

# Magic Quadrant for Master Data Management of Product Data Solutions

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Increased demand in end-user organizations for a trusted single view of product data to drive digital transformation is resulting in greater demand for MDM. CIOs, chief data officers and information leaders should use this report to understand this market in support of their digital agendas.

## Market Definition/Description

This document was revised on 30 December 2015. The document you are viewing is the corrected version. For more information, see the [Corrections](#) page on gartner.com.

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 initiatives
- Support ongoing master data stewardship and governance requirements through workflow-based monitoring and corrective action techniques

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
- The physical and logical location of the hub or source of the "golden record," whether on-premises, in-memory or in the cloud

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. Product data, as well as part and asset data, is becoming more critical due to the rise in hype and interest related to the Internet of Things (IoT). The IoT means that there are a lot more devices (things) sharing information — many outside the boundaries of effective information governance, so the data is untrusted. MDM can help ensure the trust and the quality and consistency of the data about the devices, as well as the data shared.

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 (see "Magic Quadrant for Master Data Management of Customer Data Solutions"). The MDM market continues to evolve. Though still dominated by spending on single domains (MDM of customer data, and MDM of product data), a small but growing segment of the market focuses on "multidomain MDM" solutions (see Note 1 and "The Five Vectors of Complexity That Define Your MDM Strategy").

Although there is growing interest from end-user organizations in multidomain MDM, what they actually implemented remains focused on a single, "anchor" data domain, such as product data or customer data. The promise of "multidomain MDM" is assumed by end-user organizations to mean "any domain, any time, any place and any way" whereas their implementations typically correspond to the following:

- Mostly a single, central domain (product or customer master data) with some notional secondary domains for system-of-reference, rather than system-of-record, governance.
- Mostly a single, central domain (product or customer master data) that is extended with a large amount of additional attributed and/or hierarchical data, in support of a local range of business processes or applications. A common example in this market is what used to be referred to as product information management (PIM) supporting multichannel, customer facing e-commerce processes.
- Multiple deployments of MDM hubs, for different domains, often using different vendor solutions for each.

When specifically focused on the use of MDM of product data solutions, such use tends to range across different scenarios. The major scenarios are in support of:

- Customer-facing business processes commonly found in e-commerce across different channels or "omnichannels." This is the classic PIM scenario.
- 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 operational business processes across many industries and many business applications, including supply chain management, ERP, product life cycle management, procurement, CRM and other customer-related strategies. It positions relevant technology providers on the basis of their Completeness of Vision and their Ability to Execute that vision.

Note that, although each business application or suite (whether for ERP, CRM or product life cycle management, for example) may store its own data and offer its own application data management capabilities, an MDM solution acts as the "middle hub" that manages, exchanges and governs the core master data shared by all applications. For many years, organizations have tried to achieve a "single view" using ERP or CRM systems; these were not designed to support MDM, so they either failed or were too costly to maintain — hence the emergence of MDM solutions.

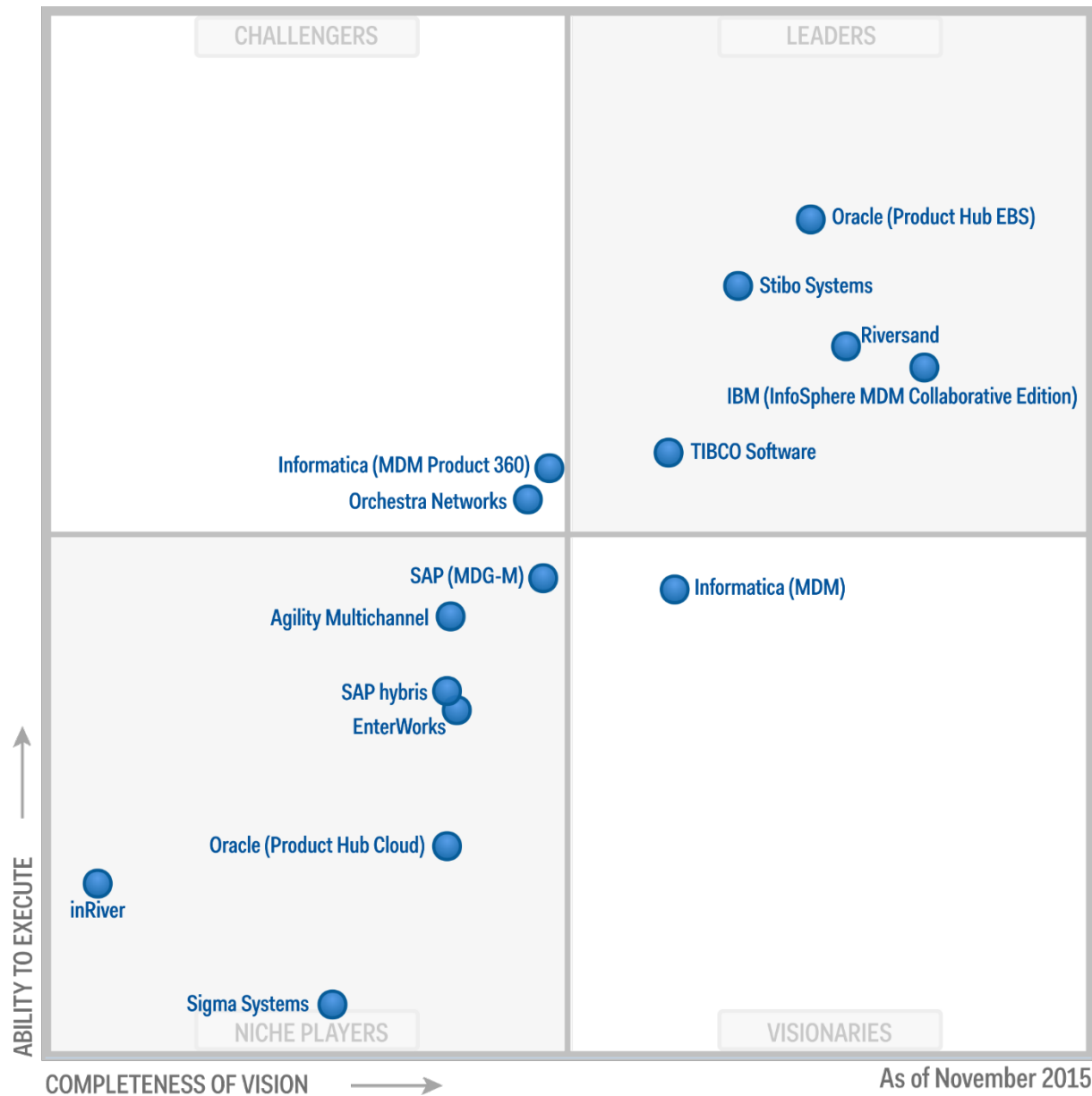
## Revenue and License Count Estimates

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As part of the research process for this Magic Quadrant, Gartner solicited data from qualified vendors regarding calendar year 2014 revenue and point-in-time license counts by data domain as of the end of March 2015. If a vendor declined to supply all or some of this data, or if we possessed information that contradicted the data provided by the vendor, we formulated revenue and/or license count estimates for that vendor, which the vendor then had an opportunity to review and comment on prior to publication. The results of this process are given for each vendor below, and are described as "estimated" in all cases.

# Magic Quadrant

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



MDG-M = Master Data Governance for Material

Source: Gartner (November 2015)

## Vendor Strengths and Cautions

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### Agility Multichannel

**Agility Multichannel** is based in York, U.K. The company's Agility version 6.3 achieved general availability (GA) in January 2015. Agility Multichannel's total revenue from MDM of product data solutions was \$8 million (estimated) in 2014. Its total MDM customer count in March 2015 was 90 (estimated).

#### Strengths

- **Growth and momentum:** Agility Multichannel targets the small or midsize business (SMB), but also has a growing number of larger enterprise clients. Our estimates suggest it grew close to 13% in software revenue during 2014 and 12% in 2013. This is faster than the market segment growth of 6.5%.
- **Product functionality:** Agility Multichannel has good capabilities oriented toward multichannel e-commerce or product information management (PIM). The data model can support multiple domains. Its Agility product has a business-user-friendly UI, and the vendor also includes embedded digital asset management capability.
- **Reference customer survey scores:** Agility Multichannel attracted a median set of scores (compared with the other vendors in this analysis) across the board for sales, service and product capability. As such, this vendor has a good reference base.

#### Cautions

- **Product development:** Agility Multichannel's cloud offering is limited to infrastructure as a service, with no multitenancy strategy so far (although its partners have deployed Agility as a SaaS solution). The concept of information stewardship (app) is emerging, but nothing is completed.
- **Customer base:** We estimate Agility Multichannel's share of the market for MDM of product data to be 1.5% in 2014. This vendor needs a stronger, larger base from which to defend its position in the market should the larger vendors move into this segment, or other vendors specifically target SMBs. Some prospects we speak to are concerned about the relatively small size of this vendor and whether this is a risk that can be mitigated.
- **Marketing and industry strategy:** Agility Multichannel's industry strategy is being driven by, and is therefore reliant on, a partner program; marketing seems modest and is built on cash flow rather than additional investment.

### EnterWorks

**EnterWorks** is based in Sterling, Virginia, U.S. EnterWorks Enable version 7.4 achieved GA in April 2015. EnterWorks' total MDM software revenue was \$13.9 million (estimated) in 2014, and its total

customer count for MDM was 235 (estimated) in March 2015. EnterWorks announced that it was acquired by Black Dragon Capital on 19 March 2015.

## Strengths

- **Investment strategy:** Prior to its acquisition, EnterWorks was focused on a narrow selection of industries — chiefly distribution, wholesale and manufacturing. This focus is being expanded (through additional investment) to include healthcare, for example, but also additional channels such as Indus — also owned by Black Dragon Capital.
- **Product capability:** EnterWorks Enable supports strong workflow capability and has a more user-friendly UI with release 7. Some of its references demonstrate high volumes of data (that is, many millions of SKUs).
- **Key customers:** EnterWorks has a number of very referenceable clients. EnterWorks' references mostly used the EnterWorks professional services team.

## Cautions

- **Product strategy:** EnterWorks is signaling its intention to expand its focus to other master data domains, including customer data. This will require additional investment and may detract from its traditional focus on core product data.
- **Little momentum and visibility:** The share of inquiries Gartner takes each year that relate to EnterWorks has hovered between 1% and 2% for the past couple of years. It shows growth rates below the market average, and its marketing seems narrowly focused.
- **Reference customer survey scores:** EnterWorks scored poorly in communication of its product roadmap, delivery of product innovations, support for information governance, and system performance and scalability.

## IBM (InfoSphere MDM Collaborative Edition)

IBM is based in Armonk, New York, U.S. IBM's InfoSphere MDM AE version 11.4 achieved GA in October 2014. IBM's total software revenue from MDM of product data solutions was \$36 million (estimated for all products) in 2014, of which \$30.2 million was for Collaborative Edition (CE). IBM's total customer count for MDM of product data solutions was more than 265 (estimated for all products) in March 2015, of which 240 were for CE.

## Strengths

- **IM vision and strategy:** IBM provides an Information Integration and Governance 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 showcasing its strengths in mastering product data.

- **Product depth:** CE has a very capable workflow capability and a preloaded and flexible data model that suits many situations. It includes data quality support for product data and an array of information stewardship capabilities.
- **Marketing innovation:** IBM embeds some CE capability in several related products (spanning IBM WebSphere Commerce), as well as in predictive maintenance. Some of IBM's leading references are leveraging IBM Watson to power a 360-degree view of product data via search and data relationship building.

## Cautions

- **Sales momentum:** IBM's overall MDM software revenue increased in 2014 by an estimated 2.3% (following a Gartner restatement that, due to new information, changed our estimate of its revenue for 2013). This is less than the overall market segment's growth rate of approximately 6.5%.
- **First-mover disadvantage:** Some first-generation IBM installations are replacing IBM implementations with competitive offerings; not necessarily because of any shortcomings in the product itself, but for reasons such as end-user politics and changes in buying behavior and requirements.
- **Fulfillment of product roadmap:** The integration of IBM's business process management tools across all MDM products will not be rationalized with this product until at least 2016. There remains no single packaged solution for information stewards. Cloud options remain on the roadmap.

## Informatica (MDM)

**Informatica** is based in Redwood City, California, U.S. Informatica's MDM version 10 achieved GA in November 2014. The company's total software revenue from MDM of product data solutions was \$35.6 million (estimated) in 2014. For the Informatica MDM product lines we estimated revenue at \$16.1 million and 100 customers for Informatica MDM, and \$19.5 million and 250 customers for Informatica MDM Product 360 (formerly Informatica PIM).

## Strengths

- **IM vision:** Informatica continues to develop its vision around the Intelligent Data Platform (IDP) originally introduced in 2014, which will combine its current tools and technologies and rewrite its MDM offerings while overlaying its traditional tools with a new semantic offering. The multidomain MDM product focuses on party data (for example, customer and vendor/supplier) as well as other data, including product data. It integrates with Product 360 and a new product, Supplier 360 (built on Informatica MDM), for end-to-end multidomain MDM.
- **Customers and momentum:** Informatica's overall software revenue for MDM of product data grew more than the market averages, at an estimated 14%. Informatica MDM, as one of its two offerings in the market, grew at an estimated 14%. The share of Gartner inquiries related to this

market segment in 2015 increased to 10%, up from 9.3% in 2014. Informatica MDM's 2014 market share is estimated at 3.1% and it seems set to grow well in 2016, too.

- **Partner ecosystem:** Informatica's partner ecosystem is deliberately expanding beyond its historical focus on customer data. Implementation partners are now coming online to provide the necessary industry vertical expertise for clients that want to work with them. The company also offers opportunities through its Marketplace community website.

## Cautions

- **Delivery of the IDP:** The delivery of the IDP, along with the rewrite of its MDM assets into one platform that promises flexible extensibility, will take time to achieve; this is now in its second year of development. Clients have to evaluate discrete MDM offerings today, rather than taking into account the pending development work ahead. Informatica's cloud MDM strategy goes beyond customer data, but will require the complete delivery of the IDP to be fully realized.
- **Industry strategy:** Though improving with new product releases (version 8 is recast as Product 360 and there are other industry-specific solutions for retail, for example), Informatica's overall industry strategy remains complex, due to the changing nature of its products delivered and supported, pending completion of the IDP.
- **Reference customer survey scores:** Informatica MDM references scored slightly lower overall than those for the product formerly known as Informatica PIM (Product 360); though both sets of references scores a solid average this year. Informatica MDM scored poorly in the area of a UI supporting various roles, and also in manageability and security facilities.

## Informatica (MDM Product 360)

Informatica is based in Redwood City, California, U.S. Informatica MDM Product 360, formerly Informatica PIM, achieved GA in August 2015. Its total software revenue from MDM of product data solutions was \$35.6 million (estimated) in 2014. For the Informatica MDM product line we estimated: revenue at \$16.1 million and 100 customers for Informatica MDM, and \$19.5 million and 250 customers for Informatica MDM Product 360 (formerly Informatica PIM).

## Strengths

- **IM vision:** Informatica continues to develop its vision around the Intelligent Data Platform (IDP) originally introduced in 2014 — which will combine its current tools and technologies, and rewrite its MDM offerings, while overlaying its traditional tools with a new semantic offering. Informatica MDM Product 360 focuses on those industries where product data is most complex, and will play a key role in the IDP as it comes to market with industry-specific capability.
- **Visibility and growth:** Product 360's estimated software growth slowed to 4.8% in 2014, just a little under the market average of 6.5%. The share of Gartner inquiries related to this market segment and Product 360 grew to more than 6% in 2015.



- **New product capabilities:** Informatica BPM (based on its ActiveVOS acquisition) is now integrated with Informatica MDM and Informatica MDM Product 360. The new packaging (as Product 360, formerly PIM), coupled with its Data Integration Hub offering, suggests that Informatica is now messaging effectively to a broad and rich business application infrastructure and governance environment.

## Cautions

- **Sales strategy:** There is short-term confusion in terms of which Informatica product is being positioned to which customer situation; even existing clients are not aware of all the options or of which product is being positioned where.
- **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 remains fragmented or incomplete.
- **Industry strategy:** The Product 360 offering is, by definition, very industry-oriented. In contrast, the IDP is, by definition, a platform — so not out-of-the-box industry specific. Thus, Informatica has yet to deliver a framework within the context of the IDP to preserve industry-specific support.

## inRiver

InRiver is based in Malmo, Sweden, and inRiver 6 achieved GA in January 2015. Software revenue for MDM of product data was estimated to be \$7.2 million in 2014, and a customer count of approximately 190 was estimated as of March 2015.

## Strengths

- **Midmarket entrant/product capable:** This year, inRiver has newly qualified for inclusion in the Magic Quadrant due to its fast growth. Product capability is focused on the multichannel, customer-facing uses of product data. InRiver 6 has good workflow capability and alert/notification capability; it also has an integrated digital asset management (DAM) module.
- **Industry focus:** inRiver has focused on its core base of consumer, retail, distribution and manufacturing. It remains focused here and is avoiding the distraction of moving into too many other segments.
- **Reference customers:** inRiver's references are good, if few, at present. This vendor is developing a good reputation in Europe.

## Cautions

- **Market visibility:** The share of inquiries related to this market segment for inRiver is less than 1%. This needs to change if inRiver is to gain visibility in the wider market.

- **Product strategy:** inRiver will require significant investment to compete with the largest vendors. A differentiated offering is required, but it is not clear how or where this will emerge at present.
- **Product maturity:** The workflow capability of InRiver 6 is not graphical and its product data quality capability is very basic and not best of breed. There is only basic reporting in support of information stewardship, and no multidomain roadmap at present.

## Oracle (Product Hub EBS)

Oracle is based in Redwood Shores, California, U.S. Oracle's total software revenue from MDM of product data solutions was \$72 million (estimated) in 2014, of which \$57.6 million was for Oracle Product Hub. Oracle's total customer count for MDM of product data was 500 (estimated) in March 2015 for all products, of which 400 were for Oracle Product Hub. Oracle's Product Hub version 12.2.4 achieved GA in August 2014.

### Strengths

- **MDM portfolio:** Oracle's approach to MDM is to position specific products to specific segments or domains in the market. This leads to a best-of-breed or multiple domain MDM approach, rather than a multidomain approach. Oracle has integrated Oracle Product Data Quality and Oracle Fusion Middleware for an end-to-end solution.
- **Product capability:** Oracle Product Hub E-Business Suite (EBS) can be deployed "inside" Oracle EBS, using the EBS data model as an application data management (ADM) hub. Alternatively, when "outside" EBS it can be deployed as an MDM hub that can also govern non-EBS data with a differentiated (to EBS) data model.
- **Marketing and visibility:** Oracle's share of inquiries related to this market segment increased to 18% during 2015, compared with 17% in 2014. Oracle's growth in MDM of product data software overall is estimated at 6.4%, which is roughly in line with the market.

### Cautions

- **Market messaging:** Inquiries with our clients continue to highlight their confusion as to which product is being sold for different environments: single versus multitenant; private or public cloud; cloud or on-premises. Oracle will position different point solutions according to specific customer scenarios.
- **Multiple products split investments:** Oracle's 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. Each one also has a different product direction when it comes to supporting information governance and stewardship capability.
- **Reference customer survey scores:** We were not able to obtain the response rate we needed for an authoritative response from users; a response rate of 58% (of 12 possible responses) was lower than usual for Oracle. Oracle scored poorly in product enhancement roadmap/visibility, and vendor pricing structure and simplicity.

## Oracle (Product Hub Cloud)

Oracle is based in Redwood Shores, California, U.S. Its total software revenue from MDM of product data solutions was \$72 million (estimated) in 2014, of which \$14.4 million was for Oracle Product Hub Cloud (previously known as Oracle Fusion Product Hub). Oracle's total customer count for MDM of product data was 500 (estimated) for all products in March 2015, of which 100 were for Oracle Product Hub Cloud. Oracle's Product Hub Cloud version 9.2 achieved GA in December 2013.

### Strengths

- **MDM portfolio:** Oracle has a broad range of MDM assets to address requirements across multiple domains and use cases, coupled with Oracle Product Data Quality and the range of solutions within Oracle Fusion Middleware. Oracle Product Hub Cloud is only one of the products the vendor licenses to support MDM of product data solutions.
- **Cloud-centric product capability:** Oracle Product Hub Cloud offers a standardized data model that is favored for scalable, repeatable, public cloud-based deployment. The hub can be deployed "inside" the Fusion-based applications (supporting application data management) or "outside" Fusion Applications, so it can be deployed as an MDM hub, which can also govern non-Oracle data.
- **Sales growth:** Sales of Oracle Product Hub Cloud are growing rapidly, with an estimated increase in software sales from \$3 million to \$14 million year over year. Oracle's share of inquiries related to this market segment increased to 18% in 2015, compared with 17% in 2014.

### Cautions

- **Field positioning:** Some end users have been confused over which product is being sold for different environments: single versus multitenant; private or public cloud; cloud or on-premises. Oracle will position different products based on specific customer scenarios.
- **Multiple products split investments:** Oracle's 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. Each also has a different product direction when it comes to supporting governance and stewardship capability.
- **Functional capability:** Early inquiries of our clients on this product led some to suggest its capability was lacking, or not equivalent to that of Oracle Product Hub EBS.

## Orchestra Networks

Orchestra Networks is based in Paris, France. Orchestra's EBX5 version 5.6 achieved GA in January 2015. Orchestra's total software revenue from MDM of product data solutions was \$8 million (estimated) in 2014. Orchestra's total customer count for MDM of product data was 85 (estimated) in March 2015.

## Strengths

- **Market momentum:** In 2014, Orchestra's estimated revenue grew by more than 21% year over year, on top of an estimated 32% the previous year. The vendor's head count has increased year over year from about 87 to 115. Its partner strategy is starting to drive new revenue.
- **Product flexibility and capability:** EBX5 has deep experience with reference data and hierarchy management; it is used across the financial services and manufacturing sectors. EBX5 offers flexible XML-based data modeling and is integration-/message-oriented. The vendor has good capability emerging to support information stewardship and governance.
- **Reference customers:** Most Orchestra 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 multidomain MDM projects, including 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 is steady at around 2% in 2014. It has not shown any growth during the past couple of years and marketing does not seem to be a major focus for this vendor.
- **Product strategy:** Orchestra has begun to develop starter templates including data, business process and workflow models via its partners (such as Cognizant), to compete with larger rivals. Its big data/Hadoop support won't begin until 2016, which is quite late compared with other vendors.
- **Reference customers and product capability:** We were not able to obtain the response rate we needed for an authoritative response from users; we received a response rate of 42% (of 12 possible responses), which was lower than usual for this vendor. For those that did respond, the product capability was scored as "OK" overall.

## Riversand

[Riversand](#) is based in Houston, Texas, U.S. Riversand's MDMCenter version 7.6.6 achieved GA in April 2015. Riversand's total software revenue from MDM of product data solutions was \$18.3 million (estimated) in 2014. Riversand's total customer count for MDM of product data was 69 (estimated) in March 2015.

## Strengths

- **Product capability:** 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 (references report) in all MDM of product data scenarios. It was first to market with an in-memory implementation of more than 10 million records. It is the only .NET-based solution in this Magic Quadrant.

- **Strong leadership team:** Riversand's founding leadership has been a constant for the past five years. Compared with other vendors, this is quite rare and provides continuity and a common foundation for a more robust and defensible vision.
- **References and customer base:** Riversand has broad exposure and experience in the retail, manufacturing, distribution and energy sectors. The references (100% response rate) scored Riversand well in good understanding of MDM in a business context, product roadmap visibility and responsiveness to new features.

## Cautions

- **Momentum:** After several years of rapid growth, estimates suggest that Riversand's software revenue growth has slowed to 3.4% year over year (while the market is growing at more than 6%); at the same time, the share of Gartner inquiries related to this vendor has dropped slightly from more than 6.5% to about 6%. Riversand's broad marketing to so many segments of the MDM market might be confusing clients and prospects as what its specialty is.
- **Product innovation:** Riversand has brought an improved data quality capability and some solution accelerators to market, but it has not yet addressed the broader needs of information stewardship and governance via a packaged solution.
- **Strategic growth:** Riversand has plans to tackle complex challenges in MDM of customer data. A stronger multidomain MDM platform is therefore needed, which takes investment and refocusing. Past growth has led to growing pains, and some new leadership changes and challenges with customer service. It may be time for this vendor to seek strategic alternatives to fund its growth strategy.

## SAP (MDG-M)

SAP is based in Walldorf, Germany. SAP's Master Data Governance for Material (MDG-M) version 8 achieved GA in September 2015. SAP's total software revenue from MDM of product data solutions was \$99.8 million (estimated) in 2014, of which \$65 million was for SAP MDG-M as a stand-alone hub; the balance was from SAP NetWeaver MDM, and SAP hybris PCM. Gartner estimates (as of March 2015) are for more than 550 active SAP MDG-M customers.

## Strengths

- **Broad portfolio:** SAP's primary focus is to use SAP MDG-M as the main MDM offering to both manage ERP data (that is, application data management rather than master data management) and operate as a stand-alone hub to support MDM. The vendor continues to develop its vision of governing information across business applications, along with mobile platforms and business networks. Version 8 added support for accessing data quality and integration services running in SAP Hana.
- **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. Thus, one solution supports multiple scenarios.

- **Large installed base:** SAP has a large, blue-chip base of customers (of multiple products), not least of which is the strong ERP base. This provides an impelling reference base to draw on and good industry exposure on which to develop effective product strategies.

## Cautions

- **Declining revenue:** Our software estimates for SAP MDG-M in the market for MDM of product data suggest a decline year over year (after a Gartner restatement, due to new information, showing an estimated revenue level change the prior year). The 2014 estimates equate to \$64.7, and \$67.2 million for 2013. This ignores revenue from SAP MDG-M when implemented "inside" the ECC system, which we treat as an application data management use case.
- **Product strategy:** Though the majority of SAP MDG-M clients report that they plan to deploy the product as stand-alone from the ERP system, this is primarily to allow more frequent updates to the MDG product — independent of any ERP (ECC) upgrade cycle. SAP Information Steward is a separate product, as is SAP PowerDesigner — needed to interrogate metadata. SAP MDG workflow and SAP Process Orchestration (BPM) are different workflow capabilities/products. The share of our inquiries in 2015 related to SAP grew to 32% (from 31% in 2014), mostly due to increased concerns and questions regarding product direction and strategy.
- **Reference customer survey scores:** Product scores for SAP's MDG-M were slightly less than average in the online survey, losing out in hierarchy management, initial data loading, workflow, reporting/analysis for information stewards, and performance/scalability.

## SAP hybris

SAP hybris is based in Walldorf, Germany. The company's Product Content Management (PCM) 5.5.1 achieved GA in April 2015. Hybris' total software revenue from MDM of product data solutions was \$10 million (estimated) in 2014, and its total customer count for MDM was 100 (estimated) in March 2015.

## Strengths

- **Still (mostly) a "hands-off" SAP acquisition:** So far, SAP has not forced hybris to significantly alter its go-to sales and product strategy. SAP and hybris have developed a credible integration strategy when both are present in a prospective sale.
- **Balanced product:** Hybris targets multichannel e-commerce and PIM scenarios, as well as supporting content management. This is a good niche, and PCM is an effective contender in this market segment.
- **Industry focus:** Hybris offers good integration to its own e-commerce applications, so its support for retail and distribution industries is good.

## Cautions

- **Market growth:** Our estimates for hybris' offering have dropped significantly during the past year — to \$10 million in 2014 from \$19.9 million in 2013. It seems to be focused more on selling its e-commerce applications together with PCM, than on selling PCM stand-alone for broad MDM implementations.
- **Product strategy:** SAP has avoided rationalizing the hybris technology stack into the SAP technology stack. Clients remain uncertain how long this situation may last. Hybris has its own integration approach, and the functional overlap between SAP MDG-M, SAP Data Services and hybris PCM seems set to continue.
- **Reference customer survey scores:** The PCM product from hybris has achieved consistently lower scores (than other vendors' products in this Magic Quadrant) for product capability in the reference customer survey during the past two years.

## Sigma Systems

[Sigma Systems](#) is based in Toronto, Ontario, Canada. An MDM of product data solution, Sigma Catalog version 6.1 achieved GA in November 2014. Sigma Systems' total software revenue from MDM of product data solutions was \$8.5 million (estimated) in 2014. The vendor's license count for MDM of product data was 32 in March 2015.

## Strengths

- **Product capability:** The Sigma Systems Catalog solution is a strong, application-neutral, workflow-based, business-rule-centric MDM of product data solution. It has specific strengths from its telecommunications data model roots, but is now being deployed in other industries.
- **Growth:** Our software estimates for Catalog suggest year-over-year growth of more than 40%, from a small base.
- **Customer base:** Although Sigma Systems is small compared with other vendors, its references in the telecommunications industry have, so far, tended to be very good. It has added clients in other segments, including media and high tech.

## Cautions

- **Priority and strategy:** Sigma Systems is a business application vendor that also sells an MDM solution; it is not a specialist MDM vendor. Few of its customers have its MDM offering as stand-alone. 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.
- **Market visibility:** Sigma Systems sells a business application suite as well as an MDM offering. It is not as well-known for its MDM capability and its share of inquiries related to this market

segment (taken during the past year at Gartner) is less than 1% (and has been at this level for the past two years).

- **Reference customer survey scores:** Sigma Systems' references suffered a low response rate (46% from a possible 13 responses). The vendor does not yet offer many references outside its core telecommunications industry.

## Stibo Systems

**Stibo Systems** is based in Hojbjerg, Aarhus, Denmark. The Stibo Enterprise Platform (STEP) Trailblazer version 7.3 achieved GA in July 2015. Stibo's total software revenue from MDM of product data solutions was \$57.5 million (estimated) in 2014. Stibo's customer count for MDM of product data was more than 280 (estimated) in March 2015.

### Strengths

- **Strong momentum:** Stibo's estimated software revenue in this market segment grew by more than 24% in 2014, on top of 17% in 2013. Its 2015 share of inquiries related to this market segment has been hovering between 13% and 14% during the past two years. Its market share is estimated at more than 11% — third after SAP (17%) and Oracle (14%).
- **Product and strategy:** STEP Trailblazer has strong capabilities for multichannel e-commerce, but it can handle (references confirm) all MDM of product data scenarios. Stibo has an emerging focus on multidomain MDM and its workflow capability continues to mature. A new in-memory option will ship during 2015 with Trailblazer 7.3.
- **Blue-chip customer base:** Stibo has a growing and impressive list of blue-chip customers to call on as references. This cannot be underestimated and is one of the vendor's differentiators in the marketplace.

### Cautions

- **Organization challenges:** Fast growth leads to fast hiring and organizational growth. Stibo now has a complex product, industry, and marketing management and strategy organization (and roles). With the addition of new clients in Asia, its sales and support teams are struggling to keep up with the overall increase in market demand. Strict quality processes and investment are needed to ensure quality of service to clients through effective hiring.
- **Product capability:** Stibo has no packaged offering for information stewards; it just has a set of tools. Currently, Stibo has no funded plan for a native in-memory database capability within its STEP product.
- **Reference customer survey scores:** References have always been strong for Stibo. They remain so, but the product and presales and postsales scoring from its references have begun to stabilize and become "average" as opposed to "always better" than the peer group. There is a risk that growing too fast has resulted in Stibo leaving its customers behind. 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 based in Palo Alto, California, U.S. TIBCO's Master Data Management (MDM) version 8.3.2 HF-5 achieved GA in October 2014. TIBCO's software revenue from MDM was \$50 million (estimated) in 2014, of which \$28.9 million was for product data. TIBCO's total customer count for MDM of product data was 200 (estimated) in March 2015. TIBCO was acquired by Vista Equity Partners, a private equity firm, in December 2014.

### Strengths

- **Product capability:** TIBCO MDM is a strong solution for MDM of product data, with solid multidomain and data modeling capabilities; It's "visual MDM" UI is a differentiating feature — for data quality reporting and business user interface for MDM — that ships with a Spotfire runtime license.
- **Service-oriented architecture (SOA) focus:** Users continue to report that TIBCO MDM is a strong solution when coupled with the rest of the TIBCO technology stack, spanning SOA and business process management (BPM).
- **Market Momentum:** 2014 was a good year for TIBCO, with (estimated) software growth of 8.6% (faster than the market growth of about 6%). The share of inquiries Gartner takes related to this market for TIBCO was more than 10% in 2015, the same as 2014. A market share of approximately 5.6% suggests that there is a healthy product pipeline here for TIBCO.

### Cautions

- **Product strategy:** As a corporation, TIBCO perceives MDM as a data integration technology, not a business conversation about the business relevance or value of information. The product is, therefore, sold opportunistically and not with any significant corporate focus. Focus has been on cloud-based MDM (version 1.1.0 achieved GA in January 2015), which has yet to create any notable growth in new business for TIBCO.
- **Reference customer survey scores:** TIBCO references did not reveal any differentiated scores for TIBCO MDM. The company is missing out on leveraging what could and should be a great resource.
- **Recent acquisition:** TIBCO was acquired by a private entity (Vista Equity Partners) in late 2014, and some of our clients have expressed concerns over its future corporate strategy. So far, we have seen no concrete signs of substantial changes in investment or direction, but we will continue to monitor the situation.

## 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

- **inRiver** was added this year, because estimates of the software revenue associated with this product exceed the qualifying threshold.
- **Oracle (Product Hub Cloud)** was added this year, because estimates of the software revenue associated with this product exceed the qualifying threshold.

### Dropped

- **IBM (InfoSphere MDM Advanced Edition)** was dropped this year, due to Gartner restating its estimate for software revenue associated with that product. It fell below the qualifying threshold.
- **SAP (NetWeaver MDM)** was dropped this year, because the product is no longer actively sold by SAP publicly and SAP is focused on either leveraging SAP MDG-M or SAP hybris PCM to meet the needs of MDM of product data.

## Inclusion and Exclusion Criteria

### Inclusion Criteria

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For inclusion based on market traction and momentum, vendors should have:

- Generated at least \$5 million in total software revenue (licenses, maintenance and/or subscriptions) related to MDM of product data solutions, primarily supporting operational business processes, in 2014
- Active sales and support activities globally, that is, in at least two of the following regions: Americas, EMEA, Asia and Australasia
- Active sales, support and customers in multiple industries

Though not part of the inclusion criteria, we also collected or estimated additional data to ascertain the level of activity and stability of each vendor in the market. This included, but was not limited to:

- 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 2014
- 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 segment. Where end users report a notable difference between products from the same vendor, and where the positioning of these products in the market differs substantially, each product is evaluated separately against the inclusion criteria.

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

- **Informatica** — Two products, both qualified and included in the analysis
- **Oracle** — Two products, both qualified and included in the analysis
- **SAP** — Three products (including one from SAP hybris), of which two qualified: one from SAP and one from SAP hybris, which is analyzed separately

## Exclusion Criteria

This Magic Quadrant excludes the following vendors and revenue sources because their offerings are tangential to the main focus of MDM programs (that is, mastering data within and across an organization):

- Vendors that focus *solely* on analytical (downstream) MDM requirements. We use only revenue from operational MDM implementations for qualification, since this is where the bulk of MDM effort and business benefit originates. 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 its functionality. Likewise, royalties from an OEM or from resale by another vendor are not credited to the provider of the OEM technology; original software revenue from the end-user acquisition is credited to the reselling vendor.
- Marketing service providers, data aggregators and other data providers that provide trusted reference data external to the enterprise, but do not provide an MDM solution that specifically meets Gartner's definition of MDM.
- Application data management tools, which solely perform data management functions for use in a specific business application's data store. We exclude these whether or not the business application is sold by the same vendor as the application data management solution. We exclude these tools whatever their implementation infrastructure (for example, on-premises, cloud and in-memory) Some MDM solutions can be configured optionally as application data management tools; we also exclude revenue from these configurations from our analysis.
- Software development license revenue generated by the sale of MDM technology for its use in a specific business application, which effectively results in an application data management tool (as described above).

## Description of MDM of Product Data Solutions

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

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

- Model the complex relationships between the application sources inside the organization and between its products and services, as well as with intermediaries and other parties, and have 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 about each product. 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:

- Draw on a range of middleware products — for example, extraction/transformation and loading (ETL) and enterprise service bus (ESB) technologies — 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 (both the request/response and publish/subscribe patterns) and batch.
- Support integration with downstream business intelligence and analytical requirements.
- Support flexible and comprehensive business-service-based capabilities in order to model data services as well as user interactions across applications and data stores where master data is stored and used. Data integration service composition facilities and onboard event-processing capabilities are examples of business service functionality.

**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 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 information steward. Among the different user roles that interact with MDM, the information 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 end-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 applicable UIs on PCs, smartphones and tablets.

**Technology and architecture considerations.** MDM of product data solutions should be based on up-to-date and 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 evaluation, 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 provider 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 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 its 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 and Track 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 — through proofs of concept, 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 2015)

### 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 the Gartner position. Ultimately, technology providers are rated on their understanding of how market forces can be exploited to create opportunity for the provider and its clients.

**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 and needs with their added vision. Vendors should demonstrate a strategic understanding of MDM of product data solution opportunities (such as new application functionality or customer segments) and ongoing vendor market dynamics (such as 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 their 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 external service providers.

**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 the 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 multivector MDM in general. Also critical, is how vendors plan to support key initiatives such as those relating to the 360-degree view of the product, digital business, multichannel, 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	Medium
Sales Strategy	High
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	High
Innovation	High
Geographic Strategy	Medium

Source: Gartner (November 2015)

## Quadrant Descriptions

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### Leaders

Leaders have strong results and strong delivery capabilities, and 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 record. 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 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 while providing 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 are struggling to maintain a consistent, shareable and accurate single version of product or service data across their organizations — a requirement that is growing in importance. 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.

The overall MDM market continues to evolve in complex ways. Some of the more dynamic factors in play include:

- The global economic climate remaining in a state of flux, with some indications of growth, but others of instability. Overall, the outlook seems to suggest growth, but this is uncertain and current growth is unevenly distributed across the world and across the MDM industry. It appears that the MDM of customer data segment is growing faster than the MDM of product data segment. This is consistent with past trends in this market, which saw the product data segment grow faster than the customer data segment during downturns, but the customer data segment grow faster than the product data segment during upturns.
- The number of implementations of MDM of product data continuing to increase rapidly. The number of client inquiries Gartner has received about MDM of product data has increased during the past year; indeed, in terms of priority, have been the most popular inquiry topic of all data domains in two of the past four quarters. This is probably partly a reflection of the increasing number of failed and struggling implementations; successfully implementing MDM of product data, like many other complex programs, requires a significant level of change management. The increase in inquiries is also consistent with Gartner's understanding of the level of hype about MDM of product data — this technology is shown climbing the Slope of Enlightenment in "Hype Cycle for Enterprise Information Management, 2015."
- Confusion about how buyers search for solutions and how vendors position themselves and compete. Individual scenarios supported by this technology end up being called many different things by different users — from PIM to PDM to PCM. Additionally, some organizations target enterprisewide deployment, others only departmental or business-unit-level deployment.
- The long time that can be required to realize the success of an MDM of product data program, due to the need for accompanying organizational change management and the often woeful inadequacy of technological support for operational information governance and stewardship. Some reference customers are only now beginning to report significant business benefits — three or more years after their hub has gone live — though others report fairly immediate benefits, often achieved by intelligent sequencing of the MDM implementation styles in the roadmap (see "Establishing Milestones to Optimize Time to Value").
- The growing number of firms looking to expand their MDM programs; perhaps by adding content or unstructured data (such as graphics and documents), additional application-specific data, social 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 "Strategic Roadmap for Enterprise Information Management").

In light of these dynamic factors, the business drivers for organizations seeking 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 their MDM efforts vary accordingly (see "The Five Vectors of Complexity That Define Your MDM Strategy"). Some organizations have a product base of millions of products; for example, high-volume business-to-consumer (B2C) organizations such as retail. Others have a product base of a few thousands, such as lower-volume based industries, but more and just as complex product or service relationships. This has implications for the MDM implementation style (see "The Important Characteristics of the MDM Implementation Style").

The survey of vendors' reference customers (see Note 2) conducted for this Magic Quadrant asked for details about the business value generated from the use of MDM of product data solutions. This data is clearly not of audit quality, but more anecdotal. We asked for responses in bands of benefit — such as "between \$500,000 and \$1 million." When we added up the figures for those that responded (there was a low response rate of 38 out of 164 surveyed online), totaling the lowest end of each band, the collective business benefit reported came to approximately \$86 million.

## Market Growth Continues

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Gartner estimates that overall software revenue from the MDM of product data solutions market segment came to \$530 million in 2014, an increase of 6.5% from 2013. This compares with \$500 million from the MDM of customer data solutions market, up 10.3% from 2013.

The MDM of product data solutions market segment tends to grow more slowly than the MDM of customer data solutions market when economic growth (for example, GDP) is increasing by 2% or more each year. When economic growth is less than 2%, the opposite is true. We believe that during periods characterized by growth, executives make pleasing customers a priority — since the "customer is king" — with the result that MDM of customer data solutions are more in demand than MDM of product data solutions.

## How the Vendors Stack Up

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This market is dominated by best-of-breed solutions. The larger vendors have acquired or developed best-of-breed MDM of product data solutions that are purpose-built for a specific data domain. For example, Oracle has developed a best-of-breed solution; SAP acquired one, and has since developed a suite-based solution for many domains; and Stibo, the third largest vendor in this market segment, is a best-of-breed vendor. IBM, with the fourth-largest market share, has acquired several best-of-breed MDM solutions. Together these vendors represent 48% of the MDM of product data market segment.

The three next-largest vendors (based on software revenue) — Riversand, TIBCO and Informatica — each have two best-of-breed solutions, and represent 15% of this market segment. All these vendors offer specialized solutions for MDM of product data, although each has different interests in supporting multidomain MDM requirements — with either platform approaches (SAP and IBM, for example), or with other best-of-breed MDM solutions for customer data subsequently adapted for multidomain (Informatica, for example).

Other vendors with a smaller market share, target narrower or niche segments. Agility Multichannel targets the SMB market as does inRiver, although both vendors also have larger customers; Enterworks, originally focused on a segment of the retail/distribution market, is expanding its focus to include multidomain MDM as well as additional industries. Orchestra Networks wants to operate as a multidomain vendor, but is increasingly supporting the MDM of product data domain. Open-source MDM software is making a comeback as a new set of smaller vendors focus on this area during 2015.

## Vendors Continue to Invest in Information Stewardship, Governance and Big Data Technology

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Several trends have continued apace during the past year. Some vendors continued to focus on supporting the business user role of information steward. This remains a troublesome area for many vendors as they struggle to understand this role — not least because few of their executives have occupied it (see "How Chief Data Officers Can Help Their Information Stewards").

Beyond the work of the information steward (policy enforcement) is the work of information governance (policy setting). Some vendors have focused on this more than others — for example, Collibra and Global Data Excellence (see "Operationalize Information Governance With Technology Support"). However, this remains a complex and slowly evolving part of the market. It is quite possible that the information stewardship segment may become a discrete market in the next year or two.

Finally, big data support has become well-established with more vendors now offering links to related technology, spanning:

- Search, structured and unstructured data to yield a full product-360-degree view (that is, all related data)
- Hadoop processing (for large-scale processing and analytics)
- Graph-driven relationship discovery (that is, which products sell well with others, for example)

This is not an exhaustive list, but it does show that product master data is one of the most important information assets an organization has; second-only, perhaps, to customer master data.

## Appendix

Table 3 lists MDM-centric and cloud-related vendors that did not qualify for inclusion in this Magic Quadrant, because our estimates indicated that they failed to meet the requirements of the inclusion



criteria for level of revenue from MDM of product data solutions, geographic presence and/or industry diversity.

Table 3. MDM-Centric and Cloud MDM Vendors

Vendor	Product/Service	Area of Focus
		<b>MDM-Centric</b>
Akeneo	Akeno PIM	MDM of product data, open source
Amdocs	Master Enterprise Catalog	MDM of product data (telecommunications)
Aravo	Aravo Solutions	MDM of supplier data
Ataccama	Master Data Center/Reference Data Manager	Multidomain MDM
Creatives	Product Master Data Suite	MDM of product data
GoldenSource	360 EDM	Financial services industry focus
Ineo	3MDM	MDM, application data management
jCatalog	jCatalog PIM; jCatalog MDM	MDM of product data
Kingland Systems	Enterprise Hub	Financial services industry focus
Lansa	Lansa Data Sync Direct	MDM of product data
Magnitude Software (Kalido)	Kalido MDM	Multidomain MDM
Markit	Markit EDM	Financial services industry focus
Microsoft	Microsoft SQL Server MDS	Multidomain MDM services
pimcore	PIM	MDM of product data, open source
Pirobase	Pirobase PIM	MDM of product data
Poet	PIM	MDM of part data
Profisee	Master Data Maestro	Multidomain MDM
SAS	SAS Master Data Management	Multidomain MDM
SBS	SBS Spatial MDM	MDM of geospatial data
Semarchy	Convergence for MDM	Multidomain MDM
Software AG	webMethods OneData	Multidomain MDM
SyncForce	MDM	MDM for e-commerce

Vendor	Product/Service	Area of Focus
Talend	MDM	Multidomain MDM, open source
Trask solutions	Reference Data Store	Reference data management
Verdantis	MDM	MDM of part data
Vinculum	Vin MDM	Retail industry
		<b>Cloud MDM</b>
Dell Boomi	MDM	Cloud MDM
Edgenet	Product Content Cloud	Product data and cloud services
IHF InfoTech	iClassic MDM	Cloud MDM
Liaison Technologies	Alloy Platform	Multidomain MDM and cloud services
Liberata	Listpoint	Reference data management — cloud-based
SKUforce	Cloud Data Management; MDM	Product data and cloud services
EDM = enterprise data management; MDM = master data management; PIM = product information management.		

Source: Gartner (November 2015)

Table 4 lists other relevant vendors that did not qualify for inclusion in this Magic Quadrant because they participate solely in adjacent markets, such as application-specific data management, data quality/enrichment, information exchange/global data synchronization, and information governance/stewardship, as indicated by the Area of Focus subheadings.

Table 4. Other Relevant Vendors

Vendor	Product/Service	Area of Focus
		<b>Application Data Management</b>
Chain-Sys	appMDM	Application-specific data management
Prospecta	Master Data Online	Application-specific data management
Symphony EYC	MDM	Application-specific data management
Syncron	MDM	Application-specific data management
Triniti	Triniti Product Modeler	Application-specific data management
Winshuttle	Winshuttle Foundation	Application-specific data management
zetVisions	Single Point of Truth (SPoT)	Application-specific data management
		<b>Data Quality/Enrichment</b>
Codifyd	Product Content Services	Data enrichment
Datactics	Data Quality Suite	Data quality
IHS	Data Products and Solutions	Data enrichment
Silwood Technology	Metadata Intelligence Software	Data enrichment
Trillium Software	Trillium Product Data	Data quality
Unilog	CIMM2 PIM	Data enrichment
Verdantis	Material Master Data Governance	Data enrichment, procurement data oriented
		<b>Information Exchange/Global Data Synchronization</b>
1WorldSync	Product Information Cloud	Global Data Synchronization
Lansa	Lansa Data Sync Direct	Data information exchange (industry specialization in consumer/retail)
OpenText (GHX)	B2B Managed Services	Data information exchange (industry specialization in healthcare)
Salsify	Product Content Management	Product/rich data synchronization
		<b>Information Governance/Stewardship</b>
BackOffice Associates	Data Stewardship Platform	Information governance/stewardship

Vendor	Product/Service	Area of Focus
<a href="#">Collibra</a>	Data Governance Center	Information governance/stewardship
<a href="#">Datum</a>	Information Value Management	Information governance/stewardship
<a href="#">Diaku</a>	Axon Data Insight	Information governance/stewardship
<a href="#">Global Data Excellence</a>	Data Excellence Management System	Information governance/stewardship
<a href="#">Global IDs</a>	Data Governance	Information governance/stewardship
<a href="#">Prodago</a>	Lean Data Governance	Information governance/stewardship
B2B = business-to-business; MDM = master data management; PIM = product information management.		

Source: Gartner (November 2015)

## Gartner Recommended Reading

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

"How Markets and Vendors Are Evaluated in Gartner Magic Quadrants"

"Magic Quadrant for Master Data Management of Customer Data Solutions"

"IT Market Clock for Master Data Management, 2015"

"Risk Framework for Master Data Management"

"How Chief Data Officers Can Help Their Information Stewards"

"Consider Three Specific Scenarios for MDM of Product Data"

"The Impact of Big Data on Master Data Management and How to Survive It"

"Why You Will Probably Need More Than One Master Data Management Vendor"

"The Seven Building Blocks of MDM: A Framework for Success"

"Toolkit: RFP Template for Master Data Management Solutions"

"Toolkit: A Program Manager's Guide to MDM"

"Risk Framework for Master Data Management"

"Toolkit: Assess the Risk Across Your MDM Program"

## 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 during which the vendors provided Gartner with updates on their strategy, market positioning, recent key developments and product roadmap (these briefings took place during June and July 2015).
- 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. This work took place during July, August and September of 2015.
- Feedback about tools and vendors captured during conversations with users of Gartner's client inquiry service. This work was reviewed during the past year.
- Market share and revenue growth estimates developed by Gartner, as of March 2015.
- Inquiry analysis and inquiry share estimates developed by Gartner, based on the volume of inquiries received about this market segment (these estimates are not representative of the entire MDM solution market). This data was captured as of the end of March 2015.
- Results from a survey of vendors' reference customers (see Note 2).

### Note 1 Definition of Master Data Management and Multidomain/Multivector Master Data Management Technologies

Master data management (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, prospective customers, citizens, suppliers, sites, hierarchies and the 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 so that they 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 single-domain solutions.

Multivector MDM solutions provide an integrated set of 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 Survey of Reference Customers

As part of the Magic Quadrant research process, we sought the views of vendors' reference customers via an online and telephone survey that took place in July, August and September 2015. 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. 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, because not all organizations are using 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 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.

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