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Magic Quadrant for Master Data Management of Customer Data

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IBM and Oracle (Siebel Universal Customer Master) have strengthened their positions in the Leaders quadrant, with Initiate Systems joining them. Siperian and D&B Purisma figure as visionaries. SAP has remained strongly placed in the Niche Players quadrant.

WHAT YOU NEED TO KNOW

Organizations wanting to create a single view of the customer in a heterogeneous environment have increasingly seen the solution as a stronger focus on the discipline of master data management (MDM; see Note 1) and the implementation of an MDM system. Since 2003, there has been a strong trend toward buying, as opposed to building, a system for managing customer master data. Gartner's Magic Quadrant for MDM of customer data systems provides relative positioning of packaged MDM products and vendors for managing master customer data, based on a comprehensive set of criteria. Prior to 2008, this market was known as the customer data integration (CDI; see Note 2) hub market; then, MDM came into use as the overarching term.

Use this Magic Quadrant to understand the MDM of customer data systems market, and how Gartner rates the leading vendors and their offerings in that market. Draw on this research to evaluate vendors based on 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 are buyer-specific, and vendors from the Challengers, Niche Players or Visionaries quadrants could be better matches for your requirements. Although important, selecting an MDM for customer data system is only part of the challenge. To succeed, you should put together a balanced MDM program that creates a shared vision and strategy, addresses governance and organizational issues, leverages the appropriate technology and architecture, and creates the necessary processes and metrics for your customer data system (see "The Seven Building Blocks of MDM: A Framework for Success").

MAGIC QUADRANT

Gartner's updated Magic Quadrant for MDM of Customer Data, provides insight into the portion of the evolving packaged MDM systems market that focuses on managing customer data to support CRM and other customer-related initiatives. It positions relevant technology providers on the basis of their completeness of vision relative to the market, and their ability to execute on that vision.

challengers leaders Oracle (Siebel UCM) ability to execute IBM Initiate Systems Oracle (CDH)-Siperian DataFlux. D&B Purisma Tibco Software. VisionWare Sun Microsystems niche players visionaries completeness of vision |

Figure 1. Magic Quadrant for Master Data Management of Customer Data

Source: Gartner (June 2009)

As part of the Magic Quadrant process this year, we sought the views of vendors' reference customers via an online survey. The survey included requests for feedback on vendor maturity (for example, understanding industry verticals, provision of innovation, responsiveness to new requests, total cost of ownership [TCO] and pricing) and product capabilities (for example, flexibility in data modeling, support for data quality, user interface [UI] support for data stewardship, internal workflow and support for multiple architectural styles). Nearly 100 organizations were contacted. Not surprisingly, the references 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 historic, as not all organizations are on the latest product versions.

As of June 2009

Market Overview

The ability to create, maintain and leverage a single, trusted, shareable "view of the truth" is seen as an essential requirement in commercial and noncommercial organizations to support business processes and business intelligence (BI). However, most large enterprises have heterogeneous application and information management portfolios, with fragments of often inaccurate, incomplete and inconsistent data residing in various application silos. No comprehensive system contains the single view or is designed to manage the complete life cycle of the master data. The focus of this single view may be customers (including consumers, business customers and channel partners), products, suppliers, locations, assets, financial charts of account or other core entities of the enterprise. 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.

When creating and managing customer master data, many organizations and vendors originally thought that CRM, ERP or vertical industry systems would solve this problem of inconsistent master data spread across multiple systems; but CRM, ERP or vertical industry systems weren't designed for the task, and they often created additional silos. When organizations such as large banks accepted the need for a new central system to manage customer data, they tended to build their own systems. However, since 2003, a diverse set of vendors has rushed into this market to supply packaged systems for mastering customer data. Originally known as CDI hubs, they're increasingly seen as part of an overall integrated MDM strategy, so the term "MDM of customer data system" is proliferating. The business drivers for MDM of customer data include:

- Compliance and risk management drivers. These tend to be the hardest benefits and are essential to have.
- Cost optimization and efficiency drivers. These have tangible benefits and are a good fit for organizations' needs during a down economy.
- **Growth in revenue and profitability drivers.** These can be more difficult to measure, but will be a major focus once the economy takes an upturn.

Gartner started tracking the CDI hub market in 2004, and has followed it as it has become part of the wider aggregate MDM market. Since 2004, MDM of customer data technology has moved from emerging to adolescent status, and is now classified as early mainstream status. It has progressed along the Gartner Hype Cycle (see "Hype Cycle for Master Data Management, 2008") and is now halfway beyond the Peak of Inflated Expectations on its way to the Trough of Disillusionment. That may sound negative, but it is the normal pathway for technologies, as they continue to mature. MDM of customer data products are suitable for Type B organizations (that is, mainstream adopters of new technologies), as well as for Type A enterprises (aggressive, early adopters of new technologies). However, there are still risks, because vendors' products vary in capabilities and "sweet spots," and the vendors have varying levels of capability in different vertical markets and geographies.

Investment in MDM of customer data systems has occurred across all vertical industries. Product-oriented industries tend to be interested in a wide set of data domains (such as product, supplier and customer), whereas the service industries (such as banking and government) tend to focus on the customer data domain. There is global interest and investment in MDM of customer data technology, although many best-of-breed vendors have geographical limitations. So far, large enterprises have been the primary investors in MDM of customer data systems.

According to preliminary estimates, the market for MDM of customer data systems grew by 22%, up from \$302 million in 2007, to \$370 million in 2008. Although this is positive growth, it represents a sizable reduction compared with the early years of the market. We expect market growth to drop as markets mature, but the global economic downturn also had an effect on the market. However, MDM's business drivers are relevant in good and bad economic times.

According to our preliminary estimates, IBM, Oracle (based on a combination of its Oracle CDH and Siebel Universal Customer Master [UCM] products) and SAP accounted for more than 50% of the MDM of customer data market share in 2008, but best-of-breed vendors (such as Initiate Systems and Siperian) continue to differentiate themselves based on their capabilities and strengths in key vertical industries. We expect further consolidation, due to technology acquisition and market share acquisition reasons. The MDM of customer data market will continue to grow for several years, and our estimate is that it will account for approximately \$1 billion in software revenue in 2012.

In this year's Magic Quadrant, IBM's InfoSphere MDM Server and Oracle's Siebel UCM products are in the Leaders quadrant, and they are joined, for the first time, by Initiate Systems. IBM continues to have a strong position in financial services, retail and organizations attracted by IBM's long-term viability and range of offerings. During the past year, IBM responded to the need for better data stewardship and governance UIs. Oracle has strong sales momentum with Siebel UCM across a range of industries, mainly within the Oracle installed base, and has put a lot of effort into filling the functionality gaps. Initiate Systems had a strong year with continued innovation and making a name for itself in very demanding, high-volume environments, as well as building on its strength in healthcare and government.

In the Visionaries quadrant, Siperian is joined by D&B Purisma. Siperian is still one of the technology pace setters and continues to do well in the life sciences industry, but progress in other industries has been slower than hoped for. D&B Purisma is reaping the benefits of ownership by Dun & Bradstreet, with the ability to leverage those resources. It is focusing on sales and marketing requirements, but needs to manage its rapid growth and the demands of its growing customer base.

In the Niche guadrant, Oracle's Customer Data Hub (CDH) product continues to have a loyal user base, although the pace of new technology introduction has slowed. It's mainly positioned for established E-Business Suite [EBS] customers in product-oriented industries, often in combination with the Oracle Product Data Hub, and now Oracle Site Hub. SAP's MDM system continues to improve with each version, but it's chosen primarily by B2B customers in SAP's business applications user base. SAP is increasingly leveraging the Business Objects technologies, but is still playing catch-up in many functional areas. DataFlux is starting to execute more strongly on its MDM proposition, but continues to offer a graduated approach to MDM, starting with selling its data quality platform, which is more its sweet spot. VisionWare continues to face little competition in the Microsoft .NET segment of the market, and has successfully expanded into the public sector and healthcare in North America, providing a lower cost option than its competitors. Tibco Software continues to invest in MDM and is filling the gaps in its functionality, particularly in the data quality area, but it needs to increase sales, and then references for MDM of customer data. Sun Microsystems was placing new emphasis on MDM, and its relationship with the Mural open-source community for MDM is unique. Looking more widely, its pending acquisition by Oracle raises doubts over Sun's future investment in MDM, although Oracle could leverage Sun MDM to better penetrate the healthcare and government markets.

During the past year, there has been particular emphasis on:

- Adding or improving data stewardship and governance facilities, including data quality profiling, workflow, data visualization and manipulation, dashboards and reporting.
- Improvement in manageability and scalability capabilities.
- Increasing synergies with data quality tools technologies, which are used for cleansing, standardization, matching and profiling tasks, and some of the vendors compete in both markets (see "Magic Quadrant for Data Quality Tools").
- Growing overlap with MDM of product data systems (see "Magic Quadrant for Master Data Management of Product Data"), but vendors' ability to provide multidomain MDM capabilities in a single integrated product is still not strong enough to consider merging the two Magic Quadrants.

Market Definition/Description

Markets are sets of actual or potential customers for a given set of products or services that have common sets of needs or wants, and that reference each other when making a decision. Market segments are portions of the generic market that are qualified by more-exact criteria that group potential buyers more tightly. Segmentation takes two forms:

- A generic market can be divided into a recognizable entity in which the rules for defining a market pertain.
- An individual vendor may segment the market to target its products more precisely and
 to differentiate itself from (or avoid competing with) other players that address the same
 overall market. However, the targeted buyers may not know they're part of the same
 market segment. Such segmentation will not be reflected explicitly in a Magic Quadrant,
 although it may be reflected implicitly (via placement of a vendor in the Niche Players
 quadrant, for example).

MDM of customer data systems are software products that:

- Support the global identification, linking and synchronization of customer information across heterogeneous data sources through semantic reconciliation of master data
- Create and manage a central, database-based system of record
- Enable the delivery of a single customer view for all stakeholders
- Support data quality, process, and workflow compliance through monitoring and corrective action techniques

MDM architectural styles vary in:

- Instantiation of the customer master data varying from the maintenance of a physical customer profile to a more-virtual indexing structure
- The use of the customer master data ranging from supporting operational requirements to the support of analytical requirements
- The latency of customer master data maintenance varying from real-time, synchronous, reading and writing of the master data in a transactional context to batch, asynchronous harmonization of the master data across systems

Organizations use MDM of customer data technology as part of an overall MDM program, which is part of a wider enterprise information management (EIM) strategy (see "The Essential Building Blocks for Enterprise Information Management"). An MDM program potentially encompasses the management of customer, product, asset, person or party, supplier and financial masters. As the name suggests, MDM of customer data focuses on the management of the domain relating to customer data, whereas MDM of product data technology focuses on the domain relating to product data (see "Magic Quadrant for Master Data Management of Product Data").

Inclusion and Exclusion Criteria

The MDM of customer data market continues to mature; therefore, we have raised the bar for inclusion criteria relative to the Magic Quadrant published in 2008. We include specialist vendors and large-enterprise software vendors with products in the market, as well as vendors that Gartner views as having a unique vision or position in the market, even if they do not fully meet the inclusion criteria.

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

- At least 10 live customer references for MDM of customer data product functionality
- At least seven new customers for MDM of customer data products in the past four quarters
- Generated at least \$8 million in total software revenue (licenses and maintenance) related to MDM of customer data systems in the past four guarters

For inclusion based on near-term viability, vendors should have:

- 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 that is, if the year of operations is cash-flow-negative, then companies spend their cash reserves

This Magic Quadrant excludes:

- Vendors whose MDM of customer data related revenue are too small or that focus on a limited geographical region
- Vendors that focus on a single vertical industry market
- Vendors that focus solely on analytical (downstream) MDM requirements
- Marketing service providers (MSPs) or data providers that provide an external customer data reference database service, but don't provide an on-premises MDM of customer data product

For software vendors and MSPs that have been excluded for these reasons, see Note 3 and "Vendor Guide: Master Data Management, 2009."

We continue to include Oracle's CDH and Siebel UCM because, although Oracle sells both products under the banner of Oracle Customer Hub, they are quite different from each other, and Oracle positions them differently depending on the market segments. We have continued to rate Sun's MDM Suite offering, because Sun is actively marketing it; however, Sun declined to take part in the Magic Quadrant process this year. This year's rating is based on previously supplied information, plus publicly available information.

Added

VisionWare

Dropped

No vendors have been dropped.

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 have a positive effect on revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their visions.

Vendors are rated on the basis of the following criteria (and weighting).

Product (High)

These are software products offered by the vendor that compete in/serve the market for MDM of customer data systems. This includes product capabilities, quality, feature sets and skills, whether offered natively or through OEM agreements/partnerships, as defined in the market definition and detailed in the subcriteria.

Vendors are measured on the ability of their product releases to support the following MDM of customer data technology subcriteria.

Data-Modeling Capabilities: The applicability of the data model to your organization is a fundamental requirement. It must:

- Model the complex relationships within the enterprise's internal application sources and among the organization, its business and consumer customers, intermediaries and other parties, including the ability to handle complex hierarchies
- Map to the master customer data requirements of the entire organization, not just to selected areas
- Be configurable, customizable and extensible, as well as upgradable
- Support vertical-industry-specific 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

Information Quality Management Capabilities: A good data model has little value if it lacks accurate, up-to-date customer data. MDM of customer data products should:

- Have strong facilities, in batch and real-time mode, for cleansing, matching, identifying, linking and semantically reconciling customer master data in different data sources to create and maintain the "golden record." These facilities may be provided by the MDM for customer data vendors or by offering tight integration with products from specialist data quality partners.
- Support a "data steward" role, enabling it to manage customer data throughout its life cycle and provide data governance, including the ability to:
 - Set rules to determine where to source data and under what circumstances, including the ability to give preference to the most-dependable sources.
 - Configure rules for comparing and reconciling semantics across data sources, matching and linking the data, and manage the merging and unmerging of customer records with full auditability and survivability.
 - Ensure that business rules and associated metadata related to data cleansing are sufficiently visible to satisfy compliance requirements.

Loading, Integration and Synchronization Capabilities: MDM of customer data products need to provide data integration facilities for loading the customer data in a fast, efficient and accurate manner. There will also be a need for data and application integration capabilities, including publish-and-subscribe mechanisms, to provide a communication backbone for the bidirectional flow of customer data between the central database (or hub) and the spoke systems. These facilities may be provided by the MDM of customer data vendor or by offering tight integration

with products from specialist data and application integration partners. MDM of customer data products should be able to:

- Leverage a range of data and application integration products to integrate with a wide variety of data sources, including legacy data sources, and it should expose industrystandard interfaces
- Support integration with different latency characteristics and styles (for example, real time and batch)
- Support integration with downstream BI and analytical requirements

Business Services and Workflow Functionality: Many leading organizations plan to use the new customer master database as the basis for new operational and analytical applications. In the enterprise service-oriented architecture (SOA) world, service-oriented composite business applications may consume MDM for customer data business services through Web services standard interfaces.

MDM for customer data products should protect and complement the data layer with a layer of business services, at granular and more-coarse-grained levels, for accessing and manipulating the customer data that is built for an SOA environment, and exposing Web services interfaces. In addition, there are some scenarios (such as collaborative centralized authoring or data quality improvement of customer data) in which MDM for customer data systems require a collaborative workflow capability and need to support their own business process modeling capabilities. In other scenarios (such as forming part of a wider, end-to-end create-customer process), they need to interact with enterprise business process management (BPM) tools. As MDM becomes core to SOA strategies, this MDM/BPM suite capability may need to be reconciled with the enterprise BPM strategy.

Performance, Scalability and Availability Capabilities: If an MDM of customer data system supports operational and analytical applications and is tightly integrated with established systems and new applications, then serious demands are likely to be made on its performance, scalability and availability. MDM of customer data systems 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

Manageability and Security Capabilities: This functionality involves the availability of facilities for managing the MDM of customer data systems, such as facilities for reporting on activities within the systems. In addition, these capabilities include integrating the MDM of customer data system with common system management and security tools. On the security and data privacy management front, this involves 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

Measurement Capabilities: The ability of MDM of customer data systems to support a range of analytics from the performance of the technology, and the MDM-enabled business processes, as well as the accuracy of the master data. The MDM of customer data products needs to support users' ability to flexibly define data quality based on usage and use case, and to use these definitions in real time to report up-to-date information on the performance of MDM processes. This may be achieved by tight integration with a BI solution that embeds the analytics in the MDM

of customer data system, or by an inherent analytical capability. The analytics need to extend across:

- Overall performance of the MDM of customer data systems in terms of system availability, workflow, process monitoring and performance, and data throughput
- Analytics related to MDM-enabled business processes and service execution for example, the execution of business processes in a timely fashion to targets set by the business, as well as the effective handling of anomalies and queries related to product master data
- The overall master data quality of the business and how it's changing

Technology and Architecture Considerations: MDM of customer data systems should be based on up-to-date, mainstream technologies and should be capable of flexible and effective integration with a wide range of application and infrastructure platform components (from one or more vendors) within the user organizations. They should be capable of flexible configuration into a range of architectural styles in terms of Instantiation, latency and use of customer master data to enable it to satisfy such use-case scenarios as consolidation, registry, coexistence and centralized scenarios. The vendors are also measured on the capabilities of their architectures to support global rollouts and localized international installations.

Overall Viability (High)

Viability includes an assessment of the MDM of customer data system vendor's financial health; the financial and practical success of the business unit or organization in generating business results in the market for MDM of customer data systems, on a global basis; and the likelihood of the organization or individual business unit continuing to invest in the development of the MDM product, continuing to offer the product and advancing the state of the art in the organization's product portfolio.

Sales Execution/Pricing (High)

This criterion involves the vendor's capabilities in all global, presales activities related to MDM of customer data systems, as well as 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 (Standard)

This comprises the ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change in the market for MDM of customer data systems. This criterion also considers the vendor's history of responsiveness.

Marketing Execution (Standard)

This involves the vendor's ability to demonstrate clarity, quality, creativity and efficacy of programs designed to deliver the vendor's message, on a global basis, to influence the market for MDM of customer data systems, 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, thought leadership, word of mouth and sales activities.

Customer Experience (High)

Relationships, products and services/programs that enable clients to be successful, on a global basis, with the products evaluated contribute to the customer experience. This includes implementation and support and the way customers receive technical and account support. It also includes measures of clients' success in implementing MDM of customer data systems, such as customer references and TCO.

Implementation and Support: This service and support area includes:

- Professional services provide internal professional service resources or partner with external service providers (ESPs) with vertical industry expertise, MDM of customer data domain knowledge, global and localized country coverage, and a broad skill set (including project management and system configuration) to support a complete project life cycle
- Customer support provide satisfactory prompt service to its customers worldwide with ranges of service-level agreements to meet different requirements
- User groups provide support to active user groups

Customer References: Vendors need to produce a sufficient number of production-level references, on a global basis, with varying levels of scenario complexity and workload to demonstrate the viability of their MDM of customer data systems in the marketplace.

TCO: The TCO for the MDM of customer data product — including purchase of software licenses, implementation, and ongoing maintenance and administration — during a three- to five-year span should provide a good balance between cost and the value obtained.

Operations (No Rating)

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.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product/Service	high
Overall Viability (Business Unit, Financial, Strategy, Organization)	high
Sales Execution/Pricing	high
Market Responsiveness and Track Record	standard
Marketing Execution	standard
Customer Experience	high
Operations	no rating

Source: Gartner (June 2009)

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about their market direction, innovation, customer needs and competitive forces, as well as how they map to the Gartner position. Ultimately, technology providers are assessed on their understanding of the ways that market forces can be exploited to create opportunities for providers. Vendors are rated on the basis of the following criteria (and weighting).

Market Understanding (High)

This category is defined as the vendor's ability to understand buyers' needs and translate them into products and services. Vendors that show the best vision listen to and understand buyers' wants and needs, and can shape or enhance these desires with their added vision. Vendors should demonstrate a strategic understanding of MDM of customer data opportunities (for example, new application functionality or customer segments) and ongoing vendor market dynamics (for example, consolidation trends) on a global basis, and translate these needs into products and services.

In addition, an understanding of the wider implications and the position of MDM of customer data in an organization's multidomain MDM program is important. Also evaluated are MDM's impact on and relationship to EIM and business process platform (BPP) strategies, which are valuable to customers in taking a strategic view.

Marketing Strategy (High)

A vendor's marketing strategy is evaluated based on the need for a clear, differentiated set of MDM of customer data messages consistently communicated throughout the organization and externalized globally through the Web site, advertising, customer programs and positioning statements. Intersection with MDM of product data and wider MDM and industry challenges, as expressed by Gartner clients, is important.

Sales Strategy (Standard)

A vendor's strategy for selling the MDM of customer data systems should use an appropriate global network of direct and indirect sales, marketing, service, and communication affiliates that extends the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy (High)

A vendor's approach to product development and delivery should emphasize differentiation, functionality, methodologies and feature sets as these factors map to current and future requirements. The vendor's published "statement of direction" (or Gartner's understanding of it) for the next two product releases needs to keep pace with or surpass Gartner's vision of the market for MDM of customer data systems. Gartner's main product-oriented criteria focus on:

- Data-modeling capabilities
- Information quality management capabilities
- Loading, integration and synchronization capabilities
- Business services and workflow functionality
- Performance, scalability and availability capabilities
- Manageability and security capabilities
- Measurement
- Technology and architectural considerations

The vendor needs to offer an MDM of customer data systems that can be configured into a range of architectural styles, in terms of instantiation, latency and usage of customer master data, to

enable it to satisfy various use-case scenarios, such as the consolidation, registry, coexistence and centralized style scenarios and hybrid models.

The vendor needs to show how its MDM of customer data systems supports the multiple use cases, including business operations (operational MDM), BI and corporate performance management (analytical MDM). Because most vendors focus on one use case, vendors need to demonstrate how they intend to support the growing convergence in requirements across use cases.

The vendor must understand the major technology/architecture shifts in the market and must communicate a plan to leverage them, including the 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 must demonstrate an evolutionary path toward SOA.

Business Model (Standard)

The soundness and logic of a vendor of MDM of customer data systems underlying business proposition should be incorporated into a well-articulated strategy for revenue growth and sustained profitability. Key elements of strategy include the sales and distribution plan, internal investment priority and timing, and partner alliances, such as with ESPs.

Vertical/Industry Strategy (High)

This involves the vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals. Included are reviews of the vendor strategy for meeting the needs of such vertical industries as banking, manufacturing, communications and government.

Innovation (High)

Vendors need to be able to lead a market and, in so doing, to provide customers with innovative solutions and approaches to service customer needs in complex, heterogeneous environments. Innovation implies a well-rounded and well-thought-out road map for solving MDM of customer data issues now and in the future. Gartner looks for a vendor's understanding of the broadest and most-complex set of MDM of customer data environments, as well as of MDM in general.

Geographic Strategy (Standard)

This refers to a vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, directly or through partners, channels and subsidiaries, as appropriate for that geography and market. It includes sales, marketing and support for complex global companies.

Table 2. Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	high
Marketing Strategy	high
Sales Strategy	standard
Offering (Product) Strategy	high
Business Model	standard
Vertical/Industry Strategy	high

Evaluation Criteria	Weighting
Innovation	high
Geographic Strategy	standard

Source: Gartner (June 2009)

Leaders

Vendors in the Leaders quadrant have strong results and 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. The size and financial strength of the leaders 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, across all geographies and in many vertical industries. Leaders have the strategic vision to address evolving client requirements; however, they're not always the best choice.

Challengers

Challengers demonstrate a clear understanding of today's MDM of customer data market, but they have not demonstrated a clear understanding of the market direction or are not well-positioned to capitalize on emerging trends. They often have a strong market presence in other application areas. This version of the Magic Quadrant for MDM of Customer Data does not have any challengers.

Visionaries

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

Niche Players

Niche players do well in specific segments of the MDM of customer data market or have limited ability to be innovative or outperform other vendors in the market. They may be focused on a specific functionality, domain or industry, or have gaps relative to broader functionality requirements. Niche players may have limited implementation and support services, or have not achieved the necessary scale to solidify their market positions.

Vendor Strengths and Cautions

D&B Purisma

Strengths

• Strong Parent Company: D&B is the world's leading provider of business information related to companies and has revenue of more than \$1.7 billion. It has a dominant position in the U.S. market for business customer reference data services and a substantial worldwide presence. Purisma, originally a small best-of-breed MDM of customer data company, now has strong viability as a result of its acquisition by D&B in November 2007. D&B has kept the Purisma brand name, but Purisma is well integrated into the D&B organization and is a key component of D&B's growth strategy in what it calls the "commercial data integration" area.

- Leveraging D&B's Reach: D&B's Purisma has been an innovator in the management of B2B customer data, and this remains its focus, providing a good match with the D&B company's focus. Purisma is able to leverage D&B's extensive sales force and sell Purisma Data Hub into its large customer base, concentrating first on the U.S. market. Beginning in mid-2008, Purisma experienced a major ramp-up in its pipeline and sales. At year-end 2008, Purisma had 38 customers, a nearly 100% increase from the 20 customers it had at year-end 2007.
- Increasing Integration With D&B: D&B's Purisma is focused on the business needs of sales and marketing functions (for example, improving prospecting and lead management) and typically sells to the business. There is an increasingly deep and realtime integration between D&B's externally hosted reference data services (D&B Optimizer) and the on-premises Purisma Data Hub. This has the potential to provide more-timely, accurate, insightful and proactive information on customer and prospect B2B organizations and personnel than competitive MDM products.
- Steadily Improving Functionality: Purisma Data Hub 4.0 shipped in December 2008 and has a flexible data model with good probabilistic matching, hierarchy management, data visualization and data stewardship capabilities, including workflows and task queues. It is particularly good for operationally managing B2B information and is often used in an analytical context. Purisma Data Hub is attractive to organizations that want fast time to value, based on an initial registry-style implementation, potentially followed by evolution to a more-physical coexistence style data model. As well as using Purisma to create a high-quality customer database, organizations are increasingly using Purisma to host prospect universes that have been downloaded from D&B Optimizer. In mid-2009, Purisma Data Hub 4.1 likely will provide real-time, Web-services-based look-up and acquisition of D&B Optimizer reference data. D&B and Purisma plan to offer packaged analytical solutions on top of the Purisma Data Hub.

Cautions

- Will Focus Primarily on Customer Data: As a result of its acquisition by D&B, Purisma is unlikely to develop broad MDM capabilities across all master data domains and use cases. It is focusing on business customer data and on specific sales and marketing business needs, as opposed to cross enterprise needs. Purisma also has a relationship with Acxiom and has some experience managing consumer data, but it is not its sweet spot. In the long term, it will leverage D&B's services for vendor spend analysis and offer support for supplier data (it already has one live customer in this area). It is unlikely to address the product data domain.
- The Problems of Growth: When Purisma could effectively leverage D&B's sales channels and customer base (i.e., from mid-2008), Purisma product sales expanded dramatically. Although Purisma invested in scaling up its support services capability, it wasn't enough and there was evidence of a shortfall in experienced service personnel in late-2008. Purisma recognized the problem and is taking steps to fix it. However, if you are considering D&B's Purisma, then check the experience of the services personnel proposed for the project and ensure that you have access to the level of expertise you require.
- Limited Partnerships and Geographies: Purisma was relatively late getting into the MDM of customer data market and hasn't yet built up strongholds in particular vertical industries. It is concentrating on generic sales and marketing business needs, and will need to develop industry-specific solutions. It is also behind best in class in developing relationships with ESPs. It has some relationships, but needs to go further, particularly

with the bigger players. This will help improve the availability of additional Purisma skills, provide more go-to-market bandwidth and, potentially, help it create vertical-industry-specific solutions. Purisma is currently focused on the U.S.; D&B will need to build Purisma's services resources, and start marketing outside the U.S. to be a global player in MDM.

- Functionality and Proof Point Gaps: D&B's Purisma Data Hub product has some gaps in its applicability and functionality (for example, it isn't typically used in a centralized implementation style of MDM supporting transactions). It provides a large degree of flexibility, but it needs additional best practice templates and accelerators to ensure that implementations can be performed in a well-designed manner. Purisma Data Hub only provides generated, granular Web services, and there is no library of more coarse-grained business services or an environment for developing and governing them. Although it has an increasing amount of integration with third-party data quality and data integration tools, it could do with more, and it needs better built-in profiling and reporting capabilities. Finally, to be considered in high-volume business-to-consumer (B2C) scenarios, it needs more proof points and needs to keep working on the performance capabilities. Improvements are due in Purisma Data Hub Release 4.1, but companies should check references.
- Feedback From the References: We had a below-average response rate to the online survey from D&B Purisma customers. Those that responded gave below-average marks for the performance and scalability, the presence in their local geography and availability of skilled resources.

DataFlux

Strengths

- Strong Parent Company: Wholly owned by SAS, DataFlux has estimated revenue of \$39 million, healthy growth and strong viability. It is able to leverage SAS's development, sales and marketing resources worldwide; however, DataFlux maintains its own brand and has a great deal of autonomy.
- Data Quality Tool Leader: DataFlux is a leader in the data quality tool market (see
 "Magic Quadrant for Data Quality Tools"), with more than 1,200 customers and has
 extensive experience in helping organizations address customer data quality issues.
 DataFlux is taking the lead in Project Unity, the joint SAS and DataFlux project to
 converge their respective data quality, data integration and MDM functionality into a
 single data management platform. Project Unity v.1.0 is due in 1Q10.
- Graduated Approach to MDM: Offering organizations a graduated approach to MDM,
 DataFlux can provide data quality and integration technology, prepackaged
 "accelerators" or its MDM solution, depending on the customer's maturity in data
 management and its proactiveness. This enables an organization to start relatively
 small, with a focus on leveraging data quality tools, and evolve toward addressing morechallenging MDM needs. DataFlux's qMDM product tends to have a lower-average
 selling price than competing products.
- Steadily Improving Product: DataFlux qMDM v.2, available since October 2008 and the company's packaged offering for MDM, has a flexible data model, good data quality, data profiling, dashboarding, monitoring and reporting facilities. The focus is on customer/party data, with plans for support of other entities, such as products and policies. The data stewardship tool provides good visualization and manipulation of master data, and the workflow capability supports collaborative central authoring.

Cautions

- More Comfortable in the Data Quality Tool Market: DataFlux has been steadily building its MDM of customer data credentials during the last few years. It is most comfortable selling its data quality tools and accelerators, and helping organizations build MDM of customer data solutions, rather than selling packaged MDM products. It only has 20 customers in its MDM of customer data user base. During 2008, it started to execute more strongly on its packaged MDM strategy, but it needs continued and stronger focus to become a strong player in the market.
- Needs Stronger MDM References: The company has good references for its build approach to MDM and is starting to demonstrate stronger references for its packaged MDM solution, but it needs to go further and demonstrate references across a range of architectural styles, use-case scenarios and vertical industries to compete with the strongest players in the market. DataFlux's qMDM solution is most appropriate for consolidation and coexistence scenarios, or workflow-oriented central authoring. We have not seen references for registry or high-volume transactional implementations.
- **Needs to Demonstrate Global Execution:** DataFlux's international revenue is steadily rising. Although it is moving into many European countries and can leverage SAS's global organizational strength, it must demonstrate the ability to execute as a player with global strength in its own right.
- Some Functionality Gaps: DataFlux's qMDM v.3 is due in 2010; however, the
 company needs to provide additional functionality in such areas as hierarchy
 management, industry verticalization of the data model, better facilities for creating and
 governing coarse-grained business services, greater integration with third-party data
 quality tools, and data and application integration tools. It also needs to demonstrate
 transactional performance and scalability.
- Feedback From the References: DataFlux couldn't provide as many references for its MDM product as other vendors, but those that responded to the survey were generally happy with the product and company.

IBM

Strenaths

- Broad Information Management Strategy: IBM's Information On Demand strategy is designed to help organizations unlock the business value of information for competitive advantage, and forms part of IBM's wider strategy of helping organizations build a smarter planet. MDM is a key part of Information On Demand, which includes BI, performance management, information integration (where MDM sits), warehousing and management, content management and data management. It is an attractive proposition for organizations looking for a wide range of information functionality from a single, highly viable vendor.
- Capable Product: InfoSphere MDM Server v.8.5, released in December 2008, is a strong MDM solution for high-end, transaction-driven, centralized implementation-style requirements in SOA environments. It has a comprehensive data model for parties, such as consumer and business customers. Since the release of v.8.0, it also supports simply defined product data and account data. It provides strong hierarchy management and rich prebuilt functionality in a multilevel business service library. It is integrated with the IBM Information Server, which includes the QualityStage and DataStage products that

- support data quality and data integration capabilities. It also provides integration with unstructured content held in FileNet.
- Strong in Financial Services and Retail: InfoSphere MDM Server continues to be the leading MDM for customer data products in retail banking and insurance, and has done well in retail and distribution. It is making progress in large government deals and healthcare insurance, and has implementations across many other industries. There are projects in an increasing number of countries. MDM Server has strong references, including high workload, transactional environments, and numerous strategic, multiphase and multidomain rollouts are under way. IBM has partnerships with Amdocs, which is an OEM for MDM Server to master customer data in the communications market. It also partners with Cognizant, which has created an MDM in-the-box solution for retail banking. Both partnerships are in their early stages.
- Continuing Momentum: IBM's MDM customer base continues to grow at a healthy rate, benefiting from IBM's large sales and marketing organizations, and its large customer base. During 2008, the number of MDM deals grew significantly, following the availability of the Foundation level packaging with v.8.0 in January 2008, which enabled IBM to offer a lower cost starting point for MDM initiatives. We estimate that the number of MDM Server customers was 160 at year-end 2008, a growth of 23% from a year earlier, and that IBM revenue for MDM Server in 2008 was more \$90 million, about a 20% increase over the previous year.
- Improving Data Stewardship UI: The emphasis of InfoSphere MDM Server v.8.5 is on ease of use and deeper integration with other InfoSphere products. IBM was significantly behind best in class in providing an easy-to-use data stewardship environment, and IBM users will welcome the delivery of a role-based UI, better hierarchy management facilities and a UI generator. There will also be an "off cycle" enhancement, destined to be formally included in v.9.0, in mid-2009, that provides a graphical, drag-and-drop UI. The focus on integration provides the basis for the Rapid Deployment Package.

Cautions

- Multiple MDM Products: Although IBM only offers a single product, MDM Server, for managing customer data, its MDM product portfolio is broader and can be confusing. Historically, IBM acquired two MDM companies, Trigo, which gave rise to InfoSphere MDM Server for Product Information Management (PIM), previously known as WebSphere Product Center (WPC), and to DWL, which gave rise to InfoSphere MDM Server, previously known as WebSphere Customer Center (WCC). MDM Server is the more strategic product and continues to accrue multidomain capabilities in terms of the data model and business services. It will acquire a UI for authoring simple product data in an "off cycle" release in mid-2009. However, IBM offers the combination of both products in a multidomain environment when, in addition to management of customer data, there is a need for an integrated collaborative workflow or the authoring of complex product data.
- Time to Value Needs More Proof Points: InfoSphere MDM Server required extensive
 effort to implement, although most implementations initially managed only a small
 number of attributes. The Foundation level packaging and implementation services, plus
 increasingly packaged integration with Information Server software, are helping IBM and
 its customers achieve faster deployment and time to value, but they are relatively new
 and need additional proof points.

- Behind in Some Areas: IBM has been behind the competition in providing good data stewardship tools and visual access to the data. IBM recognized this and has made improvements in v.8.5 and the "off cycle" release. However, these changes are new or about to be delivered, and there will be gaps relative to best in class. MDM Server is definitely improving in this area, but still has a way to go to catch up with best in class. IBM was also behind in offering integrated data profiling, dashboarding and reporting facilities. Again, it is making progress in v.8.5, but has further to go.
- Some Organizations Want More Flexibility: InfoSphere MDM Server provides a
 wealth of out-of-the-box functionality, as well as configuration and customization
 facilities; however, it may not appeal to organizations that want the flexibility of starting
 with more of an MDM platform approach and building capabilities, such as the data
 model and Web services, on a more flexible and selective basis. We expect IBM to
 continue to increase the flexibility of its MDM Server offerings. MDM Server is also
 behind best in class in its workflow capabilities.
- More Work to Do on Its MDM Vision: IBM continues to add data domains to MDM Server, but IBM has further to go to deliver on its multidomain and multi-use-case MDM story. Support for the location domain is due before the end of 2009, but support for asset master data is at an investigative stage. In terms of analytical MDM, IBM can offer Cognos Business Viewpoint. There needs to be more integration with MDM Server, and IBM needs to better articulate its vision for bringing together operational and analytical MDM. IBM has many vertical industry assets, but needs to do a better job of communicating that these assets exist and making them available to MDM customers. IBM is behind best in class in teaming with ESP partners on industry verticalization.
- **Feedback From the References:** References were generally positive, but gave belowaverage marks for the UI and workflow facilities for data stewards, the internal workflow capabilities, the availability of skilled personnel and the pricing structure and TCO.

Initiate Systems

Strengths

- Focused Best-of-Breed Vendor: Initiate Systems is the largest of the best-of-breed MDM specialists and focuses on party data, such as customer, patient, citizen or organization. Initiate addresses three markets: (1) "high end CDI" (high-volume and high-performance MDM of customer data) in a range of commercial industries; (2) healthcare, moving beyond the enterprise master patient index (EMPI) market for healthcare providers to also meet the growing need for interoperability, based on information exchange, among healthcare providers; and (3) government, national and local, with an increasing interest in entity resolution. Its MDM solutions, such as Initiate Interoperable Health (for healthcare) and Initiate Entity Resolution (for public sector), are tailored for different market segments.
- Strong Revenue Growth: Initiate did well in 2008, and our analysis places it in the Leader's quadrant for the first time. Initiate's revenue increased approximately 50% to \$76 million, it raised \$31 million of new investment and achieved profitability. A sizable proportion of its revenue is initially classified as "deferred revenue" and provides a predictability about revenue forecasts. Initiate claimed to have 184 licensed customers at the end of 2008 (a growth of 22% from a year earlier). It has more than 100 live customers. The core of its business is in healthcare-related markets (for example, providers, insurers and retail pharmacies), and it has also been successful in local and central government and intelligence agencies. It's the leader in enabling data exchanges

- among multiple organizations. Initiate takes a more-opportunistic approach to other vertical industries, including financial services and high tech, where it is often chosen to meet very demanding performance requirements in leading organizations and has gained several "blue chip" commercial customers.
- Architectural Flexibility and Agility: Initiate offers multiple architectural approaches to MDM, and enables organizations to combine them into hybrids, as required. Most of the installed base uses registry style, in a form that stores the original source records in the hub and generates virtual golden records on the fly. This has the advantage of needing less governance agreement within the organization, being more suitable for multiorganizational data sharing and more easily enabling different composite views. Approximately 25% of the installed base uses a centrally authored transactional style, with a persistent golden record. Initiate has strong references across a range of architectural styles, with proof points for very high volumes of B2C data, with subsecond latency and high transaction rates. It is also demonstrating increasing experience in the B2B area.
- Comprehensive Functionality: The core MDM product, Initiate Master Data Service v.8.7 (shipped in March 2009), leverages data model and Web services flexibility, strong probabilistic matching, the architectural flexibility to deliver fast time to value (Initiate claims most implementations take less than six months), and a relatively low service-to-software cost ratio. Initiate Inspector provides facilities for data stewards to visualize and manage consumer and organizational data with v.8.5 in September 2008, introducing an improved UI and workflow for data stewardship. Initiate provides integration with a range of data quality tools, and the measurement and monitoring facilities are good.

Cautions

- Acquisition Target in the Future: Like other best-of-breed vendors, Initiate is likely to
 become a long-term acquisition target when slow market growth leads to market share
 consolidation. As with all acquisitions, the acquirer's vision may not be compatible with
 your organization's vision. However, Initiate has a secure base in the healthcare and
 government markets, plus an increasing number of blue chip commercial customers,
 and can always fall back on that strength, plus it demonstrated healthy revenue growth
 in 2008 and has a good cash position.
- Multidomain Capabilities Are Limited: Although Initiate has positioned itself as an MDM vendor, its core competency is with party data, including customer. It can model other domains, but so far has only done it opportunistically, typically in the context of specific industry requirements. The company needs to invest more seriously to be seen as an MDM vendor providing in-depth support across all MDM data domains and use cases. If your organization has a wide MDM vision and wants depth of functionality in multiple data domains from a single vendor, then be aware that Initiate's multidomain capabilities are still emerging.
- Needs to Execute More Globally: Initiate's global reach outside North America is limited. It has a good presence in the U.K. (although it has not had the success it hoped for in local government and healthcare) and Australia, but is missing opportunities in other geographies. It has built good relationships with ESPs in North America, the U.K. and Australia, and is starting to make headway in France. Initiate needs to address additional geographies to be considered a global player. In the U.S., its user base is concentrated in the healthcare and government sectors, but is getting more balanced as it sells increasingly into the commercial world. Initiate needs to provide a more easy to

- use packaging, out of the box and with a lower price point, if it wants to achieve more success in resource constrained organizations, such as local government.
- Behind in Some Areas: Initiate Master Data Services is targeted mainly at operational use cases and doesn't tend to be seen in analytical MDM use cases, although Initiate has introduced a point in time facility and some customers are starting to move in that direction. Initiate's product provides only a generic, relatively lightweight, data model (which can be a differentiator in many situations), relying on data model flexibility. Its industry-oriented templates are limited to healthcare and government. Initiate does not have a comprehensive business services library, and instead relies on generated Web services. It needs to provide a more comprehensive environment for assembling and governing more coarse-grained services. Lastly, it is behind best in class vendors in measurement and monitoring of master data quality, and there is no lightweight UI for business users to author and visualize the master data.
- **Feedback From the References:** References were generally very positive, but several of them commented on Initiate's lack of a presence in their regions, the lack of depth in skilled service resources, as the company grows quickly, and the software costs.

Oracle (CDH)

Strengths

- MDM Is Important to Oracle: Oracle has a strong focus on MDM and sees it as key to creating a cohesive application and infrastructure vision. It has built and acquired a wide range of MDM assets. In the MDM for customer data area, Oracle is continuing long-term development of Oracle CDH under the Applications Unlimited program. In parallel, Oracle is developing a multidomain and multiuse-case MDM product set with Fusion MDM. This will be a foundation for the Fusion applications suite, and we expect Oracle to launch Fusion MDM in 4Q09, with general availability in 2010.
- Appeals to EBS Customers: CDH is a key foundation for Oracle's industry solution sets in manufacturing, high tech, retail and distribution. CDH appeals to organizations with investments in Oracle EBS and to organizations that have made Oracle applications and technology their strategic choice. Sales momentum remains healthy, because of Oracle's global reach and extensive EBS customer base, although we seldom hear about CDH in open evaluations. Gartner estimates that Oracle had 275 CDH customers at the end of 2008 (a growth of 15% from a year earlier).
- Multidomain Portfolio: Oracle can now offer its EBS customers a pre-Fusion, integrated, multidomain MDM capability. It introduced a Site Hub in January 2009, and has MDM hubs for customer, product and location data (with a supplier hub due later in 2009). These are all based on EBS technology, and Oracle CDH can be deployed stand-alone or in the same instance as Oracle's PIM Data Hub. This has been attractive to EBS customers in high tech and manufacturing.
- Improvements in the Product: Oracle CDH Release 12.1, released in January 2009, has a rich party model, a good data visualization interface in Oracle Customers Online, and integration with third-party data quality vendors and data providers. It is well-integrated with Oracle Fusion Middleware components. During 2H08, CDH benefited from the release of the Data Watch and Repair facility as a loosely coupled "edge application." The new functionality in Release 12.1 includes a new layer of Web services that have been harmonized with the planned Fusion MDM, allowing a greater degree of investment protection, improvements to the data quality facilities, support for integration with Trillium and usability enhancements. Release 12.1 can also benefit from some of

the new Application Integration Architecture (AIA) MDM facilities for process integration with other systems.

Cautions

- Not the Lead Product: Oracle CDH is not Oracle's lead MDM for customer data product overall; instead, Siebel UCM is. CDH is clearly taking second place to Siebel UCM in terms of the pace new functionality introductions and the level of marketing messaging. Because Oracle has two products in the same space, this makes the go-to-market strategy more complex than having a single product in the market. Clients sometimes have difficulty in understanding which product Oracle is proposing. Oracle segments the market by offering the products to different industries: Oracle CDH in manufacturing, high tech, retail and distribution, and UCM in telecommunications, media, utilities, large-scale retail, financial services and government. Organizations should evaluate the lead products for their industries.
- Fusion Applications Are Coming: By 2012, Fusion MDM likely will have become Oracle's premier MDM for customer data product. Oracle will continue to provide limited development, under the Applications Unlimited banner, for several years and there will be a Lifetime Support guarantee. We believe that most CDH customers will not migrate to Fusion MDM until it's been available for two to three years. They should mitigate the disruption by utilizing the new "Fusion harmonized" business services and AIA.
- Investment Level Could be Stronger: CDH is benefiting from the introduction of "edge applications," such as Data Watch and Repair, and AIA MDM and some incremental improvements. However, it does not appear that major functionality improvements will not be made to the core product, CDH, unless they are common to multiple MDM products. CDH is slated to benefit from the future Data Governance Framework, plus improved hierarchy management, but the plan to replace the existing data quality functionality with the technology from Informatica appears to have slipped. Although Oracle positions CDH as capable of registry-style implementations, we haven't seen it win this type of business in key industries, such as government and healthcare provision.
- Feedback From the References: Oracle's CDH references had the highest response rate for any product in our survey. References were generally positive, but gave below-average marks in a number of areas, including Oracle's rate of delivery of new functionality and visibility of the road map, the flexibility of the data modeling, the internal workflow facilities, the UI and workflow for data stewards, and the ability to monitor, measure and report on data quality.

Oracle (Siebel UCM)

Strengths

- MDM Is Important to Oracle: Oracle has a strong focus on MDM and sees it as key to creating a cohesive application and infrastructure vision. It has built and acquired a wide range of MDM assets. In the MDM for customer data area, Oracle is continuing the long-term development of Siebel UCM under the Applications Unlimited program. In parallel, Oracle is developing a multidomain and multiuse-case MDM product set with Fusion MDM. This will be a foundation for the Fusion applications suite. We expect Oracle to launch Fusion MDM in 4Q09, with general availability in 2010.
- It's the Lead Product: UCM is Oracle's lead MDM of customer data solution and is the most important offering in Oracle's MDM portfolio. It is key to Oracle's industry solution

product lines for telecommunications, media, utilities, large-scale retail, financial services and government. UCM appeals to organizations with investments in Siebel CRM, especially in heterogeneous environments, as well as organizations with long-term strategic commitments to Oracle applications and technology.

- Good Momentum: During 2008, Oracle was successful in selling UCM; we estimate
 that Oracle had 170 UCM customers at year-end 2008, a growth of 26% from a year
 earlier. It has an impressive number of commitments from blue-chip names across
 geographies and industries, with particular strength in telecommunications. Oracle's
 MDM customer advisory board plays a leading role in setting the development direction.
 Oracle has a strong ESP environment for MDM and is codeveloping MDM
 industry/sector solutions with leading partners.
- Comprehensive Functionality: UCM v.8.1.1 (shipping since January 2009) is a capable product with a comprehensive, out-of-the-box, verticalized and extensible data model. UCM has a strong matching capability and interfaces to data quality tools, such as Trillium. It has an embedded rule engine, privacy management, and proven performance and scalability. A growing number of businesses are interfacing with it via its Web services layer, which has been harmonized with the planned Fusion MDM, allowing a greater degree of investment protection for companies. Oracle can provide a good number of references, including live transactional workloads managing up to 80 million consumers.
- Continuing Stream of Investment: Oracle is investing heavily in MDM and has delivered multiple sets of new functionality since the publication of last year's Magic Quadrant. This includes an upgrade of UCM's data quality technology, which is based on the Informatica Identity Resolution technology, and the edge application Data Watch and Repair facility. The focus for UCM v.8.1.1 was reducing the complexity and cost of integration, with the introduction of the first AIA packaged integration packs for MDM, plus an ability to make existing applications "MDM aware." An innovation pack, codename Meribel, is due out in 2H09 and should include the first parts of a new Data Governance Framework, plus improved hierarchy management and dashboarding.

Cautions

- Multiple Products Sometimes Create Confusion: Oracle offers two products in the MDM for customer data market, Oracle CDH and Siebel UCM. This makes the go-to-market strategy complex. Clients sometimes have difficulty in understanding which product Oracle is proposing. Oracle's go-to-market strategy is to segment the market and offer the products in different industries: Oracle CDH in manufacturing, high tech, retail and distribution, and UCM in telecommunications, media, utilities, large-scale retail, financial services and government. Organizations should evaluate the lead products for their industries.
- Fusion Applications Are Coming: By 2012, Fusion MDM likely will be Oracle's premier MDM for customer data product. Oracle probably will continue to provide limited development, under the Applications Unlimited banner, for several years, and there will be a Lifetime Support guarantee. We believe that most UCM customers will not migrate to Fusion MDM until it's been available for two to three years. They should mitigate the disruption by utilizing the new Fusion harmonized business services and AIA.
- Behind in Some Areas: Like other MDM vendors, Oracle has more work to do in the
 area of data stewardship and data governance facilities, although some of that will be
 addressed in the Meribel release. Also, UCM is behind best-of-breed products in terms

of integrated dashboarding facilities, as well as occasional Web 2.0-based user tools for visualization and manipulation. The new-generation data quality technology for UCM (based on Informatica's Identity Resolution technology) had significant initial troubles. UCM supports a range of architectural styles, but lacks sufficient proof points for "soft linked" registry-style implementations, where a composite record is stored. This is important, if Oracle wants to make more progress in the healthcare and government markets.

• Feedback From the References: References were generally positive, but the Siebel UCM references gave below-average marks for the availability of skilled resources, TCO, the ability to monitor, measure and report on the status of master data quality, and the ability to handle complex relationships in B2B situations.

SAP

Strengths

- Loyal User Base: SAP has a large and loyal user base, particularly in the manufacturing, consumer packaged goods (CPG), retail, high tech and energy industry verticals. Many of these organizations are looking for a single vendor to supply them with a set of core integrated applications built on an application infrastructure that includes MDM capabilities. SAP estimates that it has licensed NetWeaver MDM to 900 customers (as of year-end 2008), up from 750 (at year-end 2007). Approximately 225 of those MDM customers are licensed to manage customer data (as of year-end 2008), a growth of approximately 12% from year-end 2007. SAP estimates that it has 100 live MDM of customer data sites (as of year-end 2008).
- Strong Vision for Business Suite and NetWeaver: The company has a strong vision for its Business Suite and NetWeaver, and is in the process of leveraging BusinessObjects technologies in its Business Suite, and combining and harmonizing its NetWeaver and Business Objects information management assets. SAP sees MDM as a key part of NetWeaver and information management, and published a new three-year road map for MDM in late-2008. During the next three years, it plans to tightly integrate BusinessObjects Data Services XI technologies, such as matching and data profiling functionality, leverage NetWeaver 7.1 components, such as BPM, build a greater degree of process-specific integration between MDM and Business Suite, and provide more coarse-grained enterprise services.
- Domain-Neutral Data Model: SAP meets a wide range of MDM requirements for
 product, customer, supplier and employee data domains in a single product, which has a
 great deal of data model flexibility. However, it doesn't provide the same depth of
 functionality as best-in-class systems in the customer data domain. It has a good
 understanding of MDM for customer data requirements in B2B scenarios; most of its
 road map is driven by key customers.
- Continuing Functionality Improvements: NetWeaver MDM v.7.1, generally available in May 2009, introduces the ability to hold multiple data domains in a single repository and improved hierarchy management. It provides native integration with NetWeaver Process Integration (PI) and starts to leverage the BusinessObjects Data Services XI technology for address cleansing (that is, SAP is already leveraging BusinessObjects Data Services XI for address cleaning, but is not leveraging it for matching yet) and improves the integration with third-party data quality tools and reference data sources. NetWeaver MDM v.7.1 also introduces the SAP Signature UI to MDM.

Cautions

- Mainly Appeals to SAP Customers: NetWeaver MDM mainly appeals to SAP-centric organizations that have bought into the company's application and application infrastructure vision. SAP makes few shortlists in non-SAP-centric heterogeneous environments, where it typically isn't seen as competitive. NetWeaver MDM isn't suitable for supporting high-volume, transactional B2C use cases in financial services, communications and government, because it is optimized for read (as opposed to write) operations, due to its A2i and product catalog origins. In the banking and insurance industries, SAP will offer a different customer master product, Business Partner, if an organization wants to use SAP's banking or insurance applications.
- Functionality Is Behind the Competition: SAP MDM is behind the competition but improving in data quality, data profiling and associated reporting facilities. It needs better facilities for data stewards to manage the life cycle of master data, including visualization and manipulation of hierarchies, and a better UI for business users. It does not yet provide industry-oriented data models or templates.
- Still Work to Do on Integrating With Other SAP Components: SAP-centric
 customers are buying MDM because it's more integrated with SAP applications and
 infrastructure than competing products. Although it may have some advantages now, a
 lot of work needs to be done to realize that vision. SAP will need to leverage other
 components of NetWeaver 7.1 such as the enterprise services repository and the BPM
 and business rule engine facilities, and harmonize data types, business services and
 data models with the Business Suite and SOA by Design applications.
- Still Don't See a Large Number of Live References: Although more organizations are using MDM to manage customer data, there's still a major gap between the sales success that SAP has had and the number of live implementations, based on references. Many companies that have bought the rights to SAP's MDM product are waiting for it to mature further, or are implementing MDM for product or supplier data first. Many of these customers have higher priorities elsewhere. SAP's MDM revenue reflect this with revenue for MDM of product data much higher than the corresponding revenue for MDM of customer data, which were relatively flat in 2008.
- Multiple Approaches Will Create Confusion: In late-2008, SAP started introducing its
 Master Data Governance facility as part of Enhancement Package 4 for Business Suite.
 Initially just for financial data, SAP plans to expand this to other data domains. In effect,
 this provides an alternative MDM capability, based on the Business Suite applications,
 as opposed to a central, application-neutral, MDM hub. This will appeal to a significant
 section of the SAP customer base. and SAP will need to clearly position the two
 approaches to MDM, and ensure that the two development road maps are consistent
 and synergistic.
- Feedback From the References: SAP didn't provide as many references for its MDM product as other vendors. Those that responded to the survey were generally positive, but gave below-average marks for the data quality facilities, the UI and workflow support for a data steward, the internal workflow, the ability to monitor, measure and report on the data quality, and the architectural flexibility.

Siperian

Strengths

- Well-Regarded, Flexible Product: Siperian offers a flexible, integrated, model-driven MDM platform. It supports multiple data domains, including party, product and location data. However, its core strength is customer data, and it has good proof points with B2C and B2B customers. It is a good fit for organizations that want fast time to value, flexibility in terms of data model, strength in hierarchy management, the ability to evolve and hybridize the architectural style, and an MDM foundation for an SOA strategy.
- Better Facilities for Data Governance: The latest release is Siperian MDM Hub XU SP1, which includes Master Reference Manager (the base product), Hierarchy Manager (for hierarchy and relationship management), Activity Manager (for virtual data aggregation) and Insight Manager (for analysis, reporting and monitoring, plus integration with third-party BI tools). A new product, Business Data Director, focuses on allowing business users to create, manage, monitor and consume master data, a facility that customers have been eager to have. Siperian is an OEM for Exeros (recently acquired by IBM) for analyzing and discovering the data sources used in creating the target master data model. Siperian leverages Lombardi for complex MDM workflows, as well as integrating with BPM tools, such as Lombardi, in end-to-end business processes. Its product vision includes support for structured and unstructured data in a facility it calls "Semantic Master."
- Strong in Life Sciences: Siperian continues to do well in the life sciences industry, where it is the clear MDM market share leader. More than 50% of its business comes from life sciences, and there is a great deal of repeat business and enterprisewide deployments. It also has a presence in selected banking sectors, such as wealth management and capital markets, as well as in other industries, including media, manufacturing, insurance, communications, utilities and automotive. In 1Q09, Siperian had 50 customers (a growth of 25% from 1Q08).
- Good Mind Share: The company continues to execute well on the marketing front in North America, gaining mind share and building strong partnerships with ESPs to extend its reach. It has strong customer loyalty, and is good at taking the product forward by responding to customers' needs. For example, Siperian worked closely with customers to develop the new data governance and workflow facilities. It continues to build on its track record of product innovation.

Cautions

- Growth Is a Challenge: Siperian is a private company. We estimate that its revenue was \$30 million in 2008, down 15% compared with 2007 revenue. Its focus for 2009 is profitability, not growth, and it cut costs early in 2009 and raised \$9 million more cash. This is sensible, as end-user organizations tend to be more risk-averse in economic downturns, making it more difficult for best-of-breed vendors. Siperian claims to be profitable and to have a good cash position, enabling it to ride out the current economic storm. However, like many other best-of-breed vendors, it is an acquisition target; long term, as the market consolidates, there is an increasing possibility that it will be acquired. As with all acquisitions, the acquirer's vision may not be compatible with your organization's vision.
- Multidomain Strategy Has Its Risks: Although Siperian has a strong presence in life sciences, it failed to create an equivalent critical mass in financial services, which was

planned to be its second major industry. However, it has successfully generated sales more opportunistically across other industries and domains. It has a multidomain MDM strategy, but moving forward on a broad front means that it is drawn into providing support for a wide range of business needs related to different data domains and industries. Although this strategy is attractive for clients committed to Siperian and a means of maintaining overall revenue, one result is that the share of its revenue related to managing customer master data continues to decline, and there is a risk of the company trying to do too many things with not enough leverage.

- Limited Geographically: Siperian has a good presence in North America, but has not consistently invested in Europe, has a small presence in the U.K., and no presence in the Asia/Pacific region. Increasingly, it has chosen to rely on reaching the markets outside North America via partners, which has not resulted in the level of mind share or sales as seen in North America. Organizations evaluating Siperian outside North America should check on the level and location of skills available to them.
- Less Out of the Box: Although the Siperian MDM Hub platform provides a high degree of flexibility, it doesn't offer the same degree of out-of-the-box facilities in terms of data model and business services as a company such as IBM. This could mean that organizations using Siperian would have to build up the functionality (for example, by creating composite business services based on the data services generated from the data model). The alternative argument is that this approach provides a better fit and is less cluttered than what came out of the box.
- Feedback From References: References were generally positive, but gave belowaverage marks for the UI and workflow support for a data steward, and the monitoring, measurement and reporting of data quality. There were several negative comments about Siperian's pricing structure and a desire for a more local presence.

Sun Microsystems

Strengths

- Part of a Wider Infrastructure Strategy: Sun MDM Suite forms part of Sun's Java
 Composite Application Platform Suite (Java CAPS) 6. It is based on technology that Sun
 acquired with SeeBeyond Technologies. Sun can leverage its size and global reach to
 sell Java CAPS and MDM Suite into its user base and beyond to support SOA
 initiatives. In particular, it believes that combining MDM with strong role and identity
 management over an SOA can be a strong solution for regulatory and policy
 compliance.
- Leading the Way With Open Source: Sun is unique in initiating an open-source community, called Mural, to collaboratively solve data management problems, including MDM. It donated part of its MDM Suite technology to Mural, which is based on GlassFish and NetBeans. Sun continues to sell MDM Suite commercially and will be able to derive revenue from MDM solutions based on open-source Mural technologies, which are extended with Sun's unique capabilities, services and support. Sun hopes to leverage Mural commercially when it becomes widely adopted.
- Main Strength Is Healthcare: Sun MDM Suite includes Sun Master Index (formerly eView) and the derivative Master Patient Index (formerly eIndex), which are established MDM of customer data products with substantial customer bases and many live implementations in healthcare. Sun has some customers in other industries, such as government, retail and utilities, and its MDM focus is on three markets: healthcare, government and communications. Gartner estimates that Sun had 150 eView, eIndex

- and MDM Suite customers in 1Q09, but many are deployed as lightweight indexing solutions.
- Improved MDM Focus From Sun: Sun Master Index has a flexible data model, good probabilistic matching and data stewardship facilities, including an improved UI and support for SOA. It has excellent scalability. Sun brought fragmented development teams together under the MDM Suite banner and created a new focus on MDM of customer data in 2008. The result was increased integration among such Sun facilities as data integration, identity management and data federation.

Cautions

- What Will Oracle Do?: After the abortive acquisition talks with IBM, Sun's board has agreed to acquisition by Oracle (see "Sun Middleware Under New Management: What to Expect"). If the deal goes through as planned, then it is likely that Oracle would sideline the general marketing and new sales of Sun's MDM Suite in favor of its own MDM products, except in the healthcare EMPI market, where Sun (and previously SeeBeyond) has an established presence, unlike Oracle. In the long term, Sun MDM will get superseded by Fusion MDM, plans for which will likely get adjusted to include intellectual property from Sun MDM that Oracle deems of interest (and which it doesn't have already).
- Needs to Expand Beyond Healthcare: Before being acquired by Sun, SeeBeyond had built up strength in healthcare EMPI, but had failed to take full advantage of its potential in other vertical industries. Sun's acquisition added to this lack of focus, enabling competitors to move ahead in terms of capabilities and market share. Then, in 2008, there was a new focus from Sun on MDM, together with the open-source initiative, but this has not translated into sales and marketing success outside the healthcare market.
- No Multidomain Vision: Sun's MDM vision is mainly restricted to customer or party data, and it has yet to lay out a multidomain or multiuse-case MDM vision. It needs a stronger marketing and sales focus to translate its presence in industries other than healthcare (for example, government, telecommunications, retail, utilities and financial services) into MDM for customer data deals.
- Gaps in a Number of Areas: Sun Master Index is most suitable for B2C and registrystyle scenarios. It needs better hierarchy management for B2B, more ability to handle
 multiple styles, more verticalization, integration with third-party data quality and
 integration tools, and better profiling and reporting capabilities. Sun Master Index will
 mainly appeal to organizations with SOA initiatives that are buying into a wider Sun Java
 CAPS vision.
- Feedback From the References: We weren't able to contact references this year because Sun declined to take part in the Magic Quadrant process.

Tibco Software

Strengths

 Multidomain MDM: Tibco Software offers an MDM product called Tibco Collaborative Information Manager (CIM), which it positions as a multidomain MDM system, suitable for workflow and transactional environments, and enabling SOA or event-driven scenarios, including those with demanding scalability requirements. CIM leverages Tibco's BPM and enterprise service bus (ESB) offerings, but supports other ESBs, and

was originally developed as a PIM product by Velosel, a company that Tibco acquired in 2005.

- Leveraging the Tibco Customer Base: Tibco has built up a sizable customer base for CIM. However, the number of live sites is less than half as large as it's total customer base. The growth rate was a healthy 30% from the previous year. Most CIM projects are for multiple data domains. Tibco has the most experience in managing product master data, but is building up experience in managing customer, organization, counterparty and employee data in the telecom, financial services, energy, distribution and automotive industries, often selling as part of an overall solution into organizations with Tibco investments.
- Flexible With Good Workflow: CIM has a flexible approach to data modeling, in
 common with other former PIM products, and can support multiple data domains,
 including the ability to model cross-domain relationships. It has strong workflow and
 process-modeling capabilities, and can also be called by an external BPM tool. It
 supports survivorship and versioning, and can construct a point-in-time view for analysis
 purposes. CIM can provide a multitenancy capability by managing logical partitions
 within a single instance for different business units and geographies.
- Strong Investment: During the past year, Tibco has invested strongly in CIM, releasing 7.1 in June 2008 and 7.2 in February 2009. In 7.1, Tibco started offering an in-built matching capability based on the open-source Lucene fuzzy matching technology, and introduced its distributed cache architecture that is designed for high performance in transactional environments. Tibco CIM 7.2 introduced improved data stewardship tools and a new UI, as part of the Tibco One Project to provide a unified Web 2.0 UI across all Tibco products, and it started the process of localization for CIM. It also significantly expanded the number of out-of-the-box Web services.

Cautions

- Needs More Sites Managing Customer Data: An increasing number of Tibco's implementations are planned to be multidomain, but most of its experience is in managing product data. The number of sites using Tibco CIM for managing customer data continues to increase, but falls short of the minimum software revenue inclusion criteria for this Magic Quadrant.
- Now Filling the Data Quality Gap: Tibco CIM has been weak in data quality, which has held it back in the MDM of customer data area. It has had some of its capabilities data quality and has used the Lucene technology, but otherwise it has relied on calling external third-party data quality tools, such as Trillium. Tibco has signed an OEM deal with Netrics to embed its matching technology, and has plans to partner with other vendors for name and address cleansing and standardization. These deals will put Tibco in a more competitive position, although it will take time to gain experience and make incremental improvements. Tibco needs to build stronger relationships and integration with third-party data service providers (DSPs), such as D&B.
- Needs to Execute Globally: Tibco is leveraging its worldwide presence and customer base in marketing CIM, but needs to go further in making its presence felt internationally, and to continue building the availability of skills in sales, marketing and services. It needs to build stronger ESP relationships to generate business and provide more implementation skills.
- **Behind in Some Areas:** Like other vendors, Tibco will need to keep investing in areas of data governance, such as profiling, dashboarding and out-the-box reporting.

Customers will look not only for granular Web services, but also for more high-level, coarse-grained services. Tibco can leverage the ActiveMatrix family for service composition, registry and governance. CIM is being used in a variety of MDM implementation styles, but is typically used in distributed-authoring, coexistence style (recommended for the majority of customers) or workflow-style, central-authoring use cases.

Feedback From the References: Tibco's references for MDM of customer data are still
weak, compared with its competitors. If it is positioning itself for demanding workloads,
then it needs to demonstrate proof points for that positioning.

VisionWare

Strengths

- Attractive to Microsoft Users: VisionWare's MultiVue is the only MDM of customer
 data product on the market that is based solely on Microsoft technologies, such as .NET
 and SQL Server. The company has very competitive pricing, with a starting point below
 \$100,000, and its products are attractive for resource-constrained organizations that are
 Microsoft-centric. It is mainly used to manage individual parties and households, as
 opposed to businesses.
- Strength in the Government Market: VisionWare has a strong domain knowledge of the local government market and has 55 customers, mainly in the U.K., spread across local government, healthcare provision and law enforcement. During the last 18 months, it has expanded in the U.S., successfully leveraging partners and the Microsoft relationship, and opening an office in Boston. Of its 10 customers in the U.S., seven use MultiVue in departments such as Medicaid, public health, human services, criminal justice and public safety.
- Soft Linking Is the Sweet Spot: MultiVue's sweet spot is in distributed authoring of the data, which is then brought to a central hub and a "single view" is created. Following matching, it typically "soft links" the different versions to create a composite, as opposed to performing a "hard merge" to form a single golden record. This can be attractive for to organizations that favor a noninvasive form of MDM.
- Leverages Microsoft Technologies: VisionWare MultiVue v.1.8, released in 4Q07, has a flexible data model, allowing modeling of data domains in addition to customer data. It uses VisionWare's capable probabilistic matching and cleansing technology, and its data integration technologies. Elsewhere, MultiVue leverages Microsoft technologies, such as BizTalk, and implementations are scaling to hold data on more than 4 million unique customer entities. MultiVue v.2.0, due in 3Q09, will focus on usability and visualization, and will include a facility called Prism, based on Silverlight, that should improve usability, and offer better visualization of parties and relationships. An Information Sharing Framework, also due for release in 3Q09, should provide facilities for cross-agency information sharing.

Cautions

• Small Company: VisionWare is a small U.K. company, with approximately \$5 million in revenue in 2008, which was a growth of 40% over the previous year. To put that in perspective, its revenue has stayed relatively flat over a four-year period. This is in contrast with the market leaders, which grew significantly during that period. However, VisionWare is profitable and has not taken venture capital. VisionWare is likely to be an acquisition target, as the MDM market consolidates during the next few years.

- Limited Geographical Coverage: The company has limited geographical coverage. It is strongest in the U.K. and has a growing presence in the U.S., mainly through partners, and plans to develop partners in South Africa, Australia and New Zealand. VisionWare is not currently offering MultiVue anywhere other than the U.K. and the U.S. As a small company, it needs to further build its partner channel to achieve a higher volume of sales with costs appropriate to the price point. VisionWare is a niche player in terms of its vertical industry focus, with the majority of its customer base in government, healthcare or law enforcement. It has had only minor, opportunistic success so far in commercial organizations.
- Long-Term Risk of Competition With Microsoft: VisionWare has achieved great leverage from its Microsoft relationship; however, Microsoft will enter the MDM space with its first product, SQL Server Master Data Services, due in 1H10. Initially, Microsoft is likely to focus on the analytical MDM area, which was the focus of Stratature, the company Microsoft acquired. It also plans to provide a platform level MDM capability. It remains to be seen how this will take form, but there is a risk that Microsoft will end up competing with VisionWare.
- Oriented Toward Microsoft Technologies: VisionWare MultiVue is restricted to
 running on Microsoft SQL Server and strongly leverages Microsoft .NET technologies. It
 may not be suitable for organizations with Java Platform, Enterprise Edition standards,
 or IBM or Oracle relational database management system mandates. Scalability data
 points continue to improve, but organizations with high-volume requirements should
 check references first and perform a proof of concept. In making comparisons, they
 should focus on the number of unique entities created, as well as the number of
 customer records associated with those entities.
- Gaps in Functionality: To compete with best-in-class functionality, VisionWare needs
 to improve in a number of areas, including provision of better support and proof points
 for central authoring of data (transactional and workflow use cases), better support for
 business data (including more-comprehensive hierarchy management and integration
 with reference data suppliers, such as D&B) and out-of-the box integration with thirdparty data integration and data quality tools.
- Feedback From the References: References were generally positive, but gave belowaverage marks for the UI and workflow support for a data steward, the lack of ability to handle different architectural styles and the lack of presence in North America. They mentioned the resourcing problems of a small company, plus the need for better facilities to monitor, measure and report on data quality.

RECOMMENDED READING

"Magic Quadrants and MarketScopes: How Gartner Evaluates Vendors Within a Market"

"Roundup of Master Data Management and Related Research, 4Q08"

"Key Issues for Master Data Management, 2009"

"Mastering Master Data Management"

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

"Use the Gartner MDM Maturity Model to Show the Business Benefits of MDM Investments"

"Four Dimensions of MDM: Understanding the Complexity"

"Vendors Have Different Approaches to Implementing Master Data Management"

"How to Choose the Right Architectural Style for Master Data Management"

"The Important Characteristics of the MDM Implementation Style"

"How to Evaluate a Vendor's Master Data Management Solution"

"Hype Cycle for Master Data Management, 2008"

"10 Best Practices for Customer Data Integration"

"Magic Quadrant for Master Data Management of Product Data"

"Magic Quadrant for Data Quality Tools"

Note 1 MDM Definition

Master data is the consistent and uniform set of identifiers and extended attributes that describe the core entities of the enterprise and are used across multiple business processes. Examples of core entities are parties (for example, customers, prospects, people, citizens, employees, vendors, suppliers and trading partners); places (including locations, offices, regional alignments and geographies) and things (such as accounts, assets, policies, products and services). Groupings of master data include organizational hierarchies, sales territories, product rollups, pricing lists, customer segmentations and preferred suppliers.

MDM is a technology-enabled discipline in which business and the IT organization work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of the enterprise's official, shared master data assets.

Note 2 CDI Definition

CDI is the combination of the technology, processes and services needed to create and maintain an accurate, timely and complete view of the customer across multiple channels, business lines and organizations, where there are multiple sources of customer data in multiple application systems and databases.

Note 3 Other Vendors and Service Providers

In addition to the providers that have been rated in this Magic Quadrant, many vendors and service providers are on the periphery of the MDM of customer data market.

Vendors whose MDM of customer data revenue is too small or that focus on a limited geographical region include:

- Amalto Technologies: A small French vendor whose Xtentis MDM product is based on a native XML database and leverages open-source technology. It is employed mainly in operational use cases and can provide flexible, multidomain data-modeling facilities, based on XML schemas
- Data Foundations: A small U.S. vendor whose OneData product is an MDM framework
 with a fully configurable and extendible data model that can manage multiple domains of
 master data, reference data, hierarchies and metadata, and analytical and operational

MDM use cases. Recent enhancements include a built-in data quality engine and federated data management. Early OneData implementations focused on managing product and supplier data, but now there are also implementations managing customer and counterparty data.

- Orchestra Networks: A small French MDM vendor whose EBX. Platform provides
 flexible, multidomain data-modeling facilities, based on XML schemas, including the
 ability to create and manage complex hierarchies. It has a strong and growing blue-chip
 client list in France, and is getting a foothold in North America, but is still building
 revenue related to MDM of customer data.
- **Software AG:** Software AG has the worldwide rights to OEM Orchestra Networks' EBX Platform, which it markets as webMethods Master Data Manager. However, we haven't seen any traction outside France, where it works closely with Orchestra Networks.

Vendors that focus solely on a single vertical industry market include:

- Amdocs: Amdocs is a telecommunications industry specialist selling a broad portfolio of services and software applications. Its information framework, includes Enterprise Customer Hub (ECH) that is based on an OEM version of the IBM InfoSphere MDM Server. This is wrapped with a layer of telecom-specific services and is integrated with the Amdocs portfolio. No ECH sales have been made public yet.
- Cegedim Dendrite: This company has an MDM product called Nucleus Pharma offered to life sciences companies looking to build a single view of healthcare professionals, organizations and related hierarchies to support the Prescription Drug Marketing Act, spend compliance, prescription data restriction and crosswalk initiatives. Nucleus Pharma is provided in a service model (where it can be combined with Cegedim Dendrite's healthcare reference provider data), on-premises or as a hosted offering.

Vendors that focus mainly on analytical (downstream) MDM requirements include:

- IBM's Cognos Software business unit: In December 2008, IBM's Cognos business unit introduced IBM Cognos 8 Business Viewpoint. This is part of the Cognos 8 suite and is designed to enable business users to collaboratively create, maintain, govern and share dimensions and hierarchies for use across BI and performance management applications. It is data-domain neutral.
- Kalido: Kalido's business-model-driven Information Engine is designed to automatically feed information to end users through their BI tools, while supporting data governance initiatives. It includes an MDM component with a cross-subject area MDM capability for all types of data objects. With its integrated workflow capabilities, it is optimized for data governance initiatives and MDM use cases where data from analytical and operational data sources is rolled up for reporting purposes.
- Microsoft: In June 2007, Microsoft acquired Stratature, a small analytical MDM vendor
 with a product called Enterprise Dimension Manager (+EDM). +EDM was designed to
 align dimensional data, master data and reporting hierarchies across for consistent
 reporting. Microsoft plans to introduce its SQL Server Master Data Services, based on
 +EDM, in 1H10.
- Oracle's Hyperion: Oracle offers an analytical MDM product called Hyperion Data Relationship Management. It is a data-model-neutral solution that focuses on managing change in hierarchical structures and building consistency in the relationships among information assets, including general ledger accounts, cost centers and related entities.

 Teradata: Teradata sees MDM as an integral part of data warehouse solutions and views data mart consolidation as an ideal opportunity to implement MDM, achieving data synchronization for analytical MDM, while also laying a foundation for operational MDM use cases. Teradata MDM offers a packaged solution for MDM of customer data, and recent releases have emphasized management of relationships within master data (hierarchies and cross referencing) and tools to manage matching rules.

MSPs or data providers provide an external customer data reference database service, but don't provide an on-premises MDM of customer data product. Several MSPs or DSPs provide an external customer data reference database service that can complement an MDM of customer data system:

- Acxiom: This company (see Note 4) provides a range of customer information-related solutions, including a new software-as-a-service (SaaS) data quality offering (PanOptic-X On-Demand), recognition management solutions (such as AbiliTec and PanOptic-X Recognition Manager) and data assets (such as InfoBase-X). Acxiom's real-time SaaS data quality offering and its Recognition Manager product can be used as an external MDM customer data hub or be deployed at a client's site using Acxiom's PanOptic-X 2.0 solution.
- D&B: Providing information and insight on business customers, D&B is generally regarded as the leading supplier in the B2B area, with the most worldwide coverage. Its hosted data service (D&B Optimizer) can be used to bring structure to business data by persistently identifying legal entities via D&B D-U-N-S Numbers and providing an understanding of legal entity hierarchies. D&B also provides an MDM solution through its Purisma Data Hub, acquired in 2007.
- Equifax: In addition to its credit-related offerings, Equifax provides customer information services (see Note 5). The acquisition of Austin Tetra in 2006 forms the basis of its commercial data offerings, including the ability to bring structure to business data by persistently identifying legal entities with an EFX ID number, as well as their global corporate hierarchy relationships. Its offerings on the consumer data side include Connexus that provides persistent keys for customers and addresses.
- Experian: Experian provides data and analytical services to help companies target and engage customers more effectively. Its CDI offering, which incorporates its Truvue linkage technology, addresses this by delivering data quality processing combined with a variety of decisioning attributes, including lifestyle, attitudes, demographics, life events and custom models to customer-facing systems. Truvue ensures persistent identification in marketing databases or data warehouses.

Note 4 Acxiom

Acxiom is a portfolio company of ValueAct Capital Management, a private investment firm that also owns a substantial, publicly disclosed interest in Gartner, Inc., and has one seat on Gartner's 11-member Board of Directors. Gartner research is produced independently by the Company's analysts, without the influence, review or approval of our investors, shareholders or directors. (For further information on the independence and integrity of Gartner research, see "Guiding Principles on Independence and Objectivity" on our Web site, http://www.gartner.com/it/about/omb guide.jsp.

Note 5 Equifax

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Vendors Added or 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 appearing 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. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.

Evaluation Criteria Definitions

Ability to Execute

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

Overall Viability (Business Unit, Financial, Strategy, Organization): 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 pre-sales activities and the structure that supports them. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.

Market Responsiveness and Track 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

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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 Web site, 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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