

# The Forrester Wave™: Master Data Management Solutions, Q1 2014

by Michele Goetz, February 3, 2014

## KEY TAKEAWAYS

### **Multiplatform MDM Conducts The Data Orchestra**

Master data should promote a consistent and multidimensional profile across data and business silos. To meet this expectation, MDM must emphasize the orchestration of master data to customize a trusted, relevant master view aligned with data consumption needs.

### **IBM, Informatica, And SAP Set The Bar**

Each vendor demonstrated strengths as a true multiplatform MDM leader: data governance, core platform (matching, modeling, quality, etc.), and scale and performance. The difference: IBM's strength is coordinating for the entire data platform, Informatica's strength is universal MDM, and SAP's strength is putting the business in control.

### **Choose Multiplatform MDM For Long-Term Data Strategies**

Past MDM implementations lacked the agility to meet new master data needs. Today's multiplatform MDM solutions take change into account, allowing organizations to implement master data strategies with room to grow for new data needs, new platforms, and new performance demands.



## The Forrester Wave™: Master Data Management Solutions, Q1 2014

How The Top Five MDM Vendors Stack Up For Multiplatform

by [Michele Goetz](#)

with [Leslie Owens](#) and Emily Jedinak

### WHY READ THIS REPORT

The ability to keep pace with trends like big data, open data, sophisticated analytics, and the de-compartmentalization of data silos and processes, distinguishes leading master data management (MDM) solutions from their counterparts. The five vendors in this evaluation are the most prominent, widely implemented solutions in the market. They represent the future direction of MDM to support complex and highly federated data management needs. Forrester looks at how these solutions stack up against one another and how each meets the demands and expectations of discerning enterprise customers.

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### Notes & Resources

Forrester conducted questionnaire-based evaluations in September 2013 and interviewed vendor and user companies IBM, Informatica, SAP, and Talend.

### Related Research Documents

[How To Make A Business Case For Data Investment](#)

January 10, 2014

[Transform Your Organization With Strong Data Management](#)

July 2, 2013

[Market Overview: Master Data Management, Q2 2013](#)

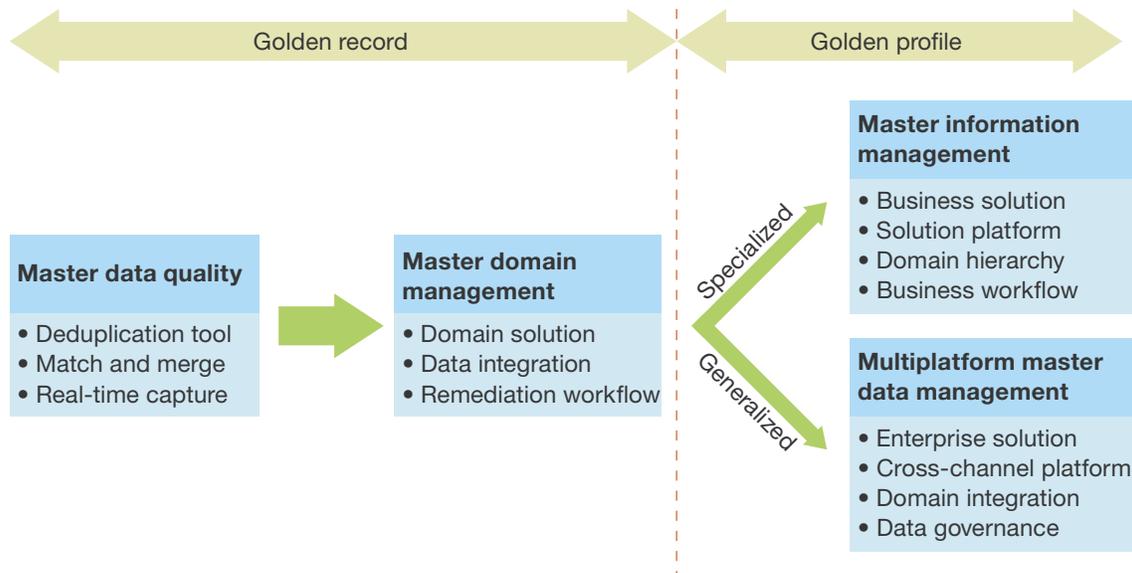
April 23, 2013

## MULTIPLATFORM MDM EMPHASIZES ORCHESTRATION OVER INTEGRATION

Organizations' acceptance of big data value has risen faster than decades of data professionals pitching business cases for investments could have ever achieved. The hype and early successes of big data has affected MDM in unexpected ways. Big data is the tide that is lifting all data boats, causing organizations to think about the implementation of sophisticated Hadoop analytic solutions and how to better manage the data that already exists to improve business imperatives, such as customer experience, strategic decision-making, and risk management.<sup>1</sup> Organizations want to increase the utilization rate of data they currently have.<sup>2</sup> However, they often run into consistency challenges due to highly federated data environments and conflicting data definitions across business units.<sup>3</sup> Multiplatform MDM meets this challenge by addressing data governance, content, orchestration, and big data.

## THE NEW FACE OF MDM IS DATA CONTEXT AT SCALE

Prior to 2011, MDM helped enterprises solve challenges pertaining to data quality and data integration that manifested as duplicate records in application systems and data warehouses.<sup>4</sup> The technology helped create better customer or product views by eliminating excess and defective data, but lacked the functionality to truly profile identities, solve complex relationships and hierarchies, or scale to support more than one master profile for different business needs. Big data began to emerge, and organizations began to address challenges related to their hyper-federated data landscapes. New releases of MDM technology emphasized data modeling, data linkage, and master profile orchestration over data integration, cleansing, and the golden record.<sup>5</sup> Today, organizations face an altered vendor landscape. Some MDM vendors (multiplatform MDM) have separated from the pack by introducing new capabilities. New vendors (master information management) have emerged to enable a golden profile<sup>6</sup> in order to overcome MDM challenges clients faced with new and existing implementation needs (see Figure 1).<sup>7</sup>

**Figure 1** Multiplatform And Master Information Management MDM Attain Golden Profiles

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Source: Forrester Research, Inc.

## MULTIPLATFORM MDM EVALUATION OVERVIEW

To assess the state of the multiplatform MDM market and see how the vendors stack up against one another, Forrester evaluated the strengths and weaknesses of the top multiplatform vendors. The evaluation focused on data governance, modeling, matching, content, performance, usability, and big data. After examining past research, user needs assessments, and conducting vendor and expert interviews, we developed a comprehensive set of evaluation criteria.

We evaluated vendors against 65 criteria, which we grouped into three high-level buckets:

- **Current offering.** We evaluated the vendors against 42 criteria that focused on core and advanced functionality. We evaluated data governance support, integration options, modeling, matching, data types, performance, and big data and cloud capabilities.
- **Strategy.** To evaluate each vendor's strategy, we assessed 10 criteria, including product strategy and corporate strategy, focusing significantly on how well each vendor is addressing its current customers' needs.
- **Market presence.** To evaluate each vendor's penetration in the enterprise MDM market, we evaluated 13 criteria, including the vendor's financial performance, new customer growth, and install base percentage.

## VENDOR INCLUSION CRITERIA

To scope this evaluation, Forrester looked at the entire MDM market, categorized it into four segments, and assessed which vendors belonged in each segment. Forrester considers the multiplatform segment the most relevant to Forrester clients based on inquiry volume and installation penetration identified in the Global Master Data Management Online Survey, Q4 2012. There are five vendors in the multiplatform MDM market that met our inclusion criteria. The five vendors we assessed are IBM, Informatica, Oracle, SAP, and Talend. Each vendor (see Figure 2):

- Has an established enterprise MDM offering. (A participating player must actively market a productized MDM solution. The vendor must have initially released the product version included in the evaluation prior to September 2013.)
- Is listed in the multiplatform segment of the MDM market overview.
- Is listed in the master domain segment of the MDM market overview, but has newly released functionality that places it between multiplatform and master domain.
- Supports analytic and operational MDM.
- Is big data ready, operates in Hadoop/DFS and NoSQL environments, scales to petabytes of data, has customers in production, or has two or more customers in development or pilot programs.
- Has data governance capabilities in product and/or a standalone solution, and has visualization or reporting of master data conditions in the MDM environment.
- Implements product domains and multidomain integration — 25% or more.
- Aligns with the direction of the market and emerging scenarios tracked by Forrester.
- Has been mentioned as a provider in Forrester's 2012 Global Master Data Management Online Survey, or Forrester has received inquiries from customers.

**Figure 2** Evaluating Vendors: Product Information And Selection Criteria

Vendor	Product evaluated	Version	Product release date
IBM	IBM InfoSphere Master Data Management	11	June 2013
Informatica	Informatica Master Data Management	9.6	June 2013
Oracle	Oracle Master Data Management	<ul style="list-style-type: none"> <li>• Oracle Customer Hub 8.2 (811.11 FP Siebel CRM)</li> <li>• Oracle Site Hub 12.1.3</li> <li>• Oracle Supplier Hub 12.1.3</li> <li>• Oracle Data Relationship Governance 11.1.2.3</li> <li>• Oracle Data Relationship Management 11.1.2.3</li> <li>• Oracle Fusion Customer Hub R7</li> <li>• Oracle Higher Education Constituent Hub 8.2 (811.11 FP Siebel CRM)</li> </ul>	<ul style="list-style-type: none"> <li>• August 2010</li> <li>• April 2013 (Data Relationship Management and Governance)</li> </ul>
SAP	SAP Enterprise Master Data Management portfolio	<ul style="list-style-type: none"> <li>• SAP NetWeaver MDM 7.1 SP10</li> <li>• SAP Master Data Governance 6.1</li> </ul>	<ul style="list-style-type: none"> <li>• March 2013</li> <li>• December 2012</li> </ul>
Talend	Talend Platform for Master Data Management	5.3	June 2013

**Vendor selection criteria**

Has an established MDM offering
Is listed in the multiplatform segment of the MDM market overview
Is listed in the master domain segment of the MDM market overview, but has newly released functionality that places it between multiplatform and master domain
Supports analytic and operational MDM
Is big data ready, operates in Hadoop/DFS and NoSQL environments, scales to petabytes of data, has customers in production, or has two or more customers in development or pilot programs
Has data governance capabilities in product and/or a standalone solution, and has visualization or reporting of master data conditions in the MDM environment
Implements product domains and multidomain integration — 25% or more
Aligns with the direction of the market and emerging scenarios tracked by Forrester
Has been mentioned as a provider in Forrester’s 2012 Global Master Data Management Online Survey, or Forrester has received inquiries from customers

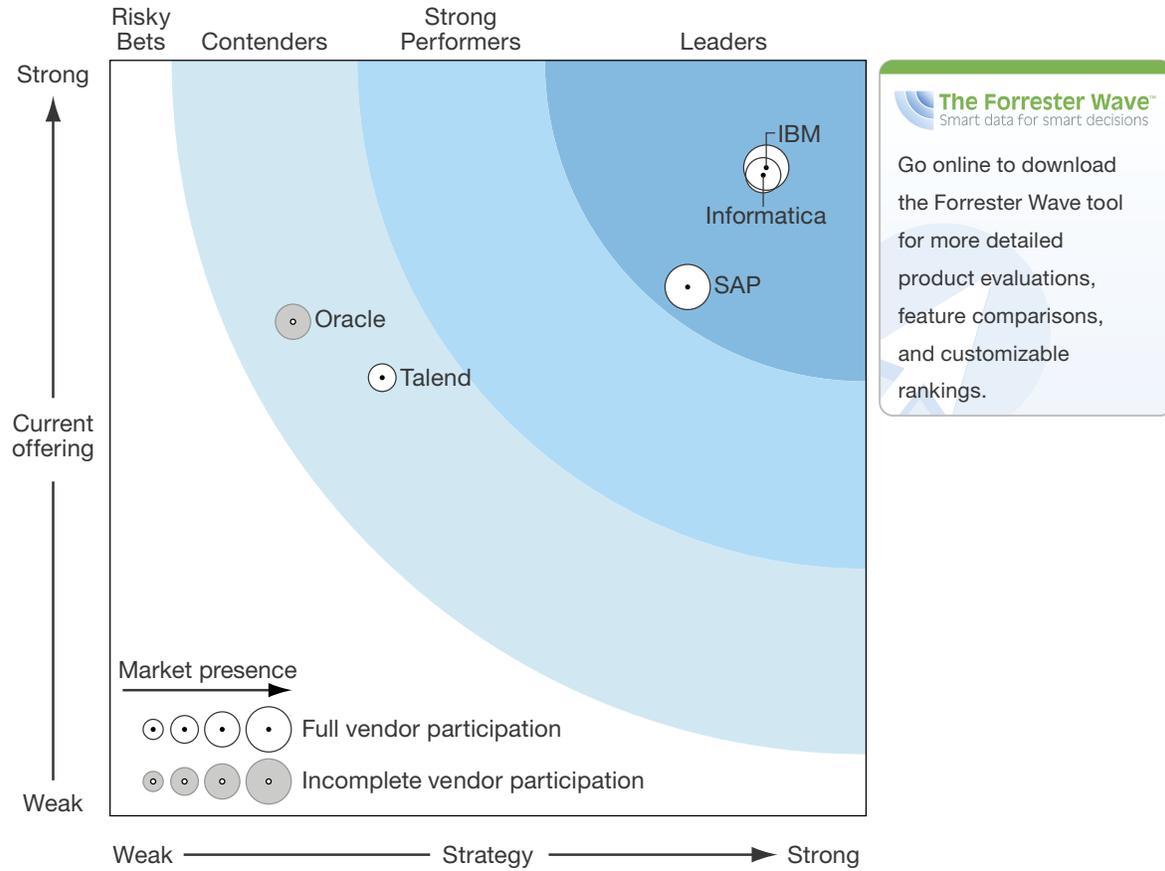
Source: Forrester Research, Inc.

## VENDOR ORIGINS DISTINCTLY SHAPE THEIR STRENGTHS

Already frontrunners in the master data management space — IBM, Informatica, Oracle, SAP, and Talend — reveal significant differentiation among their multiplatform MDM solutions (see Figure 3). For these vendors, MDM exists within a comprehensive portfolio of products to help customers manage the entire data platform, improve business operations and intelligence, or create a fabric to integrate data and application infrastructure. Leaders, such as IBM and Informatica, seek to improve technology management and business collaboration, ease integration between analytic and operational data needs, and provide rules and services that align to business objectives and processes. Leader SAP aims to support MDM managed by the business with tight integration into business applications for data governance with a well-designed business steward experience backed up by core MDM capabilities. Contenders Oracle and Talend are enhancing their data governance capabilities and strengthening support for platform scale and flexibility.

Multiplatform MDM vendors are often short-listed based on existing enterprise relationships and independent evaluations of the products. It may seem like a straightforward purchase, given the maturity of core MDM capabilities and advances in integration, but MDM is no longer a point solution or a silver bullet to data consistency. A successful investment in MDM hinges on the involvement of business data stewards and subject matter experts dedicated to aligning master data to business needs. These stakeholders bring increased complexity to the design, implementation, and ongoing management of MDM. They continually surface data's new business needs and forecast how new data will be used. In light of this shift, organizations should evaluate a multiplatform MDM solution by how well its capabilities scale and flex to meet a dynamic vision and strategy for data management.

**Figure 3** The Forrester Wave™: Master Data Management, Q1, '14



**The Forrester Wave™**  
Smart data for smart decisions

Go online to download the Forrester Wave tool for more detailed product evaluations, feature comparisons, and customizable rankings.

Source: Forrester Research, Inc.

**Figure 3** The Forrester Wave™: Master Data Management, Q1, '14 (Cont.)

	Forrester's Weighting	IBM	Informatica	SAP	Talend
CURRENT OFFERING	50%	4.29	4.24	3.50	2.90
Data governance	20%	4.29	3.75	4.36	2.28
Platform	65%	4.43	4.52	3.44	3.11
Big data	15%	3.70	3.70	2.60	2.80
STRATEGY	50%	4.34	4.32	3.82	1.80
Product strategy	65%	4.20	4.60	3.40	1.80
Corporate strategy	35%	4.60	3.80	4.60	1.80
Cost	0%	0.00	0.00	0.00	0.00
MARKET PRESENCE	0%	4.06	3.42	4.58	2.04
Installed base	80%	4.20	3.40	4.60	1.80
Revenue	10%	5.00	3.00	5.00	1.00
Revenue growth	10%	2.00	4.00	4.00	5.00
Systems integrators	0%	0.00	0.00	0.00	0.00
Services	0%	0.00	0.00	0.00	0.00
Employees	0%	0.00	0.00	0.00	0.00
Technology partners	0%	0.00	0.00	0.00	0.00

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

## VENDOR PROFILES

### Leaders

- IBM creates the enterprise master data hub.** Often chosen to manage complex master data challenges in diverse data ecosystems, InfoSphere MDM is packed with data governance capabilities, robust content (i.e., models, business services, and data rules), and the ability to integrate and scale with big data strategies. InfoSphere MDM is a bundled offer encompassing data quality, discovery, information steward, and business process express. This highly modular single platform allows IBM to manage master data, componentize capabilities for its reference data management tool, and eventually release its probabilistic matching engine (Big Match Engine) for big data and analytic environments. However, customers have expressed confusion with implementing the solutions that come after development begins. Big data capabilities released after evaluations were completed in October 2013 further extend InfoSphere MDM to support matching and data linkage in Hadoop and other analytic environments, and improve performance to meet extreme scale.<sup>8</sup> The v11 release includes a

single code base, tighter integration with other products in the InfoSphere portfolio, more packaged content to get started, and a single probabilistic matching engine. Existing customers interested in v11 and migrating from IBM MDM can import their existing models, but will need to switch from the deterministic matching engine to the probabilistic matching engine. Existing customers can also expect changes to their licensing agreements and increased costs. Various licensing options exist based on the number of master domains and records managed, but price continues to be a sticking point with customers. IBM's InfoSphere MDM customers need to put their MDM strategy in perspective of their overall information management strategy. IBM is striving toward a unified smart information platform with its InfoSphere portfolio. Customers will best realize MDM's full potential in terms of performance, scale, and governance when they incorporate other featured InfoSphere solutions. When customers require big data, sophisticated analytics, and complex multidomain master data views across federated environments, InfoSphere MDM will deliver on short- and long-term business data objectives.

- **Informatica defines the master domain across the data ecosystem.** Informatica MDM continues to show its strength to master and integrate data. Informatica is extending its core capabilities, used to model, match, and govern master data of any domain, to the big data, cloud, mobile, and social identities. In addition, the vendor is placing more attention on developing industry-specific data management solutions and bringing industry expertise to its sales and consulting arms. This specialization helps customers link master data management to business outcomes. Data governance capabilities are strong with robust role-based ownership. Business data stewards have the ability to manage data rules side by side with developers for data elements, models, and policies. However, Informatica MDM still maintains some of the look, feel, and usability of its Siperian roots, so business data stewards will need training. Informatica MDM is becoming more business friendly as it develops social identity and mobile. Application programming interfaces (APIs) with social networks, packaged rules, and consumer data feeds allow customers to visualize and reconcile party identities and relationships. Mobile apps allow business stakeholders to look up and manage master data on their tablets and smartphones. Customers purchasing Informatica MDM are often looking for an out-of-the-box solution to solve particularly complex business challenges impacted by master data. Informatica is making significant investments and changes in its business model to meet the market shift of leading MDM by adding consultants with business domain knowledge and aligning sales engagement with business stakeholders in lines-of-business and outreach with thought leadership. In addition, Informatica is expanding MDM content (data management solutions) beyond initial healthcare, insurance, and finance solutions to include other packaged MDM industry solutions. Large information management vendors make it difficult for Informatica in deals where more than MDM is in play (e.g., an entire information platform) as clients are often assessing MDM as part of a holistic data management strategy. Yet, Informatica continues to compete and increasingly closes sales in head-to-head reviews. Clients state its strengths are configurability, scalability, performance, and understanding of

the business impact. With a broad ecosystem of partnerships, it continues to bridge between the big players. Future investments in data governance and expansion of business solutions will help make Informatica highly competitive with other platform MDM vendors.

- **SAP connects the business to data.** It's business process first with SAP's NetWeaver MDM and master data governance (MDG) tools. Designed around the business processes, data models, and policies identified in its business solutions and enterprise resource planning (ERP), SAP's MDM capabilities are intended to put control in the hands of the business. MDG is the flagship MDM product where business data stewards define, orchestrate, and monitor that master data stays aligned to business objectives. Data governance workflows connect business data stewardship with business technology data management and development activities in an environment that is business friendly and can be embedded into SAP applications. In addition, SAP is the only vendor that has connected business data policies and rules to business impact by linking MDG with business objects, having packaged reports, and developing return-on-investment (ROI) calculators for data governance teams. When users look closely they find that native matching capabilities are basic and black box. More robust matching and tuning are better achieved by using SAP's Data Services tool, but customers voice issues with integration and model development, particularly with NetWeaver MDM. SAP acknowledges that the development of custom models or making adjustments to models is time-consuming and encourages the use of packaged models. When it comes to the product master, NetWeaver MDM and MDG are both suited to manage this well due to the relationship to SAP's ERP models. Although SAP manages its product master well, the acquisition of Hybris is creating a fragmented MDM strategy, both for sales and product management. This potentially leaves customers unclear if MDG or product information management (PIM) is the right solution for their needs. SAP is lagging in the release of its big data capabilities, but shows future promise by integrating MDM and MDG with its SAP HANA platform, and leveraging data services for big data connectivity. Customers report that achieving a multiplatform MDM capability from SAP is less packaged than that of MDM leaders, but the vendor's attention to supporting a business-led master data program makes SAP worthy of serious consideration.

## Contenders

- **Oracle pinpoints MDM challenges and scales with Fusion.** Oracle, a nonparticipating vendor, offers a variety of master data hubs designed to support several master data domains and business processes; in some cases more than one solution.<sup>9</sup> With the introduction of Oracle Fusion Customer and Product Hubs, organizations can create a hub of hubs, integrating and orchestrating master domains and the systems they support. This strategy poses both strengths and weaknesses for organizations. Other multiplatform vendors have streamlined their MDM portfolios as they integrate acquired products and fuse their marketing. The multitude of available Oracle MDM hubs can create confusion over which solution is appropriate to purchase, adding complexity to a firm's overall MDM strategy. However, Oracle

remains relevant because of its focus on solving MDM needs in the context of business needs, as seen in its customer data management (CDM) cloud product. Here, Oracle creates a 360-degree view of the customer experience by integrating the marketing (activities and social) and sales (customer data) clouds along with other application systems, such as JD Edwards and E-business suite. In terms of data governance, customer feedback is weak, Oracle MDM products lack the capabilities that support more than data profiling and remediation and has an environment that is not intuitive for business data stewards. Monitoring of data governance outcomes is available but requires leveraging Oracle Business Analytics and Essbase, as well as integration with other data sources to assess business impact. Survey results and client inquiries indicate that Oracle still needs to evolve its capabilities of new data scenarios that involve virtualization, federation, and big data analytics. Oracle's answer to this is Oracle Fusion, and with adoption beginning to take hold, past challenges from existing MDM hubs may be alleviated. Similar to its competition, inquiries with Forrester clients considering Oracle have indicated sticker shock at the cost to purchase a single Oracle hub. Scaling with additional hubs or Fusion can make Oracle more costly compared with other vendors in this space. Oracle's MDM road map is solid and addresses critical and strategic needs of multiplatform MDM, particularly by leveraging Oracle Fusion for integration of operational and analytic MDM. As many of the modern capabilities are newly introduced, or are coming soon, customers should factor this into their own road maps, renegotiating or crafting licenses toward agility and sourcing system integrators with direct ties to the release and training of new capabilities and versions.

- **Talend demonstrates that open source can be viable for enterprise multiplatform MDM.** Talend demonstrates that commercial open source solutions don't have to be risky bets or be relegated to emerging or early technology offers. Talend proves this with robust performance and core MDM functionality. Talend Platform for MDM bundles its data integration and data quality capabilities with MDM. The environment is unified and intuitive for developers, offering a lot of the same core master data management capabilities as its multiplatform competition. The license can be expanded to include business process management for data governance workflow and big data to close the divide between traditional data systems and Hadoop environments. Strong partnerships with other software vendors (e.g., traditional software vendors, emerging big data vendors, and niche system integrators) have provided Talend with opportunities to create data solutions offers for MDM similar to partnerships seen between big consultancies and large software vendors. However, Talend missed the opportunity to leap frog other multiplatform MDM vendors by leveraging a graph database for additional modeling flexibility and scalability when other vendors were sticking with relational database management system (RDBMS) repository strategies.<sup>10</sup> What holds Talend Platform for MDM back is its developer-oriented environment and product strategy. Data governance is technology management-focused and limits business data steward by only creating new data elements. Modeling is best supported through import, as there is lack of visualization, and drilling down to develop and augment models. Talend Platform for MDM differentiates through its ability to introduce style sheets that display data as business users would see them.

This is similar to capabilities typically seen in PIM solutions, although it still requires custom coding to implement. Overall, customers and partners are positive about their relationship with Talend, and the personal support provided. Organizations are comfortable with the open source model and want more flexibility in a custom MDM solution, but don't want to build from scratch, have a viable solution with Talend. Its ability to keep pace with the changes in the data management space and execute solidly with customers make it an MDM solution to watch in coming years.

## SUPPLEMENTAL MATERIAL

### Online Resource

The online version of Figure 3 is an Excel-based vendor comparison tool that provides detailed product evaluations and customizable rankings.

### Data Sources Used In This Forrester Wave Evaluation

Forrester used a combination of four data sources to assess the strengths and weaknesses of each solution:

- **Hands-on lab evaluations.** Vendors spent one day with a team of analysts who performed a hands-on evaluation of the product using a scenario-based testing methodology. We evaluated each product using the same scenario(s), creating a level playing field by evaluating every product on the same criteria.
- **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted vendor calls where necessary to gather details of vendor qualifications.
- **Product demos.** We asked vendors to conduct demonstrations of their product's functionality. We used findings from these product demos to validate details of each vendor's product capabilities.
- **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with three of each vendor's current customers.

### The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and we encourage readers to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve. For more information on the methodology that every Forrester Wave evaluation follows, go to <http://www.forrester.com/marketing/policies/forrester-wave-methodology.html>.

### **Integrity Policy**

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### **Survey Methodology**

Forrester's October 2012 Global Master Data Management Online Survey was fielded to 107 Data Management professionals. Forrester fielded the survey from October to December 2012. Respondent incentives included a summary of the survey results and an invitation to a Webinar explaining what the results mean. Exact sample sizes are provided in this report on a question-by-question basis. This survey used a self-selected group of respondents, Forrester contacts interested in enterprise architecture and data management and is therefore not random. This data is not guaranteed to be representative of the population, and, unless otherwise noted, statistical data is intended to be used for descriptive and not inferential purposes. While nonrandom, the survey is still a valuable tool for understanding where users are today and where the industry is headed.

Forrester's June 2011 Global Big Data Online Survey was fielded to 60 technology management professionals. Forrester fielded the survey in June 2011. Exact sample sizes are provided in this report on a question-by-question basis. Unless otherwise noted, statistical data is intended to be used for descriptive and not inferential purposes.

Forrester's Forrsights Strategy Spotlight: Business Intelligence And Big Data, Q4 2012 was fielded to 634 technology management executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from small and medium-size business (SMB) and enterprise companies with 100 or more employees. All respondents reported working for companies that were currently using or planning to use business intelligence (BI) technologies. This survey is part of Forrester's Forrsights for Business Technology and was fielded during October 2012 and November 2012. Survey respondent incentives included gift certificates and research reports.

## ENDNOTES

- <sup>1</sup> For more information on client inquiry analysis and MDM inquiry rate trend, see the October 2012 "Global Master Data Management Online Survey."
- <sup>2</sup> The average utilization rate of data within organizations is 12%. Source: Forrsights Strategy Spotlight: Business Intelligence And Big Data, Q4 2012 and the June 2011 Global Big Data Online Survey.
- <sup>3</sup> This information is based on the 2013 inquiry analysis of MDM and data governance challenges.
- <sup>4</sup> Analysis of MDM Survey responses to MDM maturing levels from 2009 to 2012 show the MDM maturity holding steady to support mastering data in data silo and lead by technology management. Source: October 2012 Global Master Data Management Online Survey.
- <sup>5</sup> For more information on MDM, see the April 23, 2013, "[Master Data Management Market Overview, Q2 2013](#)" report.
- <sup>6</sup> In a golden-profile organization, data governance: extends further into the business, master data domains integrate and create multidimensional views, master data is managed inside and outside the organizational walls, MDM creates context for big data, context defines master data, and contextual profile development is prioritized over data integration objectives. See the April 23, 2013, "[Master Data Management Market Overview, Q2 2013](#)" report.
- <sup>7</sup> Data professional participant responses indicated the growing trend of big data adoption the nature of a shifting landscape to include cloud sources and social media. MDM vendors received mixed scores on their ability to leverage preexisting MDM implementations to meet these trends. Sixty-four percent cited current MDM solutions were unable to meet cloud requirements. Sixty-three percent indicated current MDM solutions were unable to meet big data and social media requirements. Source: October 2012 Global Master Data Management Online Survey.
- <sup>8</sup> On October 18, 2013 IBM introduced two new, key, and generally available capabilities for big data performance: match and search on Hadoop (Big Match) and what IBM calls "virtual system patterns." Big Match (bulk matching and deduplication) tests indicate 10,000,000 comparisons per second on a Hadoop cluster (five times performance of RDBMS). Transaction performance tests show, one billion source party records loaded in 20 minutes into the Hadoop cluster, and then executed 500,000 searches against the data set (probabilistic searches, not simple gets/retrieves) in 30 minutes, with a sustained peak rate of 275 searches per second. Virtual System Patterns: Supports IBM' Pure Systems big data appliance. Three InfoSphere MDM v10.1, Three for InfoSphere MDM v11. These patterns support three database models: database is included, system-Z database, and distributed platform database.

- <sup>9</sup> Oracle chose not to participate in the MDM Wave. Data used to evaluate Oracle's MDM offerings included survey results from the October 2012 Global Master Data Management Online Survey, the website, marketing collateral, Oracle presentations, client inquiries, and partner briefings.
- <sup>10</sup> Emerging MDM vendors coming to market are investing in graph databases for their MDM repositories. These graph repositories help MDM better connect conceptual master data models with logical models and provide further flexibility, agility, and scale that RDBMS repositories often constrain (a leading complaint by customers as they look to scale or change existing MDM implementations).

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« ERIC ADAMS, client persona representing Enterprise Architecture Professionals