facilitate collaboration, and enhance productivity. If you can't trust your data, you can't rely on insights derived from it. And you're not only risking data chaos, but also you're jeopardizing your chances of creating new business value, which is unacceptable in today's competitive market.

In this chapter, you discover how data has evolved over the years and how to address modern business challenges with an effective data management strategy. You also get introduced to the benefits of master data management (MDM) and why it's an essential component for data-driven digital transformation.

Understanding the Third Era of Data

Over the years, businesses everywhere have had to evolve the way they think about and manage data. This can be broken down into three distinct eras:

- » In the **first era**, which spanned roughly the last half of the 20th century, data was used primarily to report or capture historical transactions within specific departments supported by individual business applications, such as payroll automation, enterprise resource planning (ERP), and point-of-sale (POS) systems. Technology solutions such as data integration helped businesses solve the data challenges in this era.
- » During the **second era** — the past 15 to 20 years — data has been used to support enterprise-wide analytics and business processes, such as customer relationship management (CRM), supply chain management, and quote to cash. Solutions were introduced for data quality, MDM, cloud data integration, data security, data archiving, and other data services during this era.
- » The **third era**, the next generation of data, is in the early stages, and entire businesses are realizing the disruptive power of data to fuel innovation, become more agile, and recognize new growth opportunities through new business models and processes.

In the third era, five key technology shifts are converging at the same time:

- » Remote work is more prevalent due to the COVID-19 pandemic, leading to a significant shift in the way everyone approaches work.
- » Companies are investing in artificial intelligence (AI) and machine learning (ML) to improve operations and processes. AI and ML have also been used to tackle the pandemic.
- » Cloud computing is a critical component of many businesses' IT infrastructure, providing flexible and scalable computing resources.
- » The growing amount of data is creating new challenges for organizations and leading to the development of new technologies to manage, store, and process data.

- » Self-service technologies are popular for improving efficiency and user experiences. They're also a key component of many organizations' digital transformation strategies.

Any one of these shifts would be a significant trend by itself. Together, they create a generational market disruption.

While data is universally essential for every organization, not all data requires the same emphasis. Many successful organizations focus on managing their most business-critical data — data about their customers, products, suppliers, employees, locations — to better understand their customers, accurately and easily report to internal and external stakeholders, speed their time to market, and support their business strategies to more effectively differentiate from their competition.

This business-critical data is referred to as *master data*. The categories into which master data is classified are called *domains*. There are more than 150 different domains that can be mastered. The more common ones include customer — business-to-business (B2B) and business-to-consumer (B2C) — product, supplier, reference data, financial data, location, asset, and employee data. But you can also master more specific data such as account, patient, provider, beneficiary, contract, claims, projects, movie, character, wellheads, airports, aircraft, vehicles, sites, and more. It all depends on the business challenges with which you want to align your data.

Addressing Your Business Challenges with MDM

MDM is both a technology and a discipline. As a discipline, it combines ongoing stewardship of business-critical data with the principles of data governance. You may say that MDM and data governance are two sides of the same coin. Data governance defines the policies, definitions, and rules that are needed to manage and protect data within a company; MDM is the execution and application of those policies. Together, companies gain the confidence they need that their business-critical data is strategically managed, and they're empowered with a trusted view of their data that's shared between data stewards, subject matter experts, business users, and external stakeholders, including customers, suppliers, channels, regulators, and others.

To ensure success in the third era, leading companies and industry disruptors have embraced the opportunity to recognize how a master data strategy helps them with business transformation and improved business outcomes.



A *master data strategy* defines how an organization overcomes specific data challenges to attain business goals through the applied use of its master data assets. A master data strategy sits between the overall business strategy and data governance activities. It’s about how your organization will maximize its data leverage to generate the greatest business impact.

Table 1-1 demonstrates the business initiatives that master data programs fuel with trusted data and takes a look at a few of the business outcomes.

TABLE 1-1 Business Initiatives Made Better with MDM

Business Initiative	High-Level Objective	Business Outcome
Customer Experience	Engage with customers intelligently	<ul style="list-style-type: none"> Individualized digital experiences Omnichannel consistency Targeted cross-sell/upsell offers Personalized marketing Improved customer service delivery Frictionless engagement Enable customer centric processes
Operational Efficiency	Increase efficiency and employee productivity	<ul style="list-style-type: none"> Reduce procurement costs and streamline processes Accelerate time to value by collaborating across teams and departments Achieve higher margins and conversion rates from e-commerce Reduced manpower and effort to find and use data across the organization

Business Initiative	High-Level Objective	Business Outcome
Advanced Analytics	Fuel analytics and business intelligence tools, data lakes, AI, and more with actionable data	<ul style="list-style-type: none"> Self-service analytics and reporting Customer behavior analysis Trends and forecasting Service personalization, optimization, and targeting Next-best action recommendations
Governance and Compliance	Comply with regulations and internal policies efficiently	<ul style="list-style-type: none"> Secure and protect sensitive information about customers Manage consents across the customer base Gain visibility to product and supplier details Avoid regulatory fines such as GDPR by reporting accurate data on time
Mergers and Acquisitions	Streamline M&A processes and accelerate time to value	<ul style="list-style-type: none"> Act as one company to customers and employees Expedite M&A synergies and understand product, supplier, and customer redundancy Understand risk concentration of customers, suppliers, and others Acquire new customers, introduce new products faster
Product Experience	Improve collaboration and product information management	<ul style="list-style-type: none"> Simplify complex product information management Increase productivity and collaborate across teams Ensure consistent, accurate, and complete product information across sales channels Accelerate time to market for new product introduction

(continued)

TABLE 1-1 (continued)

Business Initiative	High-Level Objective	Business Outcome
Supply Chain Management	Improve supply chain agility and operational efficiencies with speedy onboarding	Negotiate better deals Reduce costs associated with procurement Monitor supplier performance Manage supplier risks and minimize disruptions Build stronger and more collaborative relationships with suppliers Ensure ethical procurement processes



TIP

Compliance is a business value. Don't overlook how your master data strategy can streamline data privacy and protection requirements, make regulatory reporting more efficient, and deliver the trusted data you need to mitigate regulatory risk. This includes the European Union's General Data Protection Regulation (GDPR), the California Consumer Privacy Act (CCPA), and Brazil's General Data Protection Law (LGPD) — through automated orchestration and protection of personal information, fulfillment of subject rights requests, and centralizing how consents are managed.

Because everyone in the company ultimately touches master data, it's far too important to be approached as only an IT initiative. Business and IT must collaborate to achieve the desired outcomes. As you work together, keep the following in mind:

- » **Business stakeholders bring domain expertise.** Business stakeholders know the importance of data to support the business processes and outcomes they want. They know the most important questions that need answering, the critical decisions they need to make more quickly, the vital processes that need to be optimized, and the real business problems that need to be solved immediately.

» **IT owns the enabling technology.** You understand how technology supports existing processes and systems and which potential new technologies can enable new processes that cross organizational boundaries and support common goals within the business. You can determine how to best apply these technologies to help the business stakeholders get the answers, accelerate decision making, optimize the processes the business needs, and address the real business problems that need solving.

» **Together, you can be stewards of your master data.**

A master data strategy must start with what the business is trying to achieve. After that, you work out where the relevant master data resides, who has access to it, how it flows through the processes and the organization, and how to govern it.



REMEMBER

Successful master data strategies require ongoing, iterative collaboration between IT and at least one key business stakeholder.

WHAT IS AN EFFECTIVE MDM STRATEGY?

An effective MDM strategy entails an all-in-one, comprehensive view of trusted, relevant, governed, and authoritative data. This approach can be modular based on your needs and can span across multiple data domains — including customer, product, supplier, reference, financial, and 150 other potential domains. A complete MDM strategy addresses the critical business objectives for today's customer-centric and data-driven business.

Developing Your Strategy



TIP

As you develop your master data strategy, remember to select solutions that support your ability to think big, start small, and maintain the flexibility to grow quickly and to the scale that your business needs today. Here are some important tips:

- » **Focus on critical business opportunities or risks.** Consider starting with the most important business challenges that can best be addressed through more effective use of master data. Early success may be more attainable with a team that has a big need but may not be your first thought.

Example: One healthcare organization prioritized provider data instead of patient data because better provider data improved engagement and fostered stronger relationships.

- » **Look for business impact.** Nothing gets people on board faster than connecting master data to business impact: increased marketing conversions, better prediction of customer churn, reducing product returns, accelerating the supply chain, improving regulatory compliance. These factors are the impacts to business value that get attention and earn support for more investment in master data. But this doesn't mean forgetting your bigger vision. Ideally, you want to find and communicate the high-value items that move you toward an overarching enterprise — not departmental — master data strategy. Consciously use these important early projects as building blocks for your bigger play.

Example: A data initiative for regulatory compliance at a distribution company was used to support the company's broader customer experience goals when the chief executive officer (CEO) looked to unify experiences across several lines of business and operate as "one company" to its customers.

- » **Unless your company has experience with master data, don't try to sell a big, holistic master data strategy from the get-go.** An enterprise-wide master data strategy is an important part of the endgame, but if you're a novice, you can't start there. It's too big a task. To get all necessary business partners to engage with you, build confidence in your organization's ability to deliver value by breaking your master data strategy into manageable projects.

Example: One company started with customer data used in contracts and legal processes to allow the organization to adjust to new ways of thinking about data.

» **Keep everyone's eyes on the prize.** Data-driven digital transformation fueled by a master data strategy is a commitment. Those who've started on this path recognize that once it's begun, the rewards can be significant; but it involves change — and that can be hard. You're asking people to change the way they work and the processes they understand. To make it through, you need to communicate your success at every step and evangelize a clear vision along the way.

Example: One company created lapel buttons with a slogan "Ask me about Data," then hit the road with a roadshow to help teams understand what was happening and to review the return on investment (ROI) the company was achieving.



REMEMBER

You want your business partners to understand your long-term roadmap — but the roadmap can't be just phases of a big, vague project. To succeed, your roadmap needs to include a series of incremental business-value successes, each building on the one before. Lay out your vision as "wins," not just "steps." And communicate these wins — and the return on investment (ROI) — early and often.

An effective master data strategy that entails a single, end-to-end, comprehensive view of trusted, relevant, governed, and authoritative data is an important part of a data strategy. By establishing a single source of truth for the entire organization, a master data strategy helps build trust in your data through consistency of the data, as well as transparency in the processes used to manage and share that data.

CUSTOMER STORY: SUTTER HEALTH

Sutter Health is one of the nation's leading not-for-profit networks of community-based healthcare providers. The network supports more than two dozen locally run acute care hospitals as well as physician organizations, medical research facilities, region-wide home health, hospice and occupational health networks, and long-term care

(continued)

(continued)

centers. The Sutter executive team understood that the insights needed to be successful in winning patient loyalty and delivering great, cost-effective care were contained within the explosion of data being generated across the system every day.

The company had several business initiatives:

- Deliver expert, personalized care across more than 100 Northern California communities.
- Enhance the well-being of people in the communities served in the face of new competition and business models.
- Reduce risk and adhere to compliance and regulatory reporting requirements.
- Innovate transformative care solutions emphasizing high-quality, patient-centric care through Sutter Health's recently launched research.

Sutter Health also wanted to attain a few technology strategies:

- Bring together and relate patient, provider, member, location, and employee data currently scattered across the organization.
- Create self-service analytics environment, putting data directly in the hands of decision-makers.
- Provide robust data stewardship tools that are designed for use by stakeholders.
- Make trusted data available more quickly to more people.

The business found its answers in using the following services: Informatica PowerCenter, Informatica Multidomain MDM, and Informatica Data Quality. Each of these services is part of the Informatica Intelligent Data Management Cloud (IDMC), a single AI-powered data management platform.

By taking a holistic approach to leveraging data as a corporate asset, Sutter Health is poised to deliver more consistent, relevant, and cost-effective enterprise performance management. Insights discovered through these advanced analytics contribute significantly to enhancing operational performance, improving clinical outcomes, and reducing the total cost of care.

IN THIS CHAPTER

- » Learning the truth about MDM
- » Dealing with data quality
- » Addressing multidomain data needs across the enterprise
- » Looking at the process of MDM
- » Getting to a single source of truth

Chapter 2

Being Masterful at Master Data Management

Master data management (MDM) has become an imperative for organizations everywhere to address the challenges of the third era (read Chapter 1 for more on these challenges). Master data isn't just limited to customer and product data; any data that must be maintained as a single version across an organization can be classified as master data. And, when master data is combined with transactional data (such as sales data), enterprises can gain invaluable insights.

In this chapter, you discover some of the basics about MDM that will help you master your data.

Dispelling the Myths of Mastering Data

Many popular myths are associated with MDM. Like most myths, an element of fiction is involved. If you're new to MDM, you may ask yourself the following questions:

- » If we already have a robust customer relationship management (CRM) platform, do we really need MDM, too?
- » Because we already have an enterprise resource planning (ERP) system for product and vendor data, do we need MDM as well?
- » Isn't MDM redundant with an enterprise data warehouse (EDW)?

Many technologies perform some data management functions and are easily confused with MDM or considered to be good enough. For example, CRM, EDW, and ERP systems are often touted as systems of record within an organization. But these systems only perform a subset of the data management functions of a true MDM solution and can't compare with full MDM capabilities.

Another myth is that MDM is a one-and-done project. Ask anyone who's been on this path, and you'll soon realize that MDM is a journey. And, as individuals within your company understand the benefits that trusted, governed, and authoritative data delivers, the demand quickly expands into other areas — different domains, additional data sources, or new business needs. MDM today is more important and relevant than ever before given the challenges of the third era (see Chapter 1 for more details).

Finally, you may have heard that MDM is an IT project. False. Data management must be an enterprise-wide journey for all your data users, not a single project relegated to IT. Although you'll need to implement specific MDM capabilities incrementally as discrete initiatives or projects, ultimately MDM is a journey that transforms your entire organization.

WHAT IS A MASTER RECORD?

Master data, when managed and reconciled, creates a *master record* (also known as a *golden record* or *best version of the truth*) that contains the essential information that your business or organization relies on. The master record contains what your business needs to know about a customer, location, product, supplier — that business-critical “thing” — in order to facilitate, say, a marketing campaign, service call, or sales conversation.

Another easily understood type of master data is reference data. *Reference data* is a subset of master data. Reference data is like the words in a dictionary — slowly changing and widely accepted data about a person, location, product, supplier — or that business-critical “thing.” Some examples of reference data are

- Latitude and longitude
- Zip codes and area codes
- Three-letter airport codes used by airlines
- Healthcare codes (for example, ICD-10) used between organizations to understand the care provided

Here’s a familiar example of the type of problem master data solves. Over the years, you’ve probably had several phones with various address books stored on them. You also have an address book for your work and personal email accounts. All these different address books might be stored on a variety of devices such as your work computer, home computer, personal tablet, and smartphone. You may even still have a handwritten address book somewhere that you haven’t looked at in years.

When you try to look up someone — for example, your sister — she might be listed multiple times, and each listing might have a different address and phone number. Your sister moves a lot, but which listing is the right one? Because it’s your sister, you probably know which listing is the right one. But what about a company that has hundreds of thousands or millions of customers? How do you know which listing is correct for a given customer?

MDM solves the problem of multiple records referencing the same thing that exists in many different places often with incomplete,

(continued)

(continued)

inconsistent, and conflicting information. The master record in this example maintains the identifying customer information, and the reference data (which is a variant of master data) ensures that the area code, zip code, and state abbreviation (among others) are accurate and up to date.

Solving for Poor Quality of Data

Many organizations suffer as a result of inconsistent, incomplete, and inaccurate data. For example, data fragmentation and data degradation across numerous on-premises and cloud applications affects the reliability of the data. Therefore, your business decisions and strategy based on this data can be wrong. Similarly, duplicate data siloed in different systems across the organization quickly becomes stale and unreliable as consistency across the different systems becomes untenable and decision accuracy suffers.



WARNING

Data quality improvement should be a top priority for your organization. In fact, Capgemini, a multinational information technology (IT) services and consulting company, reported that 72 percent of executives believe that fragmented and poor-quality data is the biggest issue for analytics and AI.

Without a single, trusted view of data, your employees spend an enormous amount of time on manual aggregation and data cleansing. Fragmentation also leads to data errors, incomplete information, and unreliable data. Then too, your analytics projects are at risk when they rely on incomplete, error-prone, and non-standardized data.

By focusing on the quality of the data as well as creating a standardized view of your customers and their relationships, you can accelerate your data-driven digital transformation initiatives. These include quickly developing new products, reaching current and potential customers, delivering a unique brand experience, and creating strong supplier relationships.

Deciding How Your Data Will Be Used

Master data is often aligned to a domain. However, different data users throughout your organization will inevitably have to combine data from multiple domains to support their different operational and analytical needs and purposes. And whether it's analytics or operational needs that drive the investment in MDM, trusted data is at the heart of success. So, for example, when a financial services firm wants to present a single source of truth (whether through a portal or to a private banker), it would need high confidence in the three domains required for this operational purpose: customer, account, and product.

As you get started with an MDM initiative, it's important to think big (with regard to your overall master data domains and needs) but start small. Implement your first domain and begin adding capabilities and domains using a modular approach. After you have an initial quick win, quickly scale your project to maintain your momentum and extend the benefits of MDM to other domains and broader organizational demand for trusted data.



TIP

A multidomain MDM system enables multiple master data domains to co-exist in a single environment. As you begin your MDM journey, ask yourself a few questions (you can ask and answer these questions in any order during any phase of an MDM implementation):

- »» What domain types do I start with? Should I focus on customers first? What about my product data?
- »» Do I create a master data instance solely for analytical purposes? How can my operational systems benefit?
- »» What multidomain MDM architectural style is the most appropriate for my goals? What are the performance considerations?
- »» How secure will my master data be? Can I set up security roles and policies that align with my corporate data governance mandates?
- »» How long will this multidomain MDM project take? I want to see quick results to get organizational buy-in. Can I ensure that any work I do today won't be wasted as I move forward?
- »» If my business model and processes change, can I rapidly realign my architecture and MDM strategy to accommodate changes?

Reviewing the Process of MDM

As a discipline, MDM is the technical/business process through which data is mastered across multiple sources and systems. That is, the process of maintaining a single version of master data generally includes

- » Discovering where the data exists, and its current state across different data sources
- » Ensuring data quality by cleansing the data before processing
- » Reconciling and removing duplicate records that originate across the same or different data sources
- » Matching and merging relevant data based on administered rules to create the best version of the data
- » Providing a trusted model based on the input source, recency, and accuracy to validate and assess the reliability of the data
- » Validating, verifying, and enriching the master records with external data such as that from Dun & Bradstreet, your business partners, and other third-party providers
- » Maintaining hierarchal information that links multiple master entities, such as those between product categories and products, or between parent companies and subsidiaries
- » Mapping the complex relationships that exist between entities such as households, employees to customers to locations, service events to products, and so on
- » Providing master data versions based on data history and timelines (that is, the changes to a master data entity over time)
- » Providing real-time data access through an easy-to-use and easy-to-implement application programming interface (API) for sharing mastered data with other applications
- » Creating tighter workflow integrations to steward and publish the master data
- » Assigning owners for master data definitions, data stewardship, and change approvals in an easy-to-use user interface

- » Securing access at role-based, attribute-level granularity and coalescing data encryption and masking capabilities
- » Delivering a 360-degree view of a master data entity to business users for full understanding of the data and to generate data-driven insights

Delivering Trusted Data to the Business

An effective MDM strategy addresses data silo and data quality issues head on and provides a reliable view of your business-critical data and its relationships. This deliberate focus on the quality and usefulness of enterprise data can remove repetitive, time-consuming, and costly one-off efforts to manage data. A careful and focused effort on data can help drive strategic decisions, cut costs, increase revenue, improve operations, reduce risks, and capitalize on business opportunities.

High-quality, trusted data enables you to address multiple business initiatives in your organization. For example, trusted data

- » Allows marketing teams to segment their customers better and target their marketing dollars on campaigns that drive higher return on investment (ROI)
- » Empowers sales teams with in-depth customer knowledge to identify optimal cross-sell or upsell opportunities
- » Enables services teams to predict customer challenges and proactively solve problems
- » Drives regulatory compliance, such as the General Data Protection Regulation (GDPR), to avoid penalties and help protect your brand
- » Provides executives with the data insights necessary to support growth strategies
- » Improves business processes such as order-to-cash, procure-to-pay, and customer and supplier onboarding

Overall, a strategic, all-in-one MDM strategy based on trusted, relevant data can help you deliver immediate business results.

TRANSAMERICA GAINS RICH INSIGHTS TO DELIVER PERSONALIZED CUSTOMER EXPERIENCES

The marketing team at Transamerica wanted to create a single platform to manage customer and prospect data from disparate sources. The company also needed a consistent and secure enterprise view of data, while it maintained strict control and privacy protocols over data assets. This trusted view across business units would allow it to better understand customers and their households, with the ultimate goal of optimizing its investments in marketing campaigns.

The company deployed a marketing data lake with MDM at its core. The solution allowed the company to create a single, comprehensive view of customer profile data, prospect and partner data, solicitation history, web logs, and more. Transamerica's business analytics and data scientist teams can more quickly deliver trusted and relevant customer insights and adapt to changing business needs. This facilitated Transamerica's ability to discover new insights and precisely deploy personalized marketing programs to its customers. With relevant customer data at their fingertips, Transamerica's business analytics and data scientist teams can more quickly deliver trusted and relevant customer insights and adapt to changing business needs.

IN THIS CHAPTER

- » Understanding what's in an all-in-one, multidomain MDM solution
- » Recognizing the importance of the match and merge process
- » Preparing for the future with intelligent MDM

Chapter 3

Knowing What to Look for in an Intelligent MDM Solution

The end result of master data management (MDM) is trusted, accurate, complete data to fuel your most strategic initiatives and support your daily tactical decisions. And for that, you need a modular, comprehensive MDM solution — one that's designed with flexibility that allows you to start with your most pressing data challenges and business needs, and then grow the system as your needs expand.

In this chapter, I give you the capabilities and features that your organization should look for in an intelligent MDM solution.

All-in-One Capabilities

Today's data needs to be available at the speed of now. And ideally, your intelligent MDM solution should provide your business users with the ability to locate, access, and utilize trusted data exactly when and where it's needed. This can be for operational

use, such as populating a customer portal or dashboard in real time, or for analytical use by business analysts, data scientists, or others, such as determining the next best experience, action, or opportunity.

Multidomain MDM does exactly what it sounds like it does — it masters multiple domains in a single MDM solution and delivers relationship insights to the business. It helps companies to better see and manage the relationships that matter the most in order to make better business decisions. Questions that were hard to answer before can be answered easily with multidomain MDM. For example — which customer owns which products? How many product versions are owned by a customer? What locations do customers frequent most? Which customers are also employees? Which suppliers provide materials for which products?

Because of this, multidomain MDM helps companies solve multiple complex business problems across business units, departments, divisions, and regions — maximizing the value of mastered data and eliminating the need to create a unique MDM solution for each business problem or domain (customer, product, location, supplier, and so on).



TIP

Manage all your critical enterprise data and relationships in one place with a multidomain MDM solution.

A true all-in-one MDM solution not only has data mastering functionality, but also it incorporates data quality, data enrichment, data catalog, data integration, business process management (BPM), data governance, and data security capabilities. Some of the most important all-in-one capabilities include

- » **Discover:** With so much data available from so many sources, an MDM solution must discover untapped sources of relevant data, even when they aren't obvious or easy to find. Your MDM solution should be able to then provide an understanding of the state and structure of the data. Similarly, it must infer and suggest the best format for attributes of each domain that needs to be centralized (for example, recommend a standard model for a customer record that can be used across the enterprise).
- » **Acquire:** An MDM solution connects to your many disparate data sources and heterogeneous applications from across departments, lines of business, brands, and elsewhere at

varying latencies based on business requirements — regardless of whether that system is on-premises, in the cloud, or from third parties. And it has to be able to connect in real time, batch, or both. Performance, high availability, and minimizing the impact to your existing MDM solution as new data sources are introduced are prime requirements.



TIP

Look for an MDM solution that connects to your most relied on applications to ensure your data is trusted across a heterogeneous application landscape. MDM should support application programming interfaces (APIs) to ensure business applications — such as SAP, Salesforce, and Marketo — can access master data in real time.

» **Cleanse and enrich:** Today's MDM comes with embedded data quality and data enrichment capabilities to improve the overall quality of your data. It provides a seamless experience across the solution, checks for incomplete or invalid entries, and attempts to resolve conflicts. After the data is cleansed, it can then make your data more useful by enriching the records with information from third-party sources and adding missing information.

» **Match and merge:** While MDM has expanded beyond its humble beginnings, matching and merging records remains at the heart of an MDM solution. Accuracy in the match/merge capabilities is extremely important to the return on investment (ROI) of any MDM solution. Having a solution that includes the ability to test and tune match rules — and maintains transparency into the records' creation — increases the confidence in the resulting merged golden records. For more information on high-quality matching, see the section in this chapter titled "High-Quality Matching."



REMEMBER

Errors such as spelling, typing, and phonetic mistakes can creep into data at any point. Variations in data affect the ability to search and match even high-quality data. A sophisticated match-and-merge process addresses both errors and variations in data, and it applies linguistic, phonetic, empirical, deterministic, heuristic, and probabilistic algorithms to generate accurate results.

» **Relate:** Data isn't an island. Its value is amplified when you capture its relationships to other data. Being able to define and configure hierarchies and relationships within MDM should address, but isn't limited to, people and households, components or parts of products, and corporate structures.

For example, being able to compare a corporate hierarchy before and after a merger at a point-in-time is particularly important where historical auditing and reporting are critical for compliance.

- » **Reason:** The more successful business initiatives are contextually driven. MDM should provide you an ability to infer and identify insights hidden in any type of data with delivery based on the context of the user. For example, when someone in marketing looks at a customer profile, her view is different than that of a customer service representative who helps a customer resolve an issue. MDM should deliver contextually relevant insights and actions so you can make the right data-driven decision.
- » **Secure:** MDM ensures your data conforms to business rules, which helps enforce regulatory compliance, as well as protection and privacy requirements. MDM should provide access controls and make subject access requests easier.
- » **Deliver:** Master data's value is realized only when delivered to the right people, supporting the right processes, at the right time, and in the right context. MDM ensures that trusted data gets delivered as needed to customers, employees, applications, and analytics systems throughout the organization.
- » **Governance and stewardship:** MDM masters data, turning it into an effective strategic asset. It allows companies to assess the risk associated with that data, helps define policies, and helps monitor data quality. It supports effective stewardship of data by providing intuitive ways to evaluate, prioritize, and fix data issues.

For a visual representation of this list, check out Figure 3-1.



TIP

A robust MDM solution should be able to leverage workflow/BPM and steward the data process across multiple domains and complex use cases like onboarding suppliers, customers, employees, products, lead conversion, product information syndication, bulk maintenance, supplier qualification, compliance, and more.

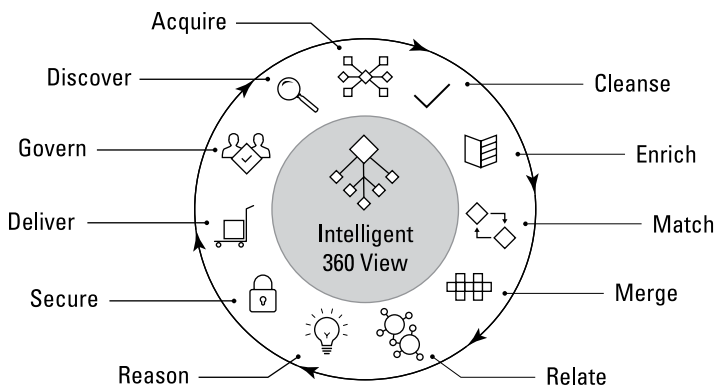


FIGURE 3-1: An intelligent MDM solution delivers all-in-one capabilities for virtually all your enterprise data needs.

High-Quality Matching

If the purpose of MDM is to reconcile information about people, places, and things from multiple databases and systems, then it's of the highest importance that the match and merge process recognizes the identifying information in the records correctly to create the trusted master records.

The success of your MDM solution and, ultimately, the value it delivers hinges on this process. No MDM strategy can work well without it.

In Figure 3-2, you see the matching process. This process analyzes the records of the input data for points of similarity. When sufficient points of similarity are found (suggesting that two or more records likely represent the same information), the records are identified as candidates for linking or merging.

During the *Improve* phase, the data quality is corrected, and any missing data is enriched with third-party sources. In the *Search* phase, one or more techniques is used to find all possible records that meet the criteria specified in the search and fills the hopper for the match. In the *Match* phase, the system examines the records found during the search phase, compares different attributes — for an individual it may evaluate names, addresses, birthdates, ID numbers, and so on — in each record to the search terms, and generates a confidence rating that indicates how likely the records are to be a match.

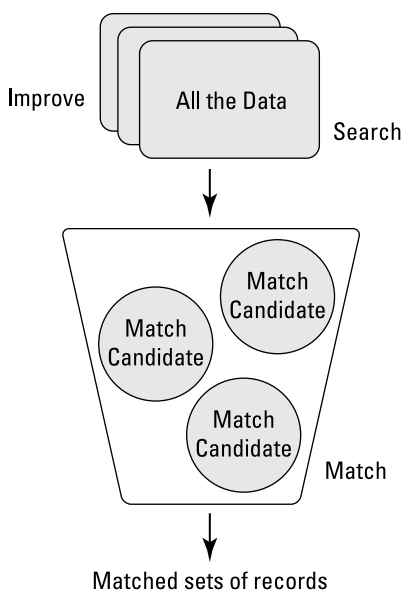


FIGURE 3-2: Improve, Search, and Match in identity resolution.

This confidence rating determines whether the system accepts the match, rejects it, or flags a record as a potential match for manual review. Too high of a confidence level, and you may have a lot of false positives; too low, and the manual review process becomes onerous.

Apart from customer data, matching can be applied to product, location, asset, and other types of master data. For example, in e-commerce, product data from different suppliers may have slightly different descriptions and requires sophisticated matching to identify duplicates.



TIP

High-quality data matching capabilities in MDM significantly reduce manual data stewardship. Look for the capability to tune rules based on learning and the level of confidence needed. You may start out with a lot of manual reviews and fine tune to a more manageable number of records as you learn more about your data. And with today's data volumes, automating the process as much as possible is a good thing.

Future Proofing Your Intelligent MDM Solution

Agility is important. To get it, many organizations want greater flexibility and modularity in deployment with the option to spin up capabilities rapidly in the cloud. Intelligent MDM offers companies a centralized approach to manage your master data optimally as a software-as-a-service (SaaS) solution. A modular, agile, and flexible MDM solution should enable companies to leverage cloud computing where it delivers the most value, while continuing to support critical on-premises legacy applications for as long as they're necessary. It should allow you to process big data volumes and provide flexibility offered by graph databases (GDB) for relationship insights. The MDM solution should also offer an intuitive, business-friendly, modern interface and include artificial intelligence (AI)-driven matching to enhance productivity of data stewards.



TIP

Modern cloud-based architecture should ensure master data is secure because it includes sensitive information about customers and suppliers. As more and more companies are embracing cloud for managing their critical data and processing requirements, modern MDM should offer a scalable and flexible architecture that can address both current and future master data requirements.

For cloud and hybrid workloads, start working with cloud-based data management tools such as an integration platform as a service (iPaaS). With these tools, you can

- » Make it easier to support business users.
- » Use your existing metadata and logic.
- » Reuse the skills you already have.

Scalable for growth

The amount of data that's available isn't going to get any smaller, so you should evaluate an MDM solution on its ability to scale to address your future demand. This ability to scale is important on multiple fronts:

- » **Data size:** You need to be able to manage all types of data, both small and big. Your MDM system should connect with

big data environments to match trusted data to transactions and interactions to better understand the big picture.

- » **Data sources:** With so many sources of data, the number of records that organizations must manage can easily reach into the hundreds of millions, if not billions. An MDM solution should handle this scale and deliver data rigor, accuracy, and security — despite high volume and velocity.
- » **End-users:** With the growing demand for data insights to be served directly to business users across organizations, data stewards can no longer be the gatekeepers of MDM tools. So, your solution needs to scale to support a growing number of users.

Built on microservices architecture

The cloud can drive innovation, uncover efficiencies, and help redefine business processes. But these benefits are only achieved when your cloud infrastructure allows you to integrate, synchronize, and relate all data, applications, and processes — on-premises or in any part of your multi-cloud environment.

Microservices are the building blocks that help decouple massive enterprise solutions into smaller blocks and assemble them based on demand and scale. A microservices architecture helps your business build and support future cloud services, innovate faster, and increase business agility.

MDM built on a microservices architecture allows each component such as merge, search, relate, publish, and so on, to be managed as an independent service. Microservices accelerate and simplify historically lengthy and complex data management projects, decreasing the time to value and adding flexibility to these projects.

Microservices-based MDM provides the ideal architecture for continuous delivery of updates and enhancements and maximizes the speed in which you can deploy changes. This means faster innovations for your organization and an enhanced ability to adapt to changing market conditions quickly.

Adding metadata intelligence

Metadata holds the key to understanding an organization's data landscape. It helps you discover where the key data elements are, how they're connected, and how they flow from one system to the other. By unifying enterprise metadata and applying machine learning (ML) and other AI techniques, organizations can have metadata capabilities that help accelerate and automate master data management implementations.



REMEMBER

AI applied to metadata identifies master, reference, and transactional data domains and automatically infers similar data from user tags to help discover and catalog the data. It also detects sensitive data and recognizes patterns of user data access that can suggest data risk, all of which then feeds into the MDM system.

AI and ML

Few organizations can afford to scale their resources to support the explosive growth in data volume and complexity while fulfilling the need for more data of higher quality to fuel innovation. Luckily, an intelligent MDM solution leverages AI and ML to streamline how data gets mastered.

ML can be used to improve master data management tasks that are tedious or nearly impossible to do at human scale in the time-lines required for the speed of today's businesses. ML and AI help master data management in the following ways:

- » Data discovery, identification, and rule recommendation
 - Identify master, reference, and transactional data domains and automatically infer similar data from user tags and discover relationships among data
 - Suggest data sets, transformations, and data rules, such as those for match/merge or data quality
 - Auto-map, cleanse, and standardize data as it moves from data sources to targets
 - Self-integrate new sources of data
 - Support semantic search, pattern identification, and data classification
 - Detect anomalies and notify correct owner

»» Next-best action and recommendations

- Recommend to business users the next-best action to take based on data
- Propose data sets that might be of interest to business users to boost productivity and enhance data self-service insights
- Associate business terms and definitions with underlying technical data, bridging the understanding gap between business and IT

New intelligent master data–fueled solutions also leverage AI, ML, and natural language processing to fulfill the vision of contextual customer engagement. By applying intelligence to synthesize data, identify relationships, and uncover actionable business insights, AI-enabled customer insight solutions help organizations create and utilize relationships between master, transaction, interaction, and reference data. These rich personalized behavioral insights from across a customer journey can be used to connect omnichannel customer interactions in real-time, infer events, and ensure the delivery of the next-best customer experience.



REMEMBER

Look for an intelligent all-in-one MDM solution that employs AI and ML to future proof your investment and a microservices-based architecture to accelerate enterprise productivity with a common user experience across all the capabilities.

IN THIS CHAPTER

- » Recognizing the business benefits of MDM
- » Aligning with business goals and objectives
- » Getting organized
- » Starting small, thinking big, and scaling fast
- » Defining success

Chapter 4

Planning for Success

If you fail to plan, you're planning to fail. To support your organization's data-driven digital transformation, you need a plan that leads to a well-designed and deployed master data management (MDM) initiative. And for that, you need both executive sponsorship and business buy-in. In this chapter, you make your business case for MDM, bring your team together, create a manageable deployment plan, and measure the success of your MDM initiative.

Making an Impact Internally and Externally

Companies that are serious about managing and leveraging data — and treating it as an actual asset — deliver more value both internally and externally. For these companies, MDM is a means to many ends:

- » **Improving business agility:** Allowing the business to see things more quickly, make faster, better decisions, improve competitive differentiation, and pivot intelligently in response to change

- » **Becoming a customer-centric company:** Using data to interact with customers differently, consistently, with increased understanding, less friction, and with more relevant engagement
- » **Seizing new opportunities:** Deploying disruptive business models and introducing new services and products
- » **Focusing resources on value creation:** Streamlining and automating processes to free up talent and improve productivity
- » **Earning trust of external stakeholders:** Building trust with regulators, partners, and other stakeholders while demonstrating accuracy and value along the way

Any one of these benefits would make the case for a clear, sound MDM strategy. Taken together, the value is indisputable. Achieving these benefits requires businesses to continuously review and improve their data management processes — both internally and externally (with suppliers, partners, and customers).



TIP

A tactical approach to data management doesn't scale and causes repetitive work. The key to a strategic approach is to provide context for your data management strategy. Lead with why it's needed, what business goals it aligns to, and how it affects the people concerned. Outline the key performance indicators (KPIs) you'll use to measure the program, explain the friction that inevitably comes with change, and actively enlist everyone's support. After that, communicate your progress at regular intervals. Let your stakeholders know how things are going, outline any pivots you've had to make, and keep everyone's eyes on the prize. These business benefits make this journey worthwhile.

Identifying the Business Drivers



REMEMBER

If you already have experience with MDM initiatives, you know that they begin and end with quantifiable business value that makes an impact on the top and bottom line. As you identify the business drivers, meet with stakeholders throughout your organization to gain their perspectives, gather information, and earn buy-in for your MDM initiative. Spend some time thinking about the best stakeholders to speak to on both the IT and business sides, take your groundwork to them, and enhance it with their insights.

Internal stakeholders usually include business process owners and data managers, who may have varying levels of involvement based on the scope and type of data initiative:

- » **Customer data:** Heads of the sales, service, marketing, and finance teams — and potentially even the chief executive officer (CEO) or board of directors
- » **Product data:** Heads of the research and development, manufacturing, merchandising, digital commerce, logistics, and finance departments
- » **Supplier data:** Heads of the supply chain, procurement, and finance offices
- » **Financial data:** Heads of the financial planning and accounting, reporting and compliance, and risk offices
- » **Employee data:** Human resources and finance departments

Learning from the same executives you're targeting is valuable. Talk to them to capture their business goals and align them to data-related challenges or opportunities. Knowing their current level of understanding helps you to “right-level” the message when you return with a business case. It also pays to approach a variety of stakeholders. Include the people who use the data every day to perform their jobs.

Your goal is to identify the transactions or processes (and the data elements required therein) that contribute to the success or failure of a business goal — and how that supports the broader business strategy. This enables you to communicate the impact of your MDM initiative on the overall strategy's KPIs.

After you've identified the business objectives and determined the initial domain you want to tackle, define the scope of your MDM initiative. As you do so, ask the following questions:

- » What's the right balance between speed of results (which suggests a narrow scope) and size of payoff (indicating a broad approach)?
- » How committed and aligned are the stakeholder partners?
- » Where is the data you need to support the business goals?
- » What is the state of your data today? How much time is being spent wrangling it into shape? And what is the overhead to do so?
- » How will your success be measured?

The decision about which route to take for your first projects may come down to things like the state of the data you'll be working with and the commitment of the stakeholders involved.

Organizing for Success

MDM initiatives involve a lot of people. Even if your team is small, the outcome of your project will have an impact on a large number of employees, customers, partners, and others who support, or depend on, your business. The right people are required to support, sponsor, steward, operationalize, and ultimately deliver a positive return on data assets. It's important that you

- » Assign ownership and responsibilities before starting an MDM initiative.
- » Have stewardship roles and responsibilities on both sides of the IT-business divide.
- » Create a steering committee to guide the effort to keep it on track and resolve conflicting points of view and other data-related escalations that might emerge across the organization.



TIP

Don't stifle your data quality effort by overburdening it with massive data governance and stewardship policies and procedures. Keep it simple, make logical decisions, and recognize MDM requires strategic focus. Rigid governance deters progress.

The most successful MDM implementations have, at a minimum, the involvement of these individuals or groups:

- » **Executive sponsor/committee:** The optimal executive sponsor(s) will be a chief experience officer (CXO)-level executive whose responsibilities span functional, line-of-business, application, and geographic silos. To be effective, a sponsor must be an active participant and evangelist.
- » **Project leader:** The primary responsibility — and skill — of the project leader is to oversee the ongoing journey. The leader coordinates tasks, helps communicate decisions made to relevant stakeholders, drives program success and return on investment (ROI), and is the primary point of escalation to the executive sponsor and steering committee.

» **Data steward/data quality steward:** Data stewards are the business and IT subject matter experts who can most effectively translate how data and systems influence the business processes, decisions, and interactions most relevant to the organization.



Select people with business process expertise — this may be even more essential than technical expertise. You can teach people to use tools to improve data, but you need people who understand the impact of making the change.

Prioritize for Future Needs

MDM isn't a project; it's an ongoing journey. Every organization needs to find its own best path to the right enterprise-wide MDM strategy. Regardless of your path, it's important that you don't try to boil the ocean. Think big — but start small.

As you get started with an MDM initiative for your organization, it's important to think big (with regard to your overall master data domains and needs) and have a plan for growth. Take Figure 4-1, for example. A flexible MDM solution grows in multiple ways as your business needs and experience with MDM grows.

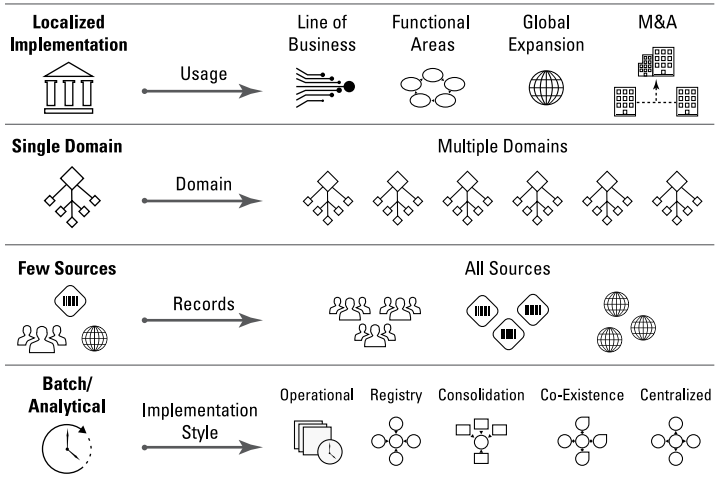


FIGURE 4-1: An MDM solution allows you to start small and grow fast.

Implement your first domain and begin adding capabilities and domains using a modular approach. After you have an initial win, you can quickly scale your project to maintain momentum and extend the benefits of MDM to the broader organization. After you define your vision and select the strategic initiative with which you want to align, you need to make a few other decisions. Delivering trusted data in one area of the business successfully will increase demand for trusted data in other areas of the company. So, before you begin, ensure that you're organized for future growth. As you tackle your initial, smaller projects, keep in mind the longer-term vision. Think about your roadmap for what data will be used and then consider the following:

- » Will it be local data, global data, or the data held by a line of business or functional area?
- » Which data domains will you want to master next, and how do you want to relate them to one another?
- » Will your usage support analytical or operational needs, or both?

Prioritize your projects to ensure you're always working toward your end goal. Design your journey around ongoing successes, staying focused on business impact. Avoid theoretical end states or mega-projects. Stay nimble and scale fast.

Measure and Report Business Impact

You need to demonstrate that master data delivers real business value — and that you know how to get there. You can't do it alone. You need executive buy-in and not just to commit the necessary funds. Maximizing the business impact of your enterprise data is an ongoing process, and IT leaders need to convince the business to commit fully to that journey.

The importance of an effective IT-business partnership cannot be overstated, so make sure you cultivate a productive, collaborative relationship with your key business stakeholders from the start. Keep communication open and report outcomes in terms of their impact to the business.



TIP

Evaluate performance before you start your MDM initiative to create a baseline against which you can track your impact. The work you do now will make things easier (and more cost effective) for many future use cases.

IN THIS CHAPTER

- » Examining biotechnology and healthcare
- » Looking at distribution and wholesale industries
- » Driving intelligent MDM in the automotive industry
- » Checking out retail and e-commerce cases
- » Learning about intelligent MDM in higher education
- » Investing in intelligent MDM in the real estate industry

Chapter 5

Ten Intelligent MDM Success Stories

In this chapter, I provide ten real-world examples of companies in different industries that are seeing the benefits of intelligent master data management (MDM). Follow their examples to reap the benefits of intelligent MDM for your organization.

Amgen

Amgen is one of the world's leading biotechnology companies, committed to discovering, developing, manufacturing, and delivering innovative therapeutics for patients suffering from serious illnesses.

As Amgen develops its pipeline of innovative medicines, it must understand the relationships between patients using its medicines, its partners (such as care providers, suppliers, and wholesalers), and products, as well as publicly available information about its competitors' products, to reach more patients with the

right treatments. As Amgen grew both organically and through acquisitions, its internally developed MDM system became unstable and difficult to scale.



REMEMBER

After implementing an intelligent MDM solution, Amgen achieved the following results:

- » Enables mastering of large datasets for new product launches in less time, helping Amgen reach more patients
- » Helps enhance patient outcomes by identifying the possibility of secondary health events and notifying care providers
- » Allows quick identification of patient relationships to products, providers and payers, enabling better patient support services
- » Reduces data management efforts significantly, empowering MDM team to work more efficiently using fewer manual tasks

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/amgen.html.

Providence St. Joseph Health

Providence St. Joseph Health is a national, not-for-profit health system focused on providing healthcare across Alaska, California, Montana, New Mexico, Oregon, Texas, and Washington. The organization operates 50 hospitals and 829 clinics and offers a range of services, including health plans and housing programs.



REMEMBER

By using an intelligent MDM solution, Providence St. Joseph Health achieved the following:

- » Reduced duplicate patient records by 86 percent by integrating enterprise master patient index with more than 18 sources containing 10 million records
- » Standardized key performance indicators (KPIs) and automated reporting functions, freeing up resources to analyze and use data strategically
- » Implemented data governance based on industry best practices, and tied all data initiatives with analytics

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/providence-st-joseph-health.html.

Avnet

Avnet is a Fortune 500 company founded in 1921. With customers in 125 countries, Avnet is a global leader in semiconductor distribution and component integration, often referred to as the “electronics supermarket.”

The challenges of globalization while providing localized delivery are driving changing data requirements for Avnet, whether it’s product information or price and inventory data. Avnet must provide this information to its customers over a variety of communications mediums based on the customer’s preferences.



REMEMBER

With an intelligent MDM solution, Avnet

- » Provides higher quality product data for customers and suppliers
- » Increases its ability to promote new products

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/avnet.html.

Elektro-Material (EM)

Founded in 1913 in Zürich, Switzerland, EM is the market leader in business-to-business (B2B) Swiss electrical wholesale, offering smart home technology, lighting products, household appliances, tools and safety equipment, solar panels, and e-mobility solutions for electric vehicles.

To succeed in an increasingly competitive online marketplace, EM strives to provide the rich product information and detail that customers increasingly expect. However, the company struggled to manage data across 300,000 different product stock keeping units (SKUs) from approximately 900 suppliers, each with different sources, formats, and varying levels of data quality and completeness.



REMEMBER

With an intelligent MDM solution, EM was able to

- » Double digital channel sales volume in just two years by providing customers with complete and accurate sets of product attributes and images.
- » Enable faster launches (four times faster!) of new products and onboarding of entire product catalogs from 900 suppliers in hours versus months.
- » Position product data team to handle an eight-time increase in product data within the following year.

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/elektro-material.html.

Luxury Automotive Group

A multinational producer of automobiles and motorcycles uses an ever-expanding number of channels to connect with existing and prospective customers. Product information must be presented accurately and consistently across customer touch points, including websites, social media feeds, brochures, customer service call centers, e-shops, and dealerships.



REMEMBER

An intelligent MDM solution extends the brand experience across customer touch points and enables the following benefits:

- » Increased efficiency and time to market for product content
- » Enhanced flexibility and speed in change management
- » Improved accuracy and quality of customer-facing information

Rent-a-Car

Rent-a-Car is a key player in car rental and utility rental operating in France, offering a wide choice of vehicles distributed across a network of nearly 500 car rental agencies and relay points.



REMEMBER

With intelligent MDM, Rent-a-Car

- » Helps build digital trust with customers for a competitive advantage
- » Thrives in the digital world and launches innovative new start-ups to meet business needs
- » Positions itself to be a leader in connected cars and uses data to fight fraud and find stolen vehicles

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/rent-a-car.html.

De Mandemakers Group (DMG)

DMG is one of the largest retailers of kitchen and bathroom ware and home furnishings in the Netherlands, Belgium, and Germany. Growing consumer demand has led to a wider range of DMG products than ever before, while shorter product life cycles have been introduced to better reflect trends and shifting consumer tastes. For DMG, the increased scale and changing nature of its products present both an opportunity and a challenge.



REMEMBER

DMG's intelligent MDM solution has helped

- » Enhance customer satisfaction through clearer communication of home products offered and more personalized service.
- » Increase revenue opportunities by boosting customer conversion and decreasing product returns and errors.
- » Create efficiencies across departments that improve processes and decrease costs.

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/de-mandemakers-group.html.

Coop Alleanza 3.0

Coop Alleanza 3.0 is Europe's largest food retail cooperative, with 2,700,000 members and 430 stores across 12 regions of Italy. The group also includes Alleanza Digital, which supported the e-commerce launch of Coop Alleanza 3.0.

Customer, product, and sales data is integral to Coop Alleanza 3.0's operational strategy. The organization realized that effective data management can create a single source of truth for corporate and product information across the business. It can also enable the company to more effectively deliver a consistent user experience across different sales channels and help the organization navigate changes in the retail market.



REMEMBER

Key benefits from Coop Alleanza's intelligent MDM story include

- » Support for the commercial success of easycoop.com with unified customer, product, and sales data
- » Help to achieve GDPR compliance by cleansing and managing customer information
- » Personalized shopping experiences for Coop members and customers

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/coop-alleanza-30.html.

Ivy League Business School

An Ivy League business school offers master of business administration (MBA), doctoral, and other executive programs to more than 10,000 global students. Enrollment in the prestigious school continues to rise, and with that, the number of alumni.



REMEMBER

The university uses intelligent MDM to create a single source of truth, consolidating alumni, donor, student, and constituent records. The university now delivers a consistent experience across the school's different entities and has achieved

- » Integrated data for seamless connections across systems, enabling smoother cross-registrations among departments

- » Accurate addresses for constituent outreach by cleansing postal address repositories
- » Near real-time integrations with Salesforce and learning management systems, with nearly 150,000 workflows daily

JLL

JLL is a professional services and investment management firm offering specialized real estate services to its clients. To capitalize on an evolving real estate market and create a strong competitive advantage, JLL needed to transform from reactive data delivery to proactive, data-driven customer service. This transition would empower sellers and customers with up-to-the-minute real estate information about its portfolio of 3.4 billion managed square feet.



REMEMBER

With an intelligent MDM solution, JLL achieved the following results:

- » Established a foundation for predictive analytics to drive continuous improvement in facility automation and management, helping cut energy consumption across JLL's facilities by approximately 15 percent
- » Provided self-service tools for employees and customers for competitive differentiation and greater customer service satisfaction
- » Replaced siloed systems with connected, real-time access to a single data store enabling more accurate trend analytics, faster time to value of business intelligence
- » Standardized data management principles, access, and other data governance processes for increased data consistency and accuracy across the enterprise

Read the full story at www.informatica.com/about-us/customers/customer-success-stories/jll.html.



Informatica®

Why You Need a 360-Degree View of Your Business

To elevate your data management game, you need a single view to connect customer, product, supplier, location and other master data domains. With a modern master data management (MDM) solution, your teams can deliver on digital initiatives that support imperatives like:

- Customer experience
- Digital commerce
- Supply chain optimization
- Finance transformation

Informatica Multidomain MDM is an all-in-one, modular service built on the Informatica Intelligent Data Management Cloud™ (IDMC). IDMC's microservices-based architecture helps organizations increase productivity, speed time to market and accelerate business outcomes. Drive real change and adapt faster with a 360-degree view of your business to provide better results — for you and your customers.

For more information on Informatica Multidomain MDM services, visit www.informatica.com/mdm.

Become masterful at MDM

In today's evolving economy, your data is your most strategic asset. With intelligent disruption creating new, data-centric competitors and shifting entire industries, an all-in-one master data management (MDM) solution should be at the core of your data-driven business transformation. For that, you need a solution that delivers a single source of trusted data for an enterprise-wide view of your business. This book shows you how to master your data and outlines the capabilities and value of intelligent MDM.

Inside...

- Why you should master your data
- Three individuals to have on your team
- Four keys to building a strategy
- Business drivers for mastering data
- Elements of an all-in-one solution
- Ways to future proof an MDM solution
- Ten examples of intelligent MDM



Informatica

Lawrence C. Miller has worked in information technology for more than 25 years. He is the co-author of *CISSP For Dummies* and has written more than 100 other *For Dummies* books.

Go to **Dummies.com**[®]
for videos, step-by-step photos,
how-to articles, or to shop!

ISBN: 978-1-394-19882-5
Not For Resale

for
dummies[®]
A Wiley Brand



Also available
as an e-book



WILEY END USER LICENSE AGREEMENT

Go to www.wiley.com/go/eula to access Wiley's ebook EULA.