Magic Quadrant for Master Data Management of Product Data Solutions

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VIEW SUMMARY

The MDM of product data solutions market segment grew nearly 9% in 2013. Increasingly, end-user organizations are exploiting MDM as the heart of a digital business transformation. This Magic Quadrant, which evaluates 15 providers, will help find the right vendor for their needs.

Market Definition/Description

Master data management (MDM) of product data solutions are software products that:

- Support the global identification, linking and synchronization of product information across heterogeneous data sources through semantic reconciliation of master data
- Create and manage a central, persisted system of record or index of record for master data
- Enable delivery of a single product view to all stakeholders, in support of various business benefits
- Support ongoing master data stewardship and governance requirements through workflow-based monitoring and corrective action techniques

For the customer master data domain, we publish a separate Magic Quadrant (see "Magic Quadrant for Master Data Management of Customer Data Solutions").

MDM of product data implementations, and their requirements, vary in terms of:

- The instantiation of the product master data, ranging from the maintenance of a physical "golden record" to a more virtual, metadata-based, indexing structure
- The usage and focus of product master data, ranging across use cases for design (information architecture), construction (building the business), operations (running the business) and analytics (reporting the business)
- Different organizations' structures, ranging from small, centralized teams through to global, distributed organizations
- The latency and accessibility of the product master data, ranging from real-time, synchronous reading and writing of the master data in a transactional scenario between systems, to message-based, workflow-oriented scenarios of distributed tasks across the organization, and legacy-style batch interfaces moving master data in bulk file format
- The complexity of the business environment and hence the use cases they need to satisfy; these need appropriate levels of governance, risk management and controls to be established
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Organizations use MDM of product data solutions as part of an overall MDM strategy, which in itself should be part of a wider enterprise information management (EIM) strategy. An MDM strategy potentially encompasses the management of multiple master data domains, such as customer, product, material, services, asset, person or party, supplier and financial masters.

As the name suggests, MDM of product data focuses on management of the domain relating to products, although the solutions can be used to govern other "thing"-type data, whereas MDM of customer data technology focuses on the domain relating to "party" data. Except for "Magic Quadrant for Master Data Management of Customer Data Solutions," there are no discrete Magic Quadrants for other master data domains at this time. We still believe that a multidomain MDM Magic Quadrant would be premature, because MDM needs are very diverse (see "The Five Vectors of Complexity That Define Your MDM Strategy"), leading to different market segments, and most evaluation and buying activity still focuses on initiatives for specific master data domains. Furthermore, different functional requirements result in some vendors having multiple MDM solutions within the same data domain, and thus, the vendor's solutions are evaluated separately in this Magic Quadrant (see the Multiple Products section). In this year's survey of reference customers, 49% of respondents voiced interest in nonproduct domains, but only 27% actually formally evaluated those capabilities in vendor solutions prior to purchase.

In addition, although many MDM solutions are marketed as "multidomain MDM," they do not always conform to our definition of multidomain MDM technology (see Note 1), and we find that they have

EVIDENCE

The analysis in this document is based on information from a number of sources, including, but not limited to, the following:

- Extensive data on functional capabilities, customer base demographics, financial status, pricing, and other quantitative attributes gained via a "request for information" process engaging vendors in this market.
- Interactive briefings in which the vendors provided Gartner with updates on their strategy, market positioning, recent key developments and product road map.
- A telephone and Web-based survey of reference customers provided by each vendor, which captured data on usage patterns, levels of satisfaction with major product functionality categories, various nontechnological vendor attributes (such as pricing, product support and overall service delivery), and more. In total, 213 organizations across all major world regions provided input on their experiences with vendors and tools in this manner.
- Feedback about tools and vendors captured during conversations with users of Gartner's client inquiry service.
- Market share and revenue growth estimates developed by Gartner.
- Inquiry analysis and share estimates developed by Gartner, based on the current capacity of inquiries taken related to this market, and these estimates are not representative of the entire market. (See Note 2 for additional evidence.)

NOTE 1
DEFINITION OF MASTER DATA MANAGEMENT AND MULTIDOMAIN/MULTIVECTOR MDM TECHNOLOGIES

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

Multidomain MDM technology is purpose-built to address the multidomain requirements of an MDM program. It has the following characteristics:

- It can be implemented in a single instance.
- The data model is uniform or interoperable and able to manage cross-domain intersections.
- The workflow and UI elements are uniform or interoperable.
- It supports at least one use case, implementation style and organization/governance model, for specific industry scenarios.

Over time, multidomain MDM solutions will mature, and their capabilities will expand, such that they will overlap and compete with the capabilities of the single/deep-domain MDM solutions (such as MDM of customer data and MDM of product data solutions). Thus, multidomain MDM solutions will attract increased investment, in some cases at the expense of the need for singular-domain-focused solutions.

Multivector MDM solutions provide an integrated set of many gaps in their capabilities for, and experience of, handling every data domain (see "MDM Products Remain Immature in Managing Multiple Master Data Domains").

The use of MDM of product data solutions ranges across different scenarios. The major scenarios are in support of:

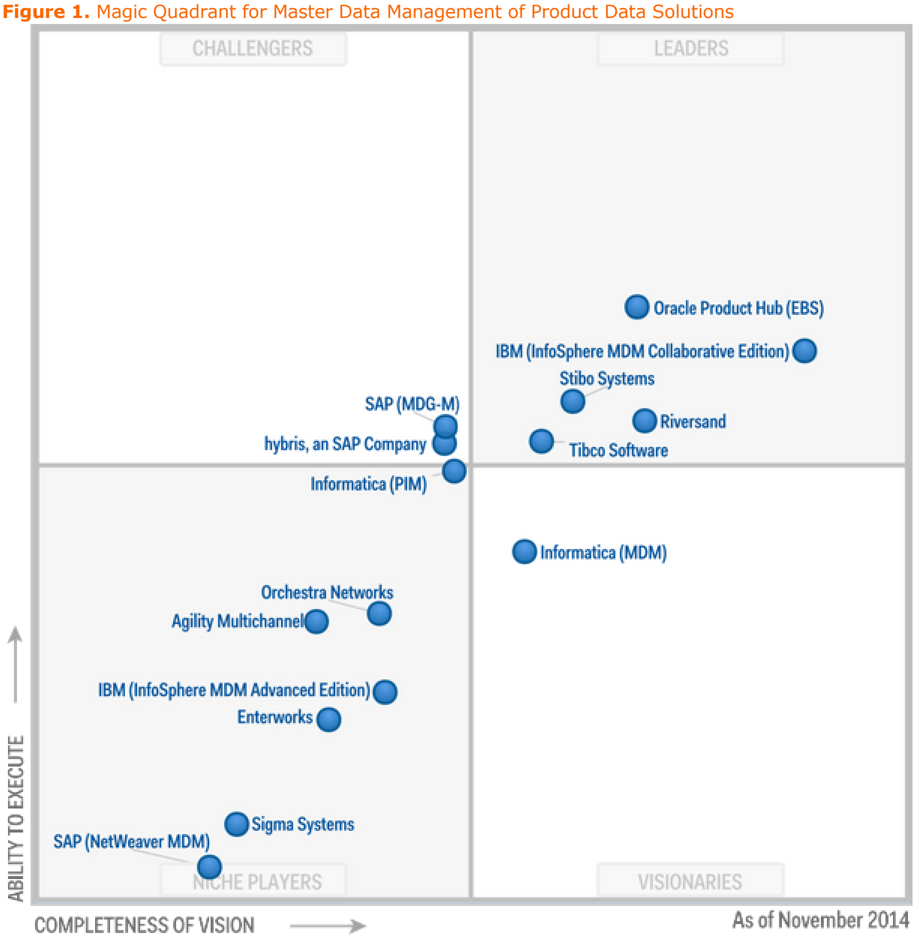
- Customer-facing business processes commonly found in e-commerce across different channels or "omnichannels."
- Supplier-facing procurement and/or product development (that is, product life cycle management) business processes. This could be for material or finished products.
- Enterprise- or ERP-centric view, starting with information architecture spanning all business processes and ending with consolidation of data from a corporate, global perspective.

For a more complete review of the scenarios covered by solutions in this Magic Quadrant, see "Consider Three Specific Scenarios for MDM of Product Data."

This Magic Quadrant provides insight into the segment of the constantly evolving packaged MDM system market that focuses on managing product data to support supply chain management (SCM), CRM and other customer-related strategies. It positions relevant technology providers on the basis of both their Completeness of Vision relative to the market and their Ability to Execute on that vision.

Magic Quadrant

Figure 1. Magic Quadrant for Master Data Management of Product Data Solutions



MDG-M = Master Data Governance for Material

Source: Gartner (November 2014)

Vendor Strengths and Cautions

Agility Multichannel

Agility Multichannel is headquartered in York, U.K. The company's Agility version 6.1 achieved general availability (GA) in April 2014. Agility Multichannel's total revenue from MDM of product data solutions in 2013 was $8 million (estimated). Agility Multichannel's total MDM customer count in March 2014 was 85 (estimated).

Strengths

- **Continued growth and momentum:** This vendor targets specifically the small or midsize business (SMB). Our estimates suggest it grew 12% in software revenue in 2013 compared with 2012, nearly 4% faster than the overall MDM of product data market. It doubled in terms of the number of inquiries in which it was mentioned by our clients.

facilities for ensuring the uniformity, accuracy, stewardship, semantic consistency and accountability of an enterprise's official, shared master data assets. These meet the needs of the business across all five vectors of MDM complexity:

- Industries — For example, product-centric industries, service industries and government
- MDM data domains — For example, customer, supplier, partner, location, product, item, material, asset, ledger, account, person and employee
- MDM use cases — For example, design/construction, operational and analytical
- Organizational structures — For example, centralized, federated and localized organizations
- MDM implementation styles — For example, registry, consolidation, coexistence and centralized

Multivector MDM solutions contain comprehensive facilities for data modeling, data quality, data stewardship, data governance, data services, and data integration in workflow and transactional usage scenarios. They also offer high levels of scalability, availability, manageability and security.

Multivector solutions may usurp single-domain and multidomain MDM solutions, but this is unlikely for at least five years.

NOTE 2
REFERENCE SURVEY

As part of the Magic Quadrant process, we sought the views of vendors' reference customers via an online survey. The survey included requests for feedback on vendor maturity (for example, understanding of industries, provision of innovation, responsiveness to new requests, TCO and pricing) and product capabilities (for example, flexibility in data modeling, support for data quality, UI support for data stewardship, internal workflow and support for multiple architectural styles).

More than 213 organizations, representing all the featured vendors' reference bases, were contacted for this survey. Unsurprisingly, the reference customers were generally pleased with their vendors and products, but they gave relatively low marks in some areas, which we have detailed in the analysis of each vendor. Some of the issues may be historical, as not all organizations are on the latest product versions.

EVALUATION CRITERIA DEFINITIONS

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or

Robust functionality: Agility Multichannel has good capabilities oriented toward multichannel e-commerce or product information management (PIM). The product has a business-user-friendly UI, and the vendor also sports embedded digital asset management capability.

Good references: Agility Multichannel scored highest of all vendors in the area of product capability. It also scored well in areas related to the sales cycle and after-sales care. Most references used Agility's own professional services.

Cautions

Limited base: We estimate Agility Multichannel's share of the MDM of product data market is 1.5% in 2013. The vendor needs a stronger base on which to defend its position in the market should the larger vendors move into this segment.

Product development: The product requires further investment in some areas to support additional implementation styles, as well as more-complex requirements shared by large and SMB organizations. A couple of Agility customers reported products were released before being fully tested and products that lacked documentation.

Vendor size: It is difficult being a small vendor with large competitors, and prospects we speak to are often concerned about the size of this vendor and if this is a risk that can be mitigated.

Enterworks

Enterworks is headquartered in Sterling, Virginia, U.S. Enterworks Enable, version 7.2, achieved GA in March 2014. Enterworks' total MDM software revenue in 2013 was $13.7 million (estimated). Enterworks' total MDM customer count in March 2014 was 245 (estimated).

Note: No vendor briefing was executed in support of this research. Gartner's analysis was therefore based on other credible sources, including publicly available information, previous briefings with Enterworks and client inquiries.

Strengths

Industry focus: Enterworks focuses on a narrow selection of industries — chiefly, distribution, wholesale and manufacturing — which enables it to concentrate its investments and to be a specialist provider to these industries.

Targeted capability: Enterworks focuses on e-commerce across multiple channels — referred to as the "PIM scenario." It has effective workflow capabilities.

Key customers: Some of Enterworks' customers offered positive feedback. The reference survey this year had one outstanding feature score, which was "hierarchy management." Enterworks' references used mostly the Enterworks professional services team.

Cautions

Product capability: Enterworks was developing new MDM-based business applications and diverting resources into adjacent market segments. It has little experience with multiple styles of MDM, and its data quality capability is not "best of breed."

Little momentum and visibility: Our estimate for Enterworks' software revenue in this market segment was flat in 2013. The vendor's share of inquiries to Gartner relating to this market segment slowed to 1% in 2014, down from 1.6% in 2013. We estimate its 2013 market share at 2.5% and falling.

Overall strategy: With estimated flat revenue, falling inquiry interest and general lack of visibility in the marketplace, we expect to see the vendor less and less in the marketplace, and it will likely remain "niche"-oriented going forward — unless it can adjust its strategy and compete in the wider market.

hybris, an SAP Company

Hybris, an SAP company, is headquartered in Munich, Germany. The company's hybris Product Content Management (PCM) 5.2 achieved GA in March 2013. Hybris' total software revenue from MDM of product data solutions in 2013 was $19.9 million (estimated). Hybris' total MDM customer count in March 2014 was 205 (estimated). Hybris was acquired by SAP in August 2013.

Strengths

Momentum and focus: Hybris' revenue growth in this market segment was 19.6% in 2013. Its share of inquiries in 2014 increased to 3.9%, up from 3.5% in 2013. We estimate its 2013 market share at 3.7% and growing.

"Hands off" SAP acquisition: So far, SAP has not forced hybris to alter significantly its own go-to sales and product strategy. SAP and hybris have developed a credible integration strategy when both are present in a prospect.

Balanced product: Hybris targets multichannel e-commerce and PIM scenarios, as well as supports content management. This is a good niche, and PCM is an effective contender in this market segment.

Cautions

SAP's product strategy: SAP has avoided rationalizing the hybris technology stack into the SAP technology stack. Clients remain uncertain how long this situation may last. How all the SAP application and information assets are rationalized, using an MDM perspective with application data, is not clear.

Core PCM product capability: Gaps persist, such as the absence of information stewardship packaging. Functional overlaps exist, such as with SAP MDG-M for managing product data. Most

account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

references report good batch support but too few-real time implementations.

References: The product achieved consistently lower scores in the reference customer survey than other vendors' products in this Magic Quadrant in terms of product capability.

IBM (InfoSphere MDM Advanced Edition)

IBM is headquartered in Armonk, New York, U.S. IBM's InfoSphere MDM Advanced Edition (AE) version 11.3 achieved GA in June 2014. IBM's total software revenue from MDM of product data solutions in 2013 was $66.1 million (estimated, for all products), of which $6.6 million was for AE. IBM's customer count for MDM of product data solutions in March 2014 was more than 280 (estimated for all products), of which 35 were for AE.

Strengths

Broad IM vision and strategy: IBM provides an Information Governance and Integration platform that sits at the heart of an organization's information management platform. Its MDM offerings also sell stand-alone and, increasingly, with bundles of supporting stewardship solutions.

Product strategy: AE is the lead IBM product for multidomain MDM, with strengths in multiple MDM styles, and the product has been deployed in some MDM of product data environments. IBM is delivering on the convergence of its legacy products into functional "editions." The included Master Data Governance facility has improving stewardship facilities.

Targeted selling: This product meets the less-complex workflow-oriented requirements for MDM of product data solutions, commonly found in some industries such as financial services. It also acts, in some cases, as the real-time integration "layer" for a Collaborative Edition (CE) deployment.

Cautions

Slowing momentum: IBM's overall MDM software revenue growth slowed to an estimated 3.5% in 2013. AE is not the lead product when product data requirements are complex, and even though IBM's overall share of inquiries in 2014 (19.9%) increased slightly over 2013 (18.6%), those inquiries were mostly related to CE and not AE.

Product capability: AE can help with initially less-complex finished product/service-centric situations, but more-complex workflows may require CE's capabilities.

References: IBM did not provide references for this product, so we have relied on our inquiry data. End users are starting to accept the new positioning of the products, However, when and where AE, CE and other Enterprise Edition are positioned in terms of sales remain specific to each client.

IBM (InfoSphere MDM Collaborative Edition)

IBM is headquartered in Armonk, New York, U.S. IBM's InfoSphere MDM AE version 11.3 achieved GA in June 2014. IBM's total software revenue from MDM of product data solutions in 2013 was $66.1 million (estimated for all products), of which $56.2 million was for CE. IBM's total customer count for MDM of product data solutions in March 2014 was more than 280 (estimated for all products), of which 238 were for CE.

Strengths

Broad IM vision and strategy: IBM provides an Information Governance and Integration platform that sits at the heart of an organization's information management platform. Its MDM offerings also sell stand-alone and, increasingly, with bundles of supporting stewardship solutions. CE is the product IBM uses when it is showcasing its strengths in mastering product data.

Product depth: CE has a very capable workflow and a flexible data model that can suit many situations. It includes data quality support for product data and a new UI for data stewards, shared with other MDM solutions from IBM. There is now also a common business rule capability.

Marketing understanding: In the last year, it has brought to market an updated Advanced Catalog Management within its e-commerce offerings, a new Product 360 capability (using Watson), and a new search tool (Data Explorer) that includes content as well as structured data.

Cautions

Momentum slipping: IBM's overall MDM of product data growth rate (estimated at 3.8%) is less than the overall market growth rate (of nearly 9%). It needs to refocus its energies if it is to sustain its leadership position.

First-mover disadvantage: Some first-generation IBM installations are being switched to newer competitive offerings — not because of any shortcoming in the newer product itself, but because of end-user politics, changes in buying behavior and so forth.

Complexity of road map: IBM's business process management tools will not be rationalized with this product until 2015 or later, and CE will have its own unique workflow capability until then. There is no single packaged solution for information stewards; in fact, in 2014, IBM added more with its Information Governance Catalog.

Informatica (MDM)

Informatica is headquartered in Redwood City, California, U.S. Informatica MDM version 9.7.1 became GA in March 2014. Informatica's total software revenue from MDM of product data solutions in 2013 was $33.1 million (estimated). For the Informatica MDM product line, we estimated it at $14.1 million. Informatica's license count for MDM of product data solutions (across both Informatica MDM and Informatica PIM) in March 2014 was 317 (estimated), of which 90 were for Informatica MDM.

Strengths

Broad IM vision: The Intelligent Data Platform (IDP), introduced in 2014, combines the positioning of its current tools and technologies, including its MDM offerings, and overlays its traditional tools with a new semantic offering. The multidomain MDM product focuses on party data, as well as other data, including product data. It operates alongside the Informatica PIM for end-to-end customer, product, and supplier information governance and stewardship.

Customers and momentum: Informatica MDM's software revenue grew in excess of market averages, at an estimated 27%. It is selling well as a stand-alone solution, as well as alongside Informatica PIM. The share of inquiries in 2014 related to this market segment increased to 9.3%, up from 8.7% in 2013. Its 2013 market share is estimated at 2.6%, so it seems it should grow well in 2015, too.

Partner ecosystem: Informatica's partner ecosystem is established for mostly party-type data, although some parts of the ecosystem have product data experience.

Cautions

Product strategy: The vendor must now explain in simple terms how the IDP, when realized, can support the myriad options related to information that needs to be governed across the enterprise. These road maps are emerging slowly.

Industry and partner strategy: Although the original MDM acquisition had a strong industry strategy, this needs to be expanded and improved, taking into account the strong industry-oriented capability that the Informatica PIM product brings.

Reference survey: Informatica received, overall, "average" scores from its reference customers, and this average score needs to be boosted if the vendor wishes to really impress the market. Sixty-three percent of the reference customers said they did a competitive evaluation of the vendor in terms of product data, and they accepted the promise of the vendor in terms of meeting their requirements for multidomain MDM.

Informatica (PIM)

Informatica is headquartered in Redwood City, California, U.S. Informatica PIM (formerly Heiler Enterprise PIM) version 7.1 became GA in July 2014. Informatica's total software revenue from MDM of product data solutions in 2013 was $33.1 million (estimated). For the Informatica PIM product line, we estimated it at $19 million. Informatica's license count estimate for MDM of product data solutions (across both Informatica MDM and Informatica PIM) in March 2014 was 317 (estimated), of which we estimate 227 were for Informatica PIM. Heiler was acquired by Informatica in June 2013.

Strengths

Broad IM vision: The IDP, introduced in 2014, combines the positioning of its current tools and technologies, including its MDM offerings, and adds to its traditional tools with a new semantic offering. Informatica PIM is positioned to manage product data that supports multichannel commerce, and it will be part of the IDP going forward.

Visibility and growth: Informatica PIM's software growth exceeded market averages, at an estimated 57%. Although the number of inquiries in 2014 for "Heiler" fell to 6.4% from 7.1% in 2014, many of the new inquiries shifted over to "Informatica." With 2013 market share for this product estimated at 3.5%, it seems it will continue to grow in 2015.

New product capabilities: With the ActiveVOS acquisition, now Informatica BPM, new capabilities will be offered in Informatica PIM in the next year. Integration and sharing of metadata between the two MDM products will help simplify implementation options. A large number (that is, more than 50%) of new clients are adopting Informatica data quality solutions that are now integrated and can share the same quality rules with other applications.

Cautions

Product strategy for stewardship: The vision for the IDP is good, but in the short term, the range of options to support operational stewardship and industry-specific capability remain fragmented or incomplete.

Protecting and exploiting intellectual property (IP): The Heiler acquisition brought much-needed experience and knowledge about business processes, ERP and industry experience. IP needs to drive Informatica's core MDM strategy and needs to be expanded if its IDP is to succeed outside of IT.

References: References reported concerns with pricing simplicity.

Oracle Product Hub (EBS)

Oracle is headquartered in Redwood Shores, California, U.S. Oracle's total software revenue from MDM of product data solutions in 2013 was $85 million (estimated), of which $80.8 million was for Oracle Product Hub. Oracle's total MDM of product data customer count for 2013 was 505 (estimated) for all products, of which 460 were for Oracle Product Hub. Oracle's Product Hub version 12.2.3 achieved GA in December 2013.

Strengths

Strong MDM portfolio: Oracle has a broad range of MDM assets for multiple domains and use cases, coupled with Oracle Enterprise Product Data Quality and the range of solutions within Oracle Fusion Middleware. Oracle Product Hub is only one of the products the vendor licenses to support MDM of product data solutions.

Strong product capability: Oracle Product Hub can be deployed "inside" the Oracle E-Business Suite (EBS) data model (in which most of its customers exist); alternatively, when "outside" EBS, it can be deployed as an MDM hub, which can also govern non-EBS data.

Momentum: Oracle's share of inquiries related to this market segment increased in 2014 to 17%, compared with 14.5% in 2013. Gartner estimates its growth in software at 11%. Its 2013 market share is 16.5% and seems to be growing.

Cautions

Field positioning: Some end users have been confused over which product is being sold. Oracle will position different products based on specific customer scenarios.

Multiple products split investments: Product innovation may need repeating on two (or more) products due to its portfolio approach. As such, the functional differences between the two main product hub offerings will tend to diverge.

References: Some references scored Oracle poorly in some areas, such as industry knowledge, continuous stream of product innovations, clear product road map and responsiveness to new features.

Orchestra Networks

Orchestra Networks is headquartered in Paris, France. Orchestra's EBX5 version 5.5 achieved GA in June 2014. Orchestra's total software revenue from MDM of product data solutions in 2013 was $7.1 million (estimated). Orchestra's total MDM product data customer count in March 2014 was 72 (estimated).

Strengths

Strong momentum: In 2013, Orchestra's revenue grew year over year by more than 32% in this market segment. Its 2013 market share was estimated at 1.3%, so it seems to be growing quickly.

Product flexibility: EBX5 has deep experience with reference data and hierarchy management, and it is used across the financial services and manufacturing sectors. It offers flexible data modeling, is integration-/message-oriented and has a cloud-based option.

References: Most references reported real-time integration with external systems, with batch support as needed. References suggested the vendor's pricing model was easy to understand.

Cautions

Marketing strategy: The vendor targets a narrow set of segments in MDM, such as hierarchy or reference data management, and targets less-complex MDM situations that are common with customer or product data. Orchestra's share of inquiries to Gartner fell in 2014 to 1.9%, which is down from 3.5% in 2013 and 3.9% in 2012.

Product/partner strategy: Orchestra needs to develop starter templates, such as data, business process and workflow models, to compete with larger rivals. This strategy requires a mature partnership model; so far, Orchestra has partnered on an opportunistic basis.

Focused on data, not stewardship: Although the product sports a stewardship dashboard, the vendor is just rounding out its vision for glossary, business rule governance and process templates with the recent introduction of its information governance capabilities.

Riversand

Riversand is headquartered in Houston, Texas, U.S. Riversand's MDMCenter version 7.6.2 achieved GA in April 2014. Riversand's total software revenue from MDM of product data solutions in 2013 was $18.6 million (estimated). Riversand's total MDM of product data customer count in March 2014 was 62 (estimated).

Strengths

Momentum: Riversand's software revenue in this market segment grew by 10%, and its current market share is estimated at 3.5%. The vendor is growing quickly, and its head count has grown to 210 (from 180 in 2012).

Product strategy: MDMCenter is at the heart of a multidomain MDM solution, with strong product data orientation, metadata management and flexible data modeling. It has been used effectively in all MDM of product data scenarios. It is the only .NET-based solution in this Magic Quadrant.

References and customer base: Riversand has broad exposure and experience in the retail, manufacturing, distribution and energy sectors. It achieved slightly above-average scores in regard to its product capability, a continuous stream of product innovations, and good understanding of information governance.

Cautions

Product innovation: Riversand has filled some of its data quality gaps — with partner-based solutions (that is, data profiling) — but its newly released module is focused more on data quality, and it is not yet a rounded information stewardship solution.

Marketing in transition: Marketing has now been "in transition" for more than a year and remains in transition. Its share of Gartner inquiries related to this market has fallen to 6.4% in 2014, from 7.4% in 2013 and 8.2% in 2012. This is now close to its market share and implies a weakening of its marketing exposure.

Organization expansion challenges: The vendor invests from cash flow, so it has to secure new customers before it can build the infrastructure to support that growth.

SAP (MDG-M)

SAP is headquartered in Walldorf, Germany. SAP's MDG-M version 6.1 achieved GA in December 2012. SAP's total software revenue from MDM of product data solutions in 2013 was $87 million (estimated), of which $61 million was for SAP MDG-M as a stand-alone hub. SAP's total MDM of product data license count in March 2014 was 2,000, although we estimate approximately 1,400 are implementing or have implemented SAP MDG-M or SAP NetWeaver MDM.

Strengths

Broad portfolio: SAP's primary focus is to use SAP MDG-M as the main MDM offering to both manage ERP data and operate as a stand-alone MDM hub. For richer, more-application-specific data outside of ERP, other applications will be offered. In 2014, SAP changed tack and started to offer an SAP Hana-based deployment option for SAP MDG-M.

Product fit and flexibility: MDG-M is Advanced Business Application Programming (ABAP)-based. Users can support ERP data management by implementing MDG-M "inside" the SAP ERP Central Component (ECC) or "outside" (but integrated with) the ECC as an MDM hub, extending the data model for non-SAP data.

Momentum within client base: The share of SAP's product data MDM sales attributed to MDG-M continues apace, growing about 8% in 2013. Its share of inquiries in 2014 grew to 31%, from 25% in 2013.

Cautions

Sold primarily to SAP's ERP installed base: MDG-M is not sold as a stand-alone or best-of-breed MDM offering. This is a self-imposed, niche-market approach.

Complex strategy: SAP MDG is at the center of SAP's strategy to help end-user organizations manage their ERP data, as well as support MDM. SAP NetWeaver MDM is now offered only for consolidation use cases and is on maintenance-only R&D through 2020. Hybris PCM plays a role in extending SAP's information governance capabilities to e-commerce application and data, even non-hybris apps/data. Other SAP applications (such as, APO, SRM/Procurement and PLM) manage their own data, irrespective of SAP MDG's existence.

References: Product scores were slightly less than average in the online survey, losing out in hierarchy management, data quality tooling for products, and reporting/analysis for information stewards.

SAP (NetWeaver MDM)

SAP is headquartered in Walldorf, Germany. SAP's NetWeaver MDM version 7.1 SP10 achieved GA in March 2013. SAP's total software revenue from MDM of product data solutions in 2013 was $87 million (estimated), of which $22 million was for SAP NetWeaver MDM. SAP's total MDM of product data license count in March 2014 was 2,000, although we estimate approximately 1,400 are implementing or have implemented SAP MDG-M or SAP NetWeaver MDM.

Strengths

Broad portfolio: SAP's primary focus is to use SAP MDG as the main offering for managing ERP data and master data. In 2014, SAP changed tack and started to offer an SAP Hana-based deployment option for SAP MDG-M. SAP NetWeaver MDM is still part of the portfolio but is now on maintenance mode only until 2020, whereupon Gartner expects SAP NetWeaver MDM to be sunsetted.

Targeted focus: SAP NetWeaver MDM is now targeted only at those end-user clients that need to consolidate product master data from multiple systems before integrating to an ERP system. This is the "sweet spot" for this product.

Customer base: The largest segment of the SAP customer base is using SAP NetWeaver MDM at present.

Cautions

Product weaknesses: The architecture for SAP NetWeaver MDM was not liked by all its customers. The product is designed to handle only some MDM scenarios, and it is not positioned to tackle centralized authoring of product data.

Customer/product road map: SAP NetWeaver MDM is on maintenance through only 2020, and Gartner expects it to be sunsetted by then. In some cases, end users may be able to leverage SAP MDG-M; in other cases, they may need hybris PCM or, in fact, a competing product.

Customer concerns: SAP did not provide any references for this product, although it remains on limited sale for specific customer scenarios, and the product still represents a sizable amount of revenue and a large customer base that needs to be "moved" over to newer products.

Sigma Systems

Sigma Systems is headquartered in Toronto, Ontario, Canada. An MDM of product data solution, Sigma Catalog version 6.0 achieved GA in June 2014. Sigma Systems' total software revenue from MDM of product data solutions in 2013 was $6 million (estimated). The vendor's MDM of product data license count in March 2014 was 30. Sigma Systems acquired Tribold in August 2013.

Strengths

Product capability: The Sigma Systems Catalog solution, acquired from Tribold, is a strong, application-neutral, workflow-based, business-rule-centric MDM of product data solution. It has specific strength from its telecommunications data model roots but is now being deployed in other industries.

Stability and growth: Historically, Tribold was focused predominantly on the telecommunications industry. With the acquisition by Sigma Systems, the vendor now has additional resources to invest in and has expanded its industry coverage.

Customer base: Although small compared with other vendors, the references in the telecommunications industry so far tend to be very good. It has added clients in other segments, including media and high tech.

Cautions

Priority: Sigma Systems is a business application vendor that also sells an MDM solution; it is not an MDM specialist vendor. Depending on how it competes and evolves in the market, the business applications (such as Sigma Order Management) may take precedence over investments in its MDM offering.

Momentum: We estimated that in the last year or two before the acquisition, Tribold was exceeding $10 million in software revenue associated with MDM of product data solutions. We understand now that it may have been less. In 2013, it was at about $6 million.

Product strategy: The history of this product is application-neutral, but it has not been deployed alongside many varied industry-specific ERP systems to date. It needs a wider product strategy to address the wider MDM of product data market.

Stibo Systems

Stibo Systems is headquartered in Hojbjerg, Aarhus, Denmark. Stibo's Step Trailblazer version 7.0 achieved GA in October 2013. Stibo's total software revenue from MDM of product data solutions in 2013 was $46.3 million (estimated). Stibo's MDM of product data customer count in March 2013 was more than 240 (estimated).

Strengths

Strong momentum: Stibo's estimated software revenue in this market segment grew by more than 17% in 2013, on top of 30% in 2012. Its 2014 share of inquiries related to this market segment has increased, from 10.6% to 14.8%, and it is now a close fourth in order of overall "popularity."

Product and strategy: Step Trailblazer has strong capabilities for multichannel e-commerce, but it can handle all MDM of product data scenarios. Stibo has an emerging focus on multidomain MDM. It has its own workflow capability, which is maturing.

References: Online survey scores suggested competitive scores for Stibo's product capability, with good scores specifically in the area of data modeling. It also scored competitively in the areas of sales support and postsales support. References are a key asset for this vendor.

Cautions

Organization expansion challenges: Stibo continues to develop its partnering program with external service providers (ESPs). Thirty-three percent of references in 2013 reported working with an ESP. It has grown its head count quickly, too.

Product strategy: Stibo has no packaged offering for information stewards; it just has a set of tools. A new data quality module has seen slow adoption. Step Trailblazer can use MongoDB as a "proxy" in support of its core database.

Product capability: Stibo's UI has attracted some mixed results over the years — some users like it, while some do not. Most references report using the solution in a batch-centric mode. Stibo needs more proof points in real-time situations.

Tibco Software

Tibco Software is headquartered in Palo Alto, California, U.S. Tibco's MDM version 8.3.1 achieved GA in November 2013. Tibco's software revenue from MDM of product data solutions in 2013 was $52.8 million (estimated), of which $30.8 million was for product data. Tibco's total MDM of product data customer count in March 2014 was 218 (estimated). Tibco has announced its intention to be acquired by Vista Equity Partners, a private equity firm (see "Planned Acquisition Raises Questions for Tibco Software Customers"). We may revise this research should new information become known.

Strengths

Product capability: Tibco MDM is a strong MDM of product data solution, with solid multidomain and data modeling capabilities; Visual MDM is a differentiating feature for data quality reporting that ships with a Spotfire runtime license.

Strong when service-oriented architecture (SOA) is important: A number of end users have said that Tibco MDM is a strong solution when coupled with the rest of the Tibco technology stack, spanning SOA and business process management (BPM).

Industry experience: Tibco has implemented its MDM solution for product data in a wide variety of industries, including manufacturing, retail, distribution, financial services, pharmaceutical and telecommunications. It has packaged workflows and data model content for some industries (for example, telecommunications) that help end users jump-start their implementations.

Cautions

Slowing momentum: 2012 was a good year for Tibco, with 25% revenue growth — 2013 was less so. Its growth slowed to 6.6%, according to our estimates. Its share of inquiries in 2014 has remained flat — at 10.3%. It seems to be missing out on its initial success in 2012.

Product strategy: Although its MDM product has strong data quality tools, there is no pressing vision to develop the current offerings into a broader information governance platform. It has invested in 2014 in its cloud-based MDM offering, although this investment may be ahead of actual market need.

References: Tibco did not score that well in 2014 in terms of product capability. It was "down" in the areas of hierarchy management, data quality for products, UI, as well as performance/scalability.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor's appearance in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

Sigma Systems — Sigma Systems was added as a result of its acquisition of Tribold, which offered an MDM of product data solution that was sold to only one industry (that is, telecommunications), and thus, it was excluded from the Magic Quadrant analysis. The new owner is now selling the product into multiple industries and, thus, qualifies for inclusion.

Dropped

No vendors were dropped.

Inclusion and Exclusion Criteria

Inclusion Criteria

For inclusion in this Magic Quadrant, vendors were required to have:

- Generated at least $5 million in total software revenues (licenses and maintenance) related to MDM of product data solutions, primarily in support of operational business processes in 2013. This represents an increase of $1 million over last year's criterion.
- Active sales and support activities globally — that is, in at least two of the following geographic regions: the Americas, EMEA, Asia/Pacific and Australasia.
- Active sales, support and customers in multiple industries.

We also collected and/or estimated additional data to ascertain the level of activity and stability of each vendor in the market, although not part of the inclusion criteria. We looked for:

- At least 12 "live" customer references for MDM of product data solution functionality
- At least eight new customers for MDM of product data solutions in the past four quarters in 2013
- Sufficient professional services to fulfill customer demand during the next six months
- Enough cash to fund a year of operations at the current "burn rate" (companies spend their cash reserves if a year of operations is cash-flow-negative)

Multiple Products

Vendors may have multiple products in the MDM of product data solutions market. Where end users report a notable difference between them, each product is evaluated separately against these inclusion criteria.

On this basis, the following vendors offer multiple products that are evaluated separately:

- **IBM:** two products, both qualified and included in the analysis
- **Informatica:** two products, both qualified and included in the analysis
- **Oracle:** two products, one qualified (Oracle Product Hub [EBS]) and one that did not (Oracle Fusion Product Hub)
- **SAP:** two products, both qualified and included in the analysis, in addition to a third product from hybris, which is analyzed separately

Exclusion Criteria

This Magic Quadrant excludes the following vendors because they are either tangential to the main focus of MDM programs (mastering data within an organization) or so new that they have yet to effect on-premises MDM deployments:

- Vendors that focus solely on analytical (downstream) MDM requirements. We use revenue from only operational MDM installations for qualification, because this is where the bulk of MDM effort goes. We exclude the portion of a vendor's MDM of product data revenue that we determine was generated by implementations dedicated solely to analytical requirements.
- Vendors reselling another vendor's MDM of product data solution without extending the functionality.
- Hosted and cloud-based services, marketing service providers and data providers that provide trusted reference data external to the enterprise but do not provide an MDM of product data solution that specifically meets Gartner's definition.
- Solutions that Gartner considers application data management tools. We define these as tools that are marketed as performing MDM functions exclusively against a particular business application's data store, and we exclude them whether or not that business application is sold as a data

management solution by the same vendor. Some MDM solutions can be configured optionally as application data management tools; we also exclude revenue from these implementations from our analysis.

Description of MDM of Product Data Solutions

This market is characterized by packaged software solutions that bring together a range of technologies and capabilities to help sustain the idea of a "single golden record" for product master data. These products are the focus of this analysis. The range of functional capabilities included in these products is as follows:

Data modeling capabilities — The applicability of the data model to your organization is a fundamental requirement. It must:

- Model the complex relationships between the application sources inside the organization and its products and services, as well as with intermediaries and other parties, along with the ability to handle complex hierarchies.
- Map to the master product information requirements of the entire organization.
- Be configurable, customizable and extensible, but also upgradable.
- Support industry-specific requirements, such as GS1 Global Data Dictionary and United Nations Standard Products and Services Code (UNSPSC), as well as multiple hierarchical and aggregated views associated with product and catalog structures related to channels, customers, partners, suppliers, other consumer systems, and so on. This is particularly important across operational and analytical MDM requirements.
- Provide a base for the required workload mix and level of performance.
- Be expressed using commonly accepted logical data model conventions with associated metadata.
- Manage data, business rules, sources, ownership and so on for data governed by the MDM program using flexible, dynamic and business-consumable metadata management capabilities.

Information quality management/semantic capabilities — A good data model is of little value unless it contains accurate, up-to-date and semantically consistent data for a customer. An MDM of product data solution should:

- Have strong facilities, in batch and real-time modes, for profiling, cleansing, matching, linking, identifying and semantically reconciling product master data in different data sources to create and maintain a "golden record." These facilities may be provided by the MDM of product data solution vendor or via tight integration with products from specialist data quality partners.
- Configure business and data rules for comparing, reconciling and enforcing semantics across data sources, matching and linking the data, and managing the merging and unmerging of records, with support for full auditability, survivability and data lineage.
- Ensure that business rules and associated metadata related to data cleansing are sufficiently visible to satisfy compliance requirements.

Business services, integration and synchronization capabilities — The MDM of product data solution needs to provide facilities for loading product data in a fast, efficient and accurate manner. There is also a need for integration middleware, including publish and subscribe mechanisms, to provide a communication backbone for the bidirectional flow of product data between the central repository and the spoke systems, be they copies or subsets of the repository, or remote applications (coexistence style). Many organizations also plan to use the new product master database as the basis for new operational (both transaction and workflow-oriented) and analytical applications. In the SOA world of enterprise architecture, service-oriented composite business applications may consume MDM of product data solution business services through Web services' standard interfaces.

These facilities may be provided by the MDM of product data solution vendor or via tight integration with products from specialist middleware partners. The MDM of product data solution should support, as necessary, the MDM implementation styles, which each use loading, integration and synchronization in different ways, by being able to:

- Leverage a range of middleware products to connect to data sources, including legacy data sources, and expose industry-standard interfaces
- Support integration with different latency characteristics and styles — for example, real time and batch
- Support integration with downstream business intelligence and analytical requirements
- Support flexible and comprehensive business-services-based capability to model data services as well as user interactions across applications and data stores where master data is stored and used

BPM and workflow design and management capabilities — Product master data will permeate a range of business applications across systems and geographies. Successful MDM programs require a strong, business-outcome-driven process understanding of where and when master data is required to ensure the integrity of business processes. MDM of product data solutions do not need to include BPM suite (BPMS) technology, but they do need to interoperate with third-party BPMS solutions for their stewardship (enforcement) and integration (services) capabilities to be consumed in actual business process orchestrations. A suggested range of necessary capabilities includes ones to:

- Model, consider or recognize a business process model at a conceptual, logical and physical level to identify a conceptual, logical and physical data model in support of the same

- Document and understand — that is, diagnose — the flow of master data across business systems, applications and processes
- Design, orchestrate and manage a business-level and data-level workflow between any MDM hub and business systems that subscribe to the necessary information infrastructure
- Support analytics, key performance indicators (KPIs) and benchmarking for an "as is" version of business processes and their outcomes, as well as workflows within them; also, to support a "to be" version for business process and data models

Performance, scalability, availability and security capabilities — If the MDM of product data solution supports operational and analytical applications, and is tightly integrated with established systems and new applications, serious demands likely will be made on its performance, scalability and availability. The MDM of product data solution should have:

- Proof points, preferably through live references, of different aspects of performance and scalability that match your current and future requirements
- Appropriate availability characteristics regarding planned and unplanned downtime
- On the security and data privacy management front — the ability to:
  - Manage the policies and rules associated with potentially complex privacy access rights
  - Configure and manage different rules of visibility, providing different views for different roles

Stewardship support and services — The MDM of product data solution needs to support a range of capabilities, from information policy evaluation to the day-to-day operation and management of MDM. The resulting focus of this functionality will be the role of the business-led data steward. Among the different user roles that interact with MDM, the data steward role requires a suitable UI through which services are provided. These services include, but are not limited to:

- Analytics and performance measures related to a range of processes and activities taking place within MDM — from running batch data loads to executing workflows against benchmarks, assessing the quality of active master data, running business process benchmarks, and measuring the business value provided by MDM.
- Status and management tools for the steward role to monitor to-do lists of users, to ensure effective action takes place across the MDM landscape.
- Systemwide master/meta models to help identify which users, roles, applications and systems are responsible for which master data, and the state of the master data and/or business rules that are generating exceptions in that data.
- Workflow services to interrogate and provide revisions to current MDM workflows.
- Business rule services to interrogate which rules are used by MDM and provide suggested enhancements to such business rules; these are also used to determine under which circumstances source preference is revised to give preference to the most dependable source.
- Full, business-consumable audit trail information to identify past changes to information.
- A range of user interfaces on PCs, smartphones and tablets.

Technology and architecture considerations — MDM of product data solutions should be based on up-to-date, mainstream server, PC and mobile device technologies, and be capable of flexible and effective integration with a wide range of other application and infrastructure platform components — whether from the same vendor or not — within end-user organizations.

An MDM of product data solution should be capable of:

- Flexible configuration into a range of implementation styles in terms of instantiation, latency and use of customer master data to enable it to satisfy different use-case scenarios, such as the consolidation, registry, coexistence and centralized scenarios
- Architecturally supporting global rollouts and localized international installations
- Supporting both on-premises and cloud deployment styles, including SaaS, and integration platform as a service, as appropriate.
- Supporting integration with big data sources, such as social networks, and performing entity resolution within those sources, whether relational or nonrelational, and whether data is structured or unstructured

Information governance support capabilities — MDM of product data solutions should provide direct and/or indirect support for information governance functions, such as policy creation, maintenance and collaboration, as well as policy change management and impact analysis. This support may be provided directly via prebuilt capabilities, including application logic, workflows and UIs, or indirectly by providing a service interface that allows these functions to be provided and transmitted by software and services external to the MDM solution.

An MDM of product data solution should be capable of:

- Providing or supporting information governance functions, such as (but not limited to) governance policy collaboration and creation, as well as policy change management and impact analysis
- Reacting to changes made in an internal or external information governance layer by facilitating updates to current data stewardship functionality
- Supporting the above functions as part of the regular cadence of the information governance council and process
- Evaluating, analyzing, setting and then monitoring (via the stewardship element or elsewhere) various levels of business targets, benchmarks and KPIs for business process, workflow and

data quality metrics

Evaluation Criteria

Ability to Execute

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods or procedures that enable IT providers' performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision.

Product or Service: This criterion considers the software products offered by the vendor that competes in/serves the MDM of product data solutions market segment. This includes product capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements and partnerships, as defined in the market definition and detailed in the subcriteria.

Vendors are measured on the ability of their products to support the following MDM of product data solution subcriteria:

- Data-modeling capabilities
- Information quality and semantic capabilities
- Business services, integration and synchronization
- Workflow and BPM capabilities
- Performance, scalability, security and availability capabilities
- Stewardship support and services
- Technology and architectural considerations
- Information governance support

Overall Viability: Viability includes an assessment of the MDM of product data solution vendor's financial health, the financial and practical success of the business unit or organization in generating business results in the MDM of product data solutions market segment on a global basis, and the likelihood that the organization or individual business unit will continue to invest in development of the product, offer the product and advance the state of the art within the organization's product portfolio.

Sales Execution: This criterion considers a vendor's capabilities in all MDM of product data solution-related presales activities on a global basis, and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: This criterion considers the vendor's ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customers' needs evolve and market dynamics change within the MDM of product data solutions market segment. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: This criterion evaluates the clarity, quality, creativity and efficacy of programs designed to deliver the vendor's message on a global basis, in order to influence the MDM of product data solutions market segment, promote the vendor's brand and business, increase awareness of its products, and establish a positive identification with its product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.

Customer Experience: This criterion considers the vendor's relationships, products and services/programs that enable clients to be successful on a global basis with the products evaluated. This includes implementation and support, and the way customers receive technical and account support. It also includes measures of clients' success in implementing MDM for product data solutions: customer references and total cost of ownership (TCO).

With the increasing hype about multidomain MDM, we also look for demonstrated proof — via proof of concepts, customer evaluations and live implementations — of multidomain/multiprovince/multivector capability.

Operations: This criterion considers the provider's ability to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	High
Market Responsiveness/Record	High
Marketing Execution	High

Customer Experience	High
Operations	Low

Source: Gartner (November 2014)

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to Gartner's position. Ultimately, technology providers are rated on their understanding of how market forces can be exploited to create opportunity for the provider.

Market Understanding: This criterion considers a vendor's ability to understand buyers' needs and translate these needs into products and services. Vendors that show the highest degree of vision listen and understand buyers' wants and needs, and can shape or enhance those wants with their added vision. Vendors should demonstrate a strategic understanding of MDM of product data solution opportunities (for example, new application functionality or customer segments) and ongoing vendor market dynamics (for example, consolidation trends) on a global basis, and translate that understanding into products and services. Additionally, we consider a vendor's understanding of the wider implications of, and the position of MDM in relation to, other kinds of master data within an organization's multidomain, multiuse case and multi-implementation style program; an understanding of the relationship to enterprise information architecture and EIM initiatives is also valuable for customers taking a strategic view.

Marketing Strategy: This criterion considers whether the vendor's clear, differentiated set of MDM of product data solution messages is consistently communicated throughout the organization and externalized globally through a website, advertising, customer programs and positioning statements. Intersection with multidomain MDM and wider MDM and industry challenges, as expressed by Gartner clients, is important.

Sales Strategy: This criterion considers a vendor's strategy for selling an MDM of product data solution that uses its, or a partner's, global network of direct and indirect sales, marketing, service and communication affiliates to extend the scope and depth of its market reach, skills, expertise, technologies, services and customer base.

Offering (Product) Strategy: This criterion considers a vendor's approach to product development and delivery, which should emphasize differentiation, functionality, methodology and feature set as they map to current and future requirements. A vendor's published "statement of direction" (or Gartner's understanding thereof) for the next two product releases needs to keep pace with, or surpass, Gartner's vision for the MDM of product data solutions market segment. Gartner's main product-oriented criteria focus on:

- Data-modeling capabilities
- Information quality and semantic capabilities
- Business services, integration and synchronization
- Workflow and BPM capabilities
- Performance, scalability, security and availability capabilities
- Stewardship support and services
- Technology and architectural considerations
- Information governance support

Vendors need to offer an MDM of product data solution that can be configured into a range of architectural styles, in terms of instantiation, latency, search and usage of product master data, to enable it to satisfy different use-case scenarios, such as the consolidation, registry and centralized-style scenarios, and leading to hybrid models such as the coexistence style.

Vendors also need to show how its MDM of product data solution supports a wide range of use cases, from business design (construction-centric MDM) to business operations (operational MDM) and business intelligence (analytical MDM). Most vendors focus on one use case, so they need to demonstrate how they intend to support the growing convergence in requirements across use cases.

Each vendor must also understand major technological and architectural shifts in the market, and communicate a plan to address them, including migration issues that may affect customers on current releases. Specifically, the vendor should have a vision to support mainstream software infrastructure technology, as opposed to a proprietary stack, and have an evolutionary path toward SOA.

Business Model: This criterion considers the soundness and logic of an MDM of product data solution vendor's underlying business proposition. Vendors should have a well-articulated strategy for revenue growth and sustained profitability. Key elements of strategy include the sales and distribution plan, internal investment priority and timing, and partner alliances, such as with ESPs.

Vertical/Industry Strategy: This criterion evaluates a vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including industries. Included are reviews of the vendor's strategy for meeting the needs of specific industries, such as banking, manufacturing, communications and government.

Innovation: Vendors need to be able to lead this market and, in so doing, provide customers with an innovative solution and approach to meet customers' needs in a complex, heterogeneous environment. Innovation implies leading the way with MDM of product data issues both now and in the future. We looked for understanding of, and support for, the most complex and broadest MDM of product data environments and the growing requirements of multidomain and multi-use-case MDM in general. New this year is a focus on how vendors plan to support key initiatives, such as the cloud, social data and other kinds of big data, and mobile communications in the context of MDM.

Geographic Strategy: This criterion evaluates a vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside its native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market. This includes sales, marketing and support for complex global companies.

Table 2. Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	High
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	High
Innovation	High
Geographic Strategy	Medium

Source: Gartner (November 2014)

Quadrant Descriptions

Leaders

Leaders have strong results and strong delivery capabilities, and they will continue to have them. They typically possess a large, satisfied customer base (relative to the size of the market) and enjoy high visibility in the market. Their size and financial strength enable them to remain viable in a challenging economy. Leaders have mature offerings and track records of successful deployments, even in the most challenging environments, in at least two geographies and in many industries. Leaders have the strategic vision to address evolving client requirements; however, they are not always the best choice.

Challengers

Challengers demonstrate a clear understanding of today's MDM of product data solutions market segment, but they have either not demonstrated a clear understanding of the market's direction or are not well-positioned to capitalize on emerging trends. They often have a strong market presence in other application areas.

Visionaries

Visionaries display healthy innovation and a strong potential to influence the direction of the MDM of product data solutions market segment, but they are limited in execution or demonstrated track records. Typically, their products and market presence are not yet complete or established enough to merit Leader status.

Niche Players

Niche Players do well in specific segments of the MDM of product data solutions market segment, or they have limited ability to innovate or to outperform other vendors in this segment. They may be focused on a specific functionality, domain or industry, or have gaps in relation to broader functionality requirements. Niche Players may have limited implementation and support services, or they may not have achieved the scale necessary to solidify their market positions.

Context

This Magic Quadrant offers insight into the portion of the packaged MDM solution market that focuses on how organizations master and share a "single version" of product data with multiple views of it across their operations — achieving a single version of master data is a key initiative for many organizations. In this Magic Quadrant, "product data" includes a range of "things," such as finished products, parts, assets, services, materials and financial instruments. This analysis positions MDM of product data solution vendors (and their offerings) on the basis of their Completeness of Vision relative to the overall market segment, and their Ability to Execute on that vision.

Use this Magic Quadrant to understand the MDM of product data solutions market segment, and how Gartner rates the vendors (and their offerings) in this segment. Studying this research will help you evaluate vendors by a set of objective criteria that you can adapt to your particular situation. Gartner advises organizations against simply selecting vendors in the Leaders quadrant. All selections should be buyer-specific, so vendors from the Challengers, Niche Players and Visionaries quadrants might be better matches for your requirements. For more information, see "How Markets and Vendors Are Evaluated in Gartner Magic Quadrants."

Selecting an MDM of product data solution is only part of the MDM challenge. To succeed, you should also put together a balanced MDM program that creates a shared vision and strategy, addresses governance and organizational issues, uses appropriate technology and architecture, and creates the necessary processes and metrics for your product data system (see "The Seven Building Blocks of MDM: A Framework for Success" and "The Five Vectors of Complexity That Define Your MDM Strategy").

Market Overview

The Need for a Single View of the Product

Businesses of all sizes and in many industries struggle to maintain a consistent, shareable and accurate single version of product or service data across their organizations. With the increasing focus on digitalization of enterprises, management of their key master data is also becoming more important. The ability to achieve and maintain a single, semantically consistent version of product master data is crucial for customer-centric organizations.

Many factors affect this market segment. Some of the more important factors are as follows:

- The global economic climate, which is in a state of flux. Some regions and industries are showing growth and large profits, while others are showing few signs of either.
- "Multidomain MDM" is popular in that vendors and users use that term all the time, although in the majority of cases to denote different things. For end users, the phrase tends to mean "any of my data domains, at some point in the future"; for vendors, it might mean "one solution," "one vendor" or "one approach."
- Industry nuances remain critical to success with MDM in general, and MDM of product data in particular. Some may drive regulatory requirements; some may imply specific business drivers.
- Appreciation of the business value of MDM, which, though increasing, is still severely lacking. This helps to explain why MDM of product data is only just entering the Slope of Enlightenment on Gartner's "Hype Cycle for Enterprise Information Management, 2014."
- A significant number of end-user implementations report a "lack of information governance." The increased focus in our analysis on solutions for — and the distinction between — governance and stewardship are a reflection of this.
- Interest in MDM remains focused on operational use cases — upstream in business systems, rather than downstream in the data warehouse in support of business intelligence and analytics. The split is approximately 90% to 10%.
- A growing number of firms are looking to expand their MDM program, perhaps by adding content or unstructured data (such as graphics and documents), additional application-specific data, or other data domains. In this way, MDM is often seen as the starting point for a broader EIM program within an organization (see "2013 Strategic Road Map for Enterprise Information Management").

In light of these dynamic factors, the business drivers for organizations to seek solutions that help sustain "a single version of the truth" for product data become more important. They include:

- Increased revenue from additional sales efforts (upselling and cross-selling), once a better view of customers' products and services is established
- Reduced time to market for new products and services as part of a process improvement program
- Better multichannel or omnichannel integration and improved customer service (presale or postsale), often with a strong e-business or e-commerce flavor
- Increased supply chain agility, visibility and, ultimately, collaboration, through a cleaner foundation of information for multienterprise business processes
- Compliance in terms of product data, hierarchy for analysis and reporting of product data through financial and other regulatory frameworks

Organizations in different industries have different business models, and therefore their MDM efforts vary (see "The Five Vectors of Complexity That Define Your MDM Strategy"). Some organizations have a customer base of millions of consumers, such as high-volume business-to-consumer (B2C) organizations. Others have a customer base of thousands or tens of thousands of customers, such as lower-volume, but more complex, B2B organizations. This has implications for the MDM implementation style (see "The Important Characteristics of the MDM Implementation Style").

Market Growth Continues

Gartner estimates that overall software revenue from MDM of product data solutions market in 2013 came to $532 million, an increase of 8.7% from 2012. This compares to the MDM of customer data solutions market, which, we estimate stood at $586 million in 2013, up 12.2% compared with 2012.

The MDM of product data solutions market segment tends to grow at a slower rate than the MDM of customer data solutions market when economic growth (for example, GDP) is on the increase — and more than 2%. When economic growth is slowing, or less than 2%, the MDM of product data solutions market segment tends to grow faster than the MDM of customer data solutions market segment. Gartner's market data therefore suggests that end users are, on the whole, comfortable with economic growth.

In terms of how the market has changed in the last year, and how we see it evolving, the actual analysis we do suggests that the analysis has expanded (for example, market growth). At the same time, there was increased emphasis by end users on capabilities in support of information stewardship, information governance, multidomain MDM, as well as in support of industry nuances and requirements.

How the Vendors Stack Up

This market is dominated by best-of-breed solutions. The larger vendors acquired or developed best-of-breed MDM of product data solutions. For example, IBM acquired Trigo Technologies first, then DWL and then Initiate Systems; Oracle developed its own product; and SAP acquired A2i, then developed another product, and then acquired hybris. Together, these vendors represent 45% of the market segment. The next four vendors — Stibo, Riversand, Tibco and hybris — represent 23%. All these vendors offer specialized solutions for MDM of product data, although they each have different interests in supporting multidomain MDM requirements.

Other vendors, with smaller market share, target narrower or niche segments. Agility Multichannel is the only vendor that targets specifically the SMB market, although the vendor also has large customers; Enterworks focuses on a segment of the retail/distribution market. Orchestra Networks wants to operate like a multidomain vendor, but it is also trying to "play" in the specialist domain, such as MDM of product data.

Many other vendors, some of them small, are innovating in and around the field of MDM of product data. Semarchy, a small French vendor, is focusing on helping clients with an "evolutionary" approach to scaling MDM. Collibra, another small vendor, focuses on the information stewardship side of MDM. These and other vendors show that this market segment is vibrant and constantly evolving. We expect more acquisitions and new entrants in the next few years.

All in all, 2013 and 2014 have been good years for this market segment in terms of growth. However, MDM technology in this segment is still just emerging from the Trough of Disillusionment on Gartner's "Hype Cycle for Enterprise Information Management, 2014" — and the data and insights summarized here show why. The current set of implementations is well-explained with the position of this technology in the "Hype Cycle for Enterprise Information Management, 2014." The technology is just leaving the Trough of Disillusionment and entering the Slope of Enlightenment.

Vendors Continue to Invest in Information Stewardship and Governance Technology

In terms of new MDM capabilities, vendors have been placing particular emphasis on adding or improving data stewardship and governance facilities, including data profiling, workflow, data visualization and manipulation, dashboards, and reporting. In 2012, they introduced better UIs and workflows for business users, making greater use of BPM technology and MDM applets, which allow existing applications to use MDM-hub-based data.

Across every aspect of MDM — product, customer and multidomain — stewardship tools are turning into solutions called information stewardship applications. This is an exciting trend, as it shows the relevance of master data to business users in terms of business value and impact (see "How Chief Data Officers Can Help Their Information Stewards"). Organizations are applying stewardship applications more often to business data attributes beyond those in master data domains, to support data stewards in their activities across varied data management initiatives. Although demand is still emerging, it is clear that early-adopter organizations recognize the value of these capabilities.

Appendix

Table 3 lists relevant vendors that did not qualify for inclusion in this Magic Quadrant.

Table 3. Other Vendors Relevant to the MDM of Product Data Market Segment

Vendor	Product/Service	Area of Focus
		Application-Specific Data Management
IBS		Application-specific data management
Symphony EYC		Application-specific data management
Syncron		Application-specific data management
Triniti	Triniti Product Modeler	Application-specific data management
Winshuttle		Application-specific data management
zetVisions	SPoT	Application-specific data management
		Cloud-Related
Dell Boomi		Cloud MDM
Edgenet		Product data and cloud services
Enterprise Technology Solutions	iClassic MDM	Cloud MDM
Liaison Technologies		MDM of product data and cloud services
Liberata	Listpoint	Reference data management — cloud-based
SKUforce		Product data and cloud services
		Data Quality/Enrichment
Codifyd		Data enrichment

Datactics		Data quality
IHS		Data enrichment
Silwood Technology		Data enrichment
Trillium Software		Data quality
Unilog		Data enrichment
		Information Exchange/Global Data Synchronization
GHX		MDM information exchange (industry specialization in healthcare)
Lansa		MDM information exchange (industry specialization in consumer/retail)
		Information Governance/Stewardship
BackOffice Associates	DSP	Information governance/stewardship
Collibra		Information governance/stewardship
Datum		Information governance/stewardship
Diaku	Axon Data Insight	Information governance/stewardship
Global Data Excellence		Information governance/stewardship
		MDM-Centric — Related Focus
Amdocs		MDM of product data (telecommunications)
Aravo		MDM of supplier data
Ataccama		Multidomain MDM
Contenix		MDM of product data for SMBs
Global IDs		Reference data management
GoldenSource	360 EDM	Financial services industry focus
Imperia	Pirobase PIM	MDM of product data
Information Builders		Multidomain MDM
InRiver		MDM of product data
jCatalog		MDM of product data
Kingland Systems	Enterprise Hub	Financial services industry focus
Magnitude Software (Kalido)		Multidomain MDM
Markit	Markit EDM	Financial services industry focus
Microsoft	Microsoft SQL Server MDS	Multidomain MDM services
Oracle	Oracle Fusion Product Hub	MDM of product data
pimcore	PIM	MDM of product data open source
Poet AG	PIM	MDM of part data
Profisee	Master Data Maestro	Multidomain MDM
Requisite Software	Product Information Center	MDM of part data
SAS	SAS Master Data Management	Multidomain MDM
Semarchy	Convergence for MDM	Multidomain MDM
Software AG	webMethods OneData	Multidomain MDM
SyncForce		MDM for e-commerce
Talend		Multidomain MDM
Teradata		Multidomain MDM
Trask	Reference Data Store	Reference data management
Utopia	Enterprise Asset MDM	SAP Master Data Governance, and Enterprise Asset Management Extension by Utopia
Verdantis		MDM of part data

Vinculum	Vin MDM	Retail industry

DSP = Data Stewardship Platform
EDP = Enterprise Data Management
MDS = Master Data Services
SPoT = single point of truth

Source: Gartner (November 2014)

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