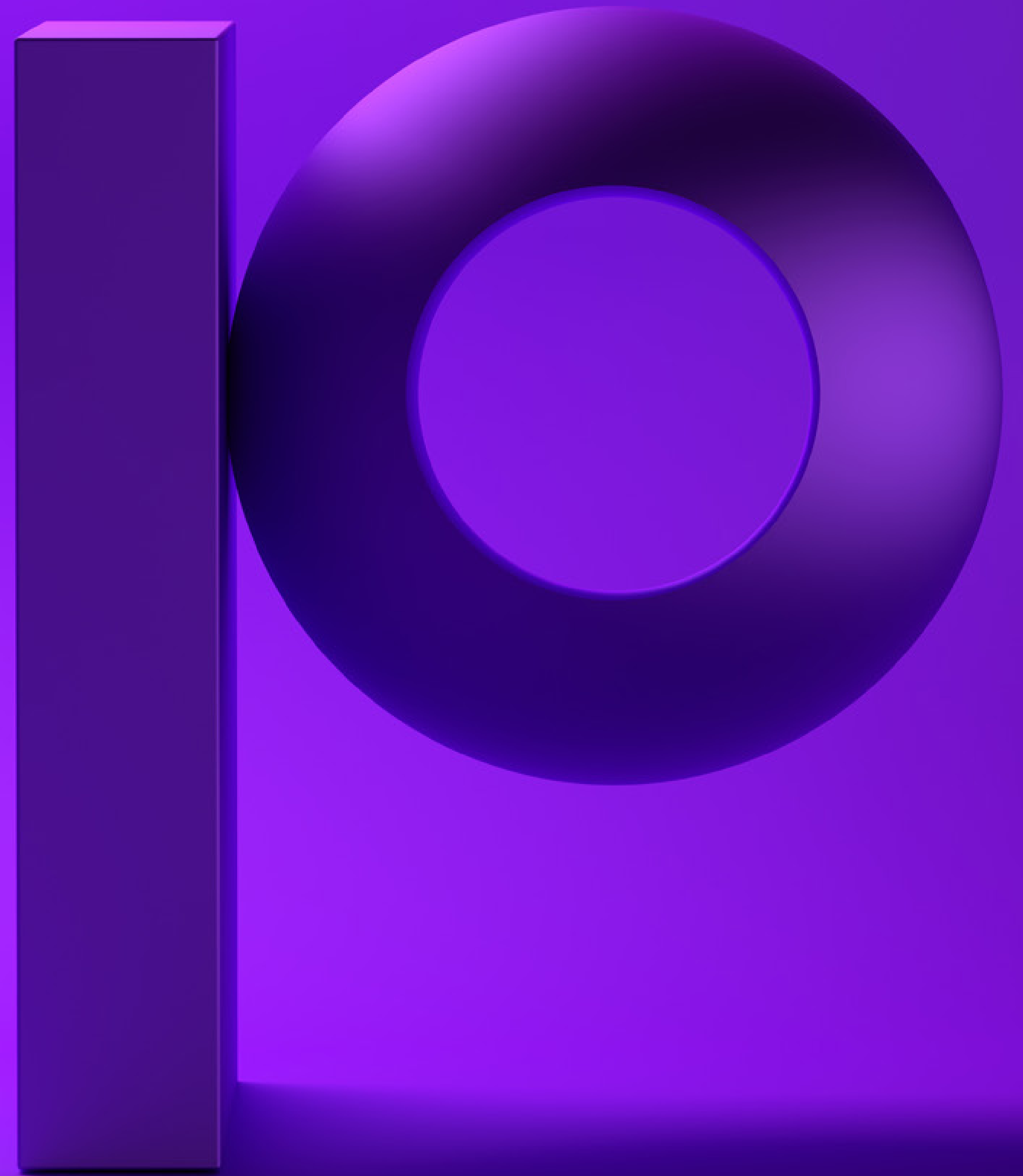


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Multi-Domain MDM: Mastering Modern Data Management Challenges



Introduction

The time has come to liberate your data from single-domain silos. This eBook introduces the attributes and advantages of Multi-Domain Master Data Management (MDM), with guidance on how to get the most from your MDM journey.

Organizations today are critically reliant on data. When harnessed, high-quality data can be the lifeblood of an organization, flowing through an enterprise to drive intelligence, innovation, and growth.

Yet all too often, companies can be overwhelmed by their data. Enterprise companies have grown to depend on multiple systems: ERP, warehouse, e-commerce, call center, CRM, accounting—the list goes on. Each system receives pieces of information by the system owner, and that data is managed, updated, and retired by the administrator of each system independently.

With the importance of trustworthy and timely data on the rise, Master Data Management (MDM) and data governance are ranking high on the radar of organizations, from the CEO and CMO to users along the lines of business. This eBook introduces the attributes and impact of Multi-Domain Master Data Management, with guidance on how to get the most from your MDM journey.

Large enterprises today are managing an average of over 37 active and unique data sources.¹



Why Siloed Domains Don't Stack Up

Initially, MDM solutions focused on a single domain, namely the customer or a product, in a narrow approach that didn't account for the fact that data flows in from a variety of sources that are critically related. Without establishing appropriate connections and relationships among domains, organizations actually create deeper silos of fragmented data.

Enter Multi-Domain MDM

As a critical part of a wider enterprise information management (EIM) strategy, Multi-Domain MDM enables an integrated and modern approach to mastering data based on a single, seamless technology platform—with unified governance, modeling, mapping, and management of all data domains.



Single Domain vs. Multi-Domain MDM

- **Cost:** Operating multiple siloed domains is costlier than one centralized multi-domain hub that meets all requirements.
- **Resources:** Single-domain solutions result in wasted implementation resources, as well as redundant training and maintenance.
- **Governance:** Retaining single-domain silos causes organizations to face constant barriers in data governance practices.
- **Agility:** Single-domain solutions lead to slower responses and time-to-market because the business lacks common references and business rules across domains.

By creating a clear and holistic view of enterprise-wide information, Multi-Domain MDM helps eliminate the guesswork and uncertainty that results from data gaps and inconsistencies.

With Multi-Domain MDM, businesses can:

- Create a “golden record” for data entities by integrating databases and systems such as ERP, CRM, WMS, and OMS, and even hard-to-integrate legacy systems that are difficult to access and even more difficult to decommission.
- Enhance data quality with the ability to extract, load, publish, and syndicate accurate and consistent content to internal and external recipients.
- Improve the efficiencies and quality of decisions for enterprise processes that rely on trusted and accurate information.
- Integrate views of a variety of domains including customers, products, suppliers, employees, assets, references, locations, and other core components of the enterprise.
- Reduce costs, streamline information management, and deliver accurate, complete, timely, and consistent views of information that are critical to achieving business objectives and strategies.



Enabling Cross-Domain Intelligence Through Multi-Domain MDM

Enterprise companies have grown to depend on multiple systems, each with its own internal and external sources of data. With Multi-Domain MDM, single-data domains like the customer, the product, the supplier, and others are merged, cleansed, and enriched.

As a result, more intelligence can be automated with single domain data when it is combined with other data domains.

Multi-Domain MDM offers a 360-degree view of data across domains. Data comes in from a variety of sources, is filtered into the MDM system, and then linked to other data or domains. This cross-domain view enables an unparalleled level of intelligence.

Let's look at an example of what can be accomplished if an organization centralizes its Customer Master Data through MDM. If a buyer updates his LinkedIn profile with a new job, for example, this may initiate a series of events.

The system may tell CRM that the salesperson has to develop a new relationship, notify accounting that invoices should go to someone new, and update e-commerce that a login must be deactivated but to continue certain auto responses and reporting.

When information is updated only in siloed systems, enterprises lose the ultimate power of knowledge that is gleaned from touchpoints that are communicating. Yet if organizations centralize data in each system to MDM, intelligent actions and decisions can be executed based on a single source of truth.

69%

of companies with a multi-domain approach to MDM saw an improvement in decision accuracy.²

Aberdeen

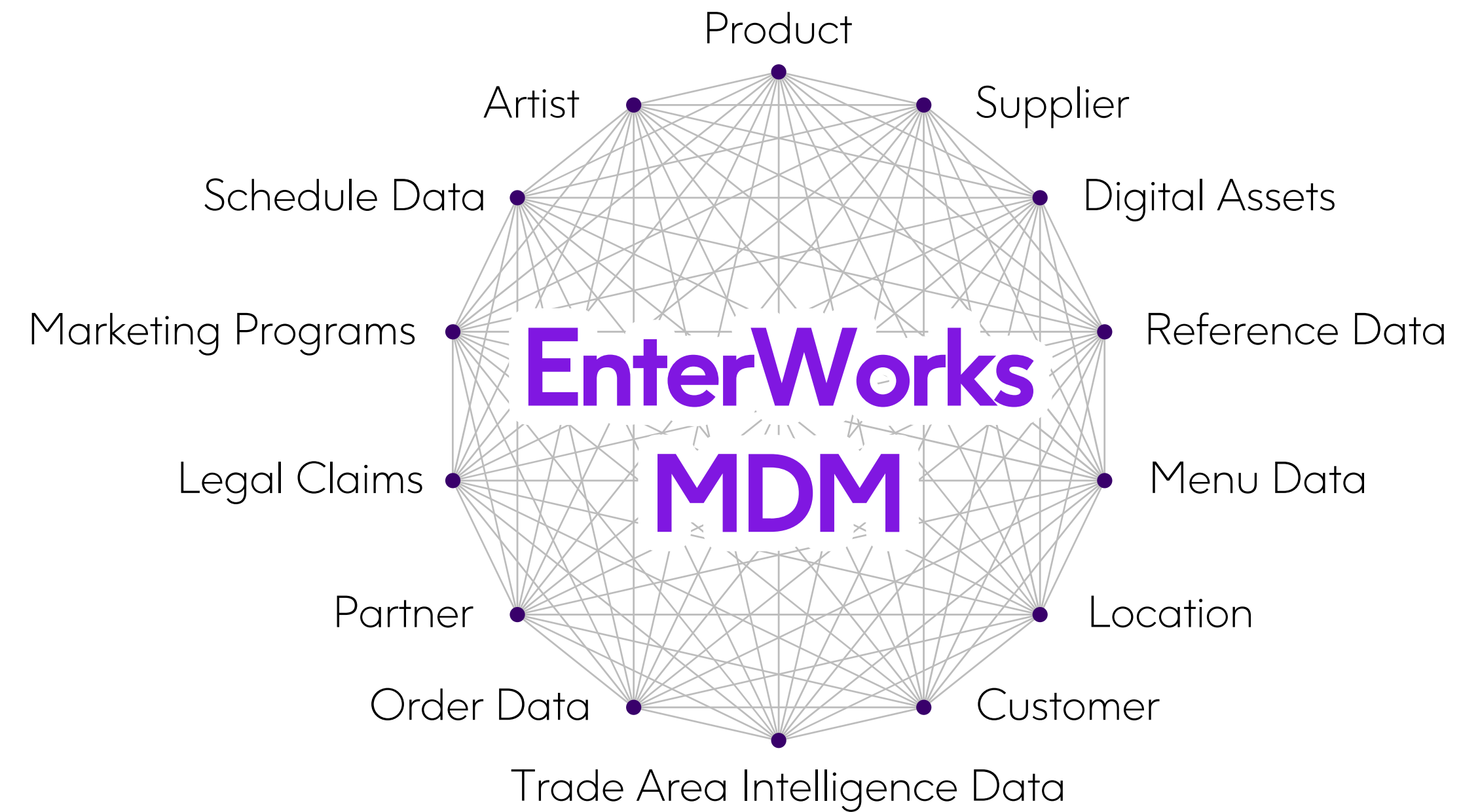
Connecting the Domain Dots

Multi-Domain MDM enables organizations to manage multiple domains of data and easily link objects from those domains to create dynamic virtual relationships. All administrative, stewardship, and governance functions across the multiple domains (and implementation styles) can be achieved from a single user interface.

Product Master

Managing product data for a vast number of products, with possibly thousands or even millions of attributes, is a daunting task. From retailers to distributors and manufacturers—all organizations are challenged with remaining competitive and keeping product information up-to-date, consistent, and compelling. This is particularly true if the information is found in disparate spreadsheets and systems across the organization. Multi-Domain MDM with a Product Master Domain helps companies:

- Aggregate and consolidate product information, delivering accurate and consistent information from a single source of data.
- Deliver a differentiated omnichannel customer experience by sharing information seamlessly from back-end to frontend, with trading partners, and syndicating information across channels.
- Deliver a new level of business performance with operational efficiency and reduced time-to-market.
- Easily meet the ever-evolving list of industry regulations and standards.



“Multi-domain and multi-vector MDM enable digital business to advance from ‘collecting’ data for a single data domain to ‘connecting’ several data domains.”³

Gartner

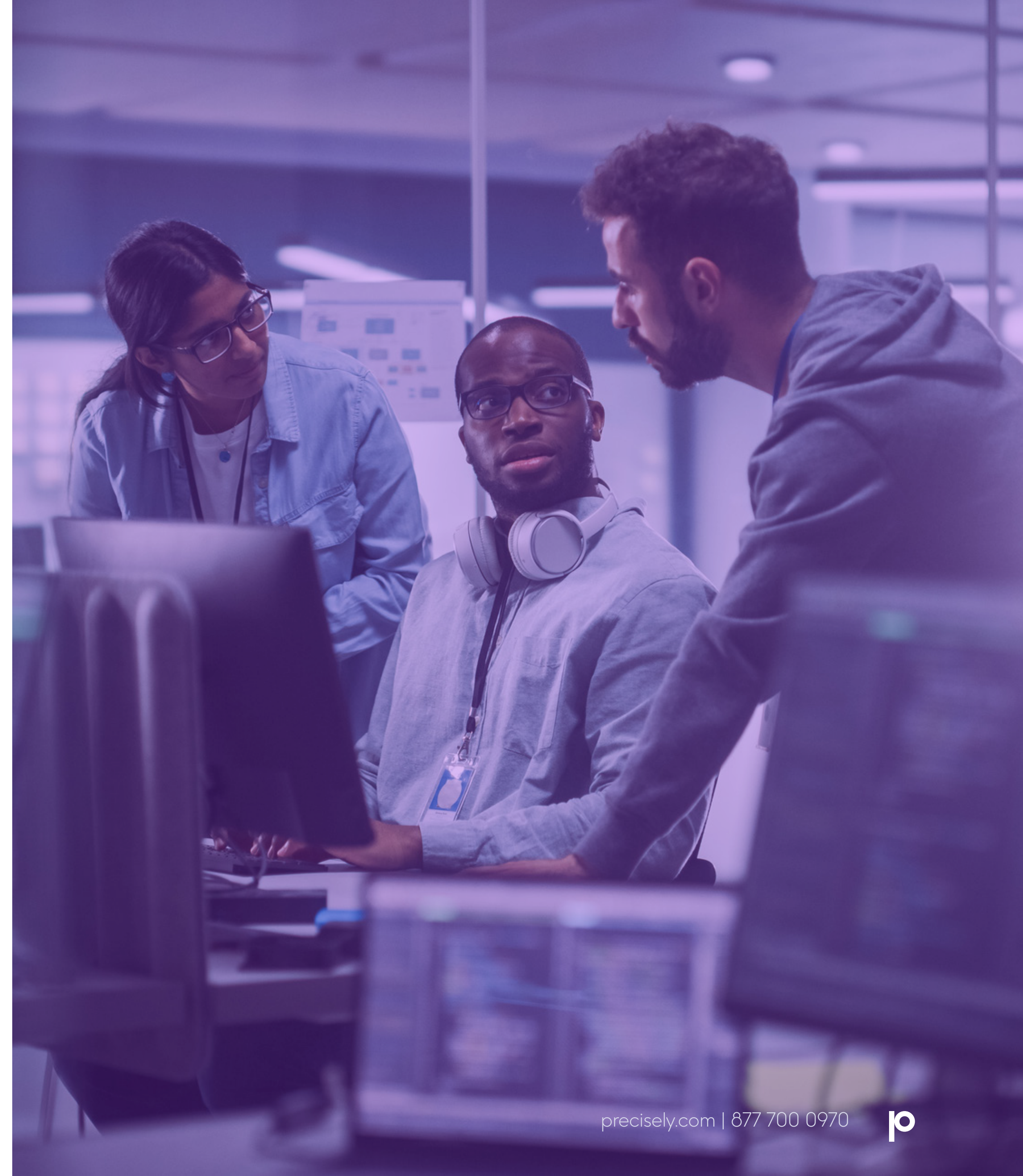
Customer Master

Understanding your customer helps your organization deliver relevant, personalized content through the right channels, at the right time in your customer's purchasing lifecycle. As a high-volume merge domain, the Customer Master manages a constant influx of intelligence around customers, prospects, suspects, and influencers.

The MDM system must identify activity around a customer and update the profile accordingly. For example, for consumers, the system must ingest marketing data about their household, who else lives there, how much each person makes, and their level of education. For business customers, the system must map their role and demographic information, as well as take in financial and geographic information on the employer's business and operational locations. The intelligence to be built around the customer from external sources makes a highly compelling demonstration of Multi-Domain MDM.

Vendor Master

An MDM platform can manage vendor data alongside customer and product data. A Vendor/Supplier Domain enables creating and managing the supplier master record. Organizations can maintain and optimize relationships between customer, vendor, and products through a single platform by standardizing vendor information and processes across brands and geographies.



Location Domain

Adding a Location Domain enables distributors, manufacturers and other organizations to manage information related to retail store locations, manufacturing plants, warehouses, regions, and more. For example, if a manufacturer sells to a large retail chain, but certain products are not sold in certain regions, they can track and link this product and location information to ensure the right inventory is sent to the correct stores.

Asset Domain

An Asset Domain, including Digital Asset Management (DAM), makes storing, categorizing, and managing images, documents, templates, audio and video files, and related metadata easier than ever. Assets are centrally stored and managed through the MDM system, with capabilities to link relationships and associating assets to information for consistency and easy tracking, searching, and reporting.

An Asset Domain can also be utilized to manage information around physical assets, like construction equipment or spare parts, for example. Tracking the specifics around what equipment is available in each store helps ensure that only compatible products are sent to each location.

Reference Domain

A Reference Domain allows reference metadata to be obtained from an internal or third-party source, and then sent into the MDM system to be repurposed or utilized across domains or use cases. Examples include color standards, units of measure, or currency exchange rates for pricing transformations in difference countries.

Other Domains Include:

- Partner
- Trade Area Intelligence Data
- Order Data
- Legal Claims
- Marketing Programs
- Menu Data
- Schedule Data
- Artist



The Data Governance Difference:

One of the most significant benefits of master data management is the ability to strengthen data governance across the enterprise. While most MDM solutions include built-in capabilities for governing master data at the operational level (such as stewardship, workflows, and record-level controls) they lack the necessary capabilities commonly found in an enterprise-wide metadata governance initiative.

When a MDM solution is integrated with a more robust data governance solution, the value becomes exponential. Governance teams can catalog key master data attributes, apply consistent business definitions in a business glossary, and trace how those attributes change over time. This alignment improves visibility and accountability across data domains and systems, creating a stronger foundation for compliance, analytics, and AI-driven initiatives.

By connecting mastered data to governance frameworks, organizations can also link data assets directly to business goals, metrics, and KPIs. This enables data and analytics leaders to demonstrate measurable ROI from their MDM initiatives, streamline governance workflows, and maintain enterprise confidence in the accuracy and consistency of their most critical data.



The Intersection of AI and MDM

Artificial intelligence (AI) is forcing organizations to reprioritize master data and its potential. As AI becomes embedded in analytics, automation, and decision-making, the need for accurate, complete, and connected data has never been greater. This is driving renewed attention to Master Data Management (MDM) as organizations recognize that AI outcomes are only as good as the data they rely on.

AI for Enhancing MDM outcomes

AI is transforming how master data is managed, making MDM processes faster, smarter, and more scalable. Rather than relying solely on semi-automated data matching, validation, and enrichment, organizations are using AI to fully automate tasks that once required significant human effort. For example, AI can compare images from vendors, extract product attributes from PDF specifications, and automatically classify items through image or text recognition. By embedding AI capabilities within MDM, organizations reduce manual workloads, accelerate time to value, and improve the consistency and accuracy of mastered data across domains.

Many organizations are finding success by starting with smaller, targeted AI capabilities that address specific data management challenges. This approach allows teams to act now, measure results quickly, and refine their use of AI through real-world experience. Over time, these focused efforts can expand across additional processes and domains, driving ongoing improvements in data quality, operational efficiency, and scalability while keeping complexity under control.

MDM for Enhancing AI Initiatives

At the same time, MDM provides the foundation that allows enterprise AI initiatives to succeed. As businesses increasingly depend on AI to glean insights, predict trends, and personalize customer experiences, MDM ensures that the underlying data is accurate, consistent, and governed. Master data such as products, customers, suppliers, and locations represents the factual core of an organization. When that data is mastered and governed, it provides the trustworthy inputs that AI models need to generate reliable insights and decisions. By connecting mastered data to business goals and metrics, organizations can better demonstrate ROI from their AI initiatives and ensure those initiatives operate with confidence and accountability. This linkage between trusted master data, governed business goals, and AI initiatives not only improves model performance but also supports responsible AI practices, reduces bias, and increases transparency.

AI and MDM are converging to create a more intelligent and trustworthy data ecosystem. AI enhances the speed and precision of master data management, while MDM ensures that broader AI-initiatives operate on the most accurate and contextual data possible. Organizations that embrace both together will move faster, make smarter decisions, and realize greater value from every data-driven initiative.

Data Without Rules

Finally, it's important to note that the benefits of MDM aren't the results of simply managing data or information. MDM capabilities are inert unless integrated with business applications that leverage the data.

Forrester Research drives home the point, noting:

“High-quality and trustworthy data sitting in some repository somewhere does not in fact increase revenue, reduce risk, improve operational efficiencies, or strategically differentiate any organization from its competitors. It's only when this trusted data can be delivered and consumed within the most critical business processes and decisions that run your business that these business outcomes can become reality.”⁵

Multi-Domain MDM includes several features that bring the value of data to life, including:

Synchronization: Synchronizing master data efficiently and effectively to multiple systems, channels, and touchpoints is one of the strengths of a Multi-Domain MDM platform. This encompasses collecting, ingesting, federating (synchronization with internal systems) and syndicating (synchronization outside the organization). The MDM system can manage bi-directional data synchronization and acts as a “command and control” center that can power and govern data across a variety of applications.

Workflow: As Gartner notes, “Organizations that see their MDM systems as a foundation for service-oriented architecture (SOA) will need a rich library of business services surrounding the data model.”⁶ Multi-Domain MDM is uniquely designed to integrate with automated workflow and business process rules that help provide the “kinetic energy” that underlies the applications leveraging master data and information. With the recording of workflow steps and reporting capabilities, companies can benchmark their performance over time on key business processes related to MDM, such as new product introductions, assortment planning, catalog layout, vendor data onboarding, data governance and data cleansing.

Integrated Business Applications: The value of MDM is further derived from delivering the master data to integrated business applications that leverage the data, such as multichannel publishing and vendor/supplier portals.

Another application example is EnterWorks' Storeytelling concept. With this approach, retailers can recapture the essence of merchandising and product stories to create visual customer experiences. Through Storeytelling, EnterWorks will link virtual reality to assortment planning and planogramming, which helps merchandisers effectively place and promote their products in the store environment. Another side of the Storeytelling concept involves a 3D store environment that can be published to the web, and then browsed by shoppers, with options for purchasing. Through a single repository of content, thanks to EnterWorks, content fuels the product information needs of merchandising, e-commerce, and store applications that need it. This can be accomplished by infusing virtual and, eventually, augmented reality into these existing systems.

EnterWorks™ software

EnterWorks has deep domain and business experience with leading companies across various manufacturing, distribution, retail, and hospitality industries. Our customers leverage EnterWorks Multi-Domain MDM to drive best-in-class customer experiences, optimize internal processes, drive consistent and accurate data across the value chain, and integrate trading partners to extend their brand.



Single view
of content



Differentiated
experiences



Complexity
remastered

Modeling Data

- Heritage in complex data environments
- Handle both structured and non-structured data
- Flexibility; no coding to change
- Solution adapts to business, not vice versa

Enriching Data

- Role based UI: flexible and easy to customize without coding
- Data governance: attribute-level security, flexible promotion/validation rules, flexible workflow, dashboard views
- All data treated as objects

Acquiring Data

- Strong data Integration technology and experience
- Collaborative supplier portals
- Workflow driven data input processes; internal and external people and systems

Sharing Data

- Multiple methods for exporting data – Push and/or Pull
- Automated syndication in target format
- 2-way dealer portals
- Multi-Channel publishing for print/online

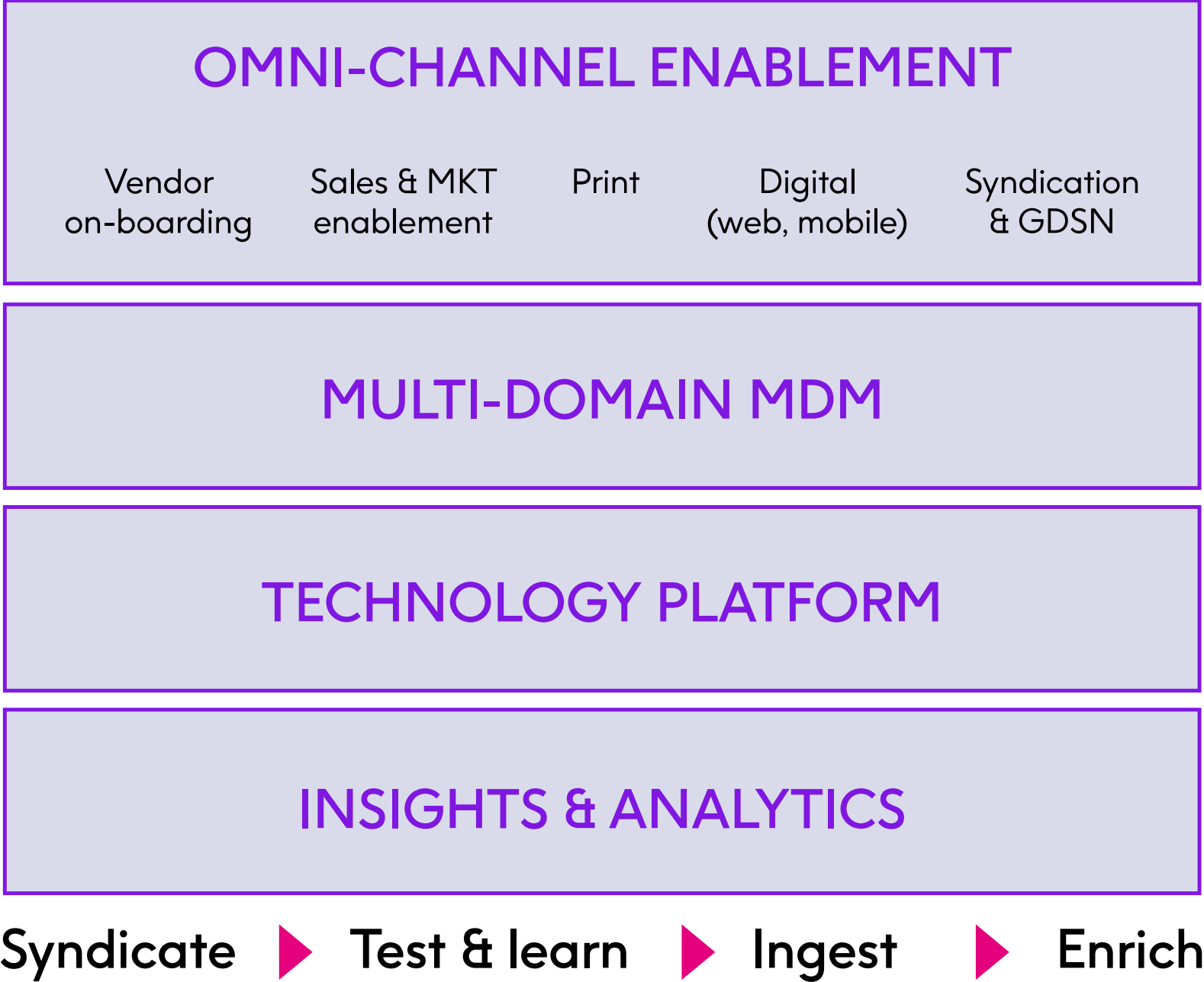
EnterWorks MDM solution

The EnterWorks™ software provides a framework of technologies and processes with a central repository of reliable, up-to-date master data consolidated across all enterprise applications. The solution efficiently combines critical elements of complex data domains, provides tools to improve data quality, and prescribes data governance mechanisms for consistent use of that data.

EnterWorks was developed from inception to master multiple unlimited domains and the relationships between them. Domains can be easily tailored to meet your business model and preferences, rather than your company being forced to fit a preexisting notion of the data structure.

With EnterWorks, companies easily:

- Tailor content and master data to industries, geographies, and position in the value chain
- Address physical or digital solutions and the underlying business processes
- Support the role of individual users to drive efficiency and effectiveness
- Enable differentiated, on-brand customer experiences
- Enrich content and data for user-touchpoint personalization
- Converge data to dynamically link supply and demand chains
- Master and manage all domains
- Homogenous platforms with the latest, proven technologies
- Gain insights and drive performance with real-time analytics and dashboard
- Benefit from on-demand cloud deployment



Key Benefits

- Improve customer experience
- Meet global language and format requirements
- Increase performance and profitability
- Enable faster time-to-market
- Ensure channel specific information
- Reduce supply chain complexity
- Enhance operational efficiency
- Increase IT agility
- Mitigate risk

What sets EnterWorks apart

“Configure, not code” Approach

Support any data structure with an open & flexible data model that fits seamlessly into your tech stack, without requiring heavy IT investment

Expand Master Data Impact

Connect MDM with Data Integrity Suite to catalog master data, create shared business definitions, and tie key MDM attributes to policies and KPIs

Unlock AI-Ready Data

Leverage Precisely’s enhanced data enrichment capabilities with AI-powered partner solutions to unlock AI-ready master data

Deep Product Data Expertise

Accelerate product (PIM) initiatives with three decades of innovation and expertise, featuring advanced taxonomies and a built-in digital asset manager (DAM)

Support for MDM Success

Active community & customer events, ideas portal to shape future roadmaps, and optional 24/7 mission-critical support



Deployment Options

The product fully supports cloud, hybrid, and on-premises deployments.

Key Features:

- Automated Workflow/BPM Engine
- Dynamic Data Modeling
- Full Fledged DAM as a Domain
- Speed of Implementation, with systems live in as little as 90 days
- Lowest TCO
- Multi-Channel Syndication
- Loading, integration and synchronization
- Information quality/semantics
- Performance, scalability, availability and security
- Hierarchy management
- Information stewardship support
- Information governance support
- Integrated complimentary capabilities including PIM, Multi-Channel Publishing, Portals and more
- Content Lifecycle Management
- Purpose-Built Apps
- Multiple Deployment and License Options

Synchronization

- Synchronization can be initiated manually, scheduled, and/or triggered by an event such as a change to the product record.
- Through a new microservices framework (Application Programmable Interface, Enterprise Service Buffs, etc.), subscribers can seamlessly query data to see what changes have been made. Changes are automatically sent to the consuming application without any manual exports.
- Out-of-the-box integration methods are supported, such as GDSN.

Data Security

Data security can be implemented at multiple levels. Access can be configured as read-only, read/write, or the object or attribute can be hidden from the user view altogether as well. Security can be set on the user role, user, object or entity, and even down to the attribute level.

Content in Context

EnterWorks' Multi-Domain MDM capability supports the requirements for both online and offline products, serving up information to a variety of touchpoints from marketplaces to mobile, POS to Print, with workflow-driven and automated processes. This enables the “content in context” approach, where companies require combinatorial outputs to deliver personalized and targeted offers across various touchpoints with consistency. The strategy encompasses business-to-business (B2B), business-to-consumer (B2C), and business-to-business-to-consumer (B2B2C) use cases.

Conclusion

A Multi-Domain MDM implementation can drive consistency and accuracy in data across your domains; reduce costs in implementation and maintenance; add a new level of data quality, governance, and stewardship across your enterprise. Ultimately, the goal of Multi-Domain MDM is to connect the dots between domains to enable an unparalleled level of intelligence around the relationships between products, customers, suppliers, and more.

Therefore, as you embark on your MDM journey, carefully consider how you will implement the technology, the best processes, and the practices that will best maintain, grow, and transform your business.

The right MDM partner can help you say so long to silos and hello to a successful multi-domain implementation.

If you're considering an MDM solution, we hope you'll contact us. The EnterWorks team would love to learn more about your company, discover your data challenges, and discuss how our solutions can help address your needs and opportunities for growth.

[Learn more about EnterWorks](#)





About Precisely

As a global leader in data integrity, Precisely ensures that your data is accurate, consistent, and contextual. Our portfolio, including the Precisely Data Integrity Suite, helps integrate your data, improve data quality, govern data usage, geocode and analyze location data, and enrich it with complementary datasets for confident business decisions. Over 12,000 organizations in more than 100 countries, including 93 of the Fortune 100, trust Precisely software, data, and strategy services to power AI, automation, and analytics initiatives.

www.precisely.com

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