

Vendor Landscape: Customer Data Management

Accelerating Performance by Calculating Results™

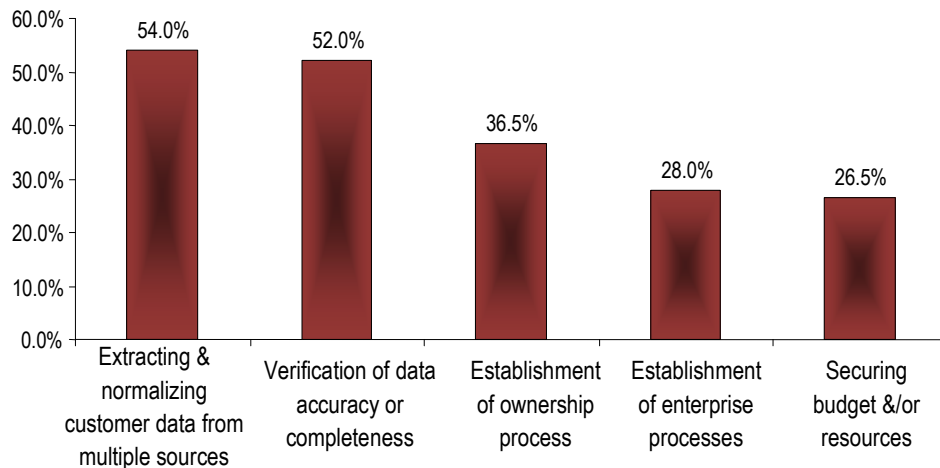
Selecting the Right Approach: Effective management of customer data is a challenge for the majority of enterprises (54%). Hypatia believes organizations plan to invest more in this key area in order to provide a better customer experience as well as to support better decision-making by those in customer-facing roles. Not surprisingly, enterprise solution providers are supporting this category with a combination of on-premise, SaaS, consulting and/or managed service offerings. This guide outlines various approaches end-users should consider in selecting a customer data management and/or data quality solution.

Market Challenges

Effective customer intelligence management is about transforming customer information into revenues—customer data converted to profits. Organizations have invested heavily in customer data capture, storage, and analysis. Hypatia’s research found that organizations need to further establish customer data integration, quality, and analysis processes, and to develop capabilities that allow customer intelligence to be applied at the line of business level.

In short, providing a 360° view of the customer so that those in customer-facing roles may apply this knowledge “in-line” depends on a well-defined customer data management strategy.

Figure 1: Customer Data Management Challenges



Not All Data Should Be Managed Equally

Selection of a customer data management solution will vary according to industry, company size, IT architecture, number of application systems and/or legacy data marts storing customer data. Moreover, organizations should

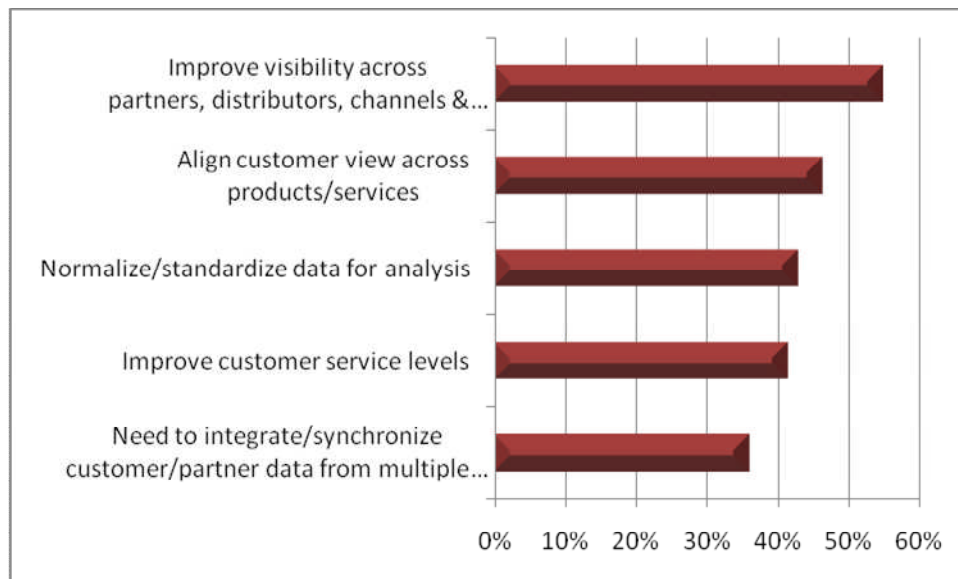
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prioritize and consider additional selection criteria having to do with accountability for creating and configuring workflow and data cleansing processes, access and security policies and/or number of external versus internal data

sources. B2B enterprises should consider vendors who offer solutions that facilitate data synchronization and integration from multiple external sources such as trading partners or stakeholders within a supply chain environment. Conversely, companies in a direct business-to-consumer model (B2C) source third-party lists to enhance their customer data—and should evaluate vendors who provide processes and tools for data quality, profiling and matching. There are three customer data types—each with its own characteristics and challenges:

- ✓ **Master reference data** is duplicate information that exists in multiple data marts or systems without a definitive system of record. Conflicting, duplicated reference information may cause conflicts when reconciling records.
- ✓ **Transaction data** is stored within a system of record, such as an Enterprise Resource Management (ERP) or financial system. These systems tend to hold large volumes of order, invoice, and payment data which must be a) cached within a CDI hub, b) dynamically extracted, or c) replicated when needed.

Figure 2: Top Market Drivers for Customer Data Management Improvements



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- ✓ **Relationship data** is best managed after reference data conflicts have been resolved—and will require the use of sophisticated visualization tools to explore and discover relationships amongst entities.

Moreover, some of the vendors profiled are capable of integrating unstructured content with customer records for operational use such as in-line decision-support or analysis of customer service levels. Organizations that seek to incorporate contextual “Voice of the Customer” insights, service call comments, or regulatory compliance notes into their customer data analysis processes should consider vendors noted as (UDM). Vendors offering Master Data Management are noted as (MDM).

The Choices: Data Quality:

Enterprises that capture, store and use customer information from numerous applications, data marts and disparate database file structures understand the benefits gained by integrating individual records, accounts and corporate entities. However, the greatest value from customer data integration initiatives results from “priming” the data through *data quality, matching and profiling processes*.

Data quality by itself is not a discrete project with a measurable return on investment—it should be measured as part of a larger solution in order to assess impact. Enhancing the quality of data analyzed for either strategic or operational use directly correlated to higher year over year performance improvements in metrics such as annual revenues, customer acquisition and retention rates.

Organizations should evaluate vendors and service providers according to their need for 1) batch, real-time and/or bi-directional information flow, 2) architecture interoperability /connectivity, 3) configurability of workflow, 4) end-user interface: business analyst, IT resource, line of business user, or data steward, 5) scalability, 6) deployment timeframe and 6) cost of ownership.

Customer Data Integration:

Vendors offer a variety of architectures to address integration requirements: Platforms with robust ‘blades’ for Service Oriented Architecture (SOA) connectivity, Extract, Transform & Load (ETL), Enterprise Information Integration (EII) or Enterprise Application Integration (EAI) solutions, and/or data integration ‘hubs’ to manage information exchanges among back office and front office applications and/or third-party information sources.

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Vendor Landscape

Hypatia assessed the Customer Data Management solution provider landscape by category:

- ✓ Data Quality / Data Profiling
- ✓ Customer Data Integration / Synchronization
- ✓ Master Data Management
- ✓ SaaS & Outsourced Managed Service Providers

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Master Data Management:

Established solution providers, IBM, Oracle, SAP and Siperian have developed MDM solutions to address enterprise master data management for use in both operational transaction processing and analytical processing. Hypatia views CDM as a mature subset application of MDM that is specific to customer data management processes such as data quality, data integration, data updates, replication and storage.

Extract, Transform & Load, Enterprise Information Integration, and Enterprise Application Integration:

Several vendors profiled have encapsulated these integration toolsets into their platforms. Please see Hypatia’s research access library for upcoming information on ETL, EAI, and EII.

Outsourced Service Providers / Software as a Service:

Hypatia’s research revealed that organizations often outsource data management on a persistent basis to service providers in order to concentrate on their core business competencies or because they lack the internal expertise to effectively manage customer data. SaaS deployments should be considered by companies of all sizes—especially those with constrained IT resources and legacy data marts, CRM and/ or ERP systems in place.

Table I: Categories of Customer Data Management Vendors

Category	Value Proposition	Vendors	Who Should Consider
<ul style="list-style-type: none"> ✓ Data Quality ✓ Address Verification ✓ Data Profiling 	<p>Lower cost of ownership and faster than manual processes. Requires “data steward” or business analyst to design workflows and manage processes prior to CDI.</p>	<ul style="list-style-type: none"> ✓ DataFlux, a SAS Company ✓ Experian / QAS ✓ FirstLogic, Business Objects (UDM) ✓ Innovative Systems ✓ Purisma / Dun & Bradstreet ✓ Similarity / Informatica ✓ Sterling Commerce ✓ Trillium Software (UDM) 	<p>Enterprises with multi-channel customer touch-points, high use of third-party data, and/or large numbers of transactions per customer should consider a data quality or synchronization solution.</p>

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Category	Value Proposition	Vendors	Who Should Consider
Customer Data Integration	Automate processes that integrate data to provide a 360° customer view for diverse business objectives: <ul style="list-style-type: none"> ✓ Service & Support ✓ Inbound/Outbound Marketing Campaigns ✓ Precision Marketing ✓ Business Development ✓ Strategic Planning 	<ul style="list-style-type: none"> ✓ IBM DWL ✓ Informatica/Similarity (UDM) (MDM) ✓ Initiate Systems (MDM) ✓ Oracle (UDM) (MDM) ✓ Pervasive (UDM) ✓ Siperian (MDM) 	Companies seeking to automate the management of customer data integration processes to increase service levels, gain greater understanding of customers and optimize their investments.
Master Data Management	Management of all operational master data that resides in various applications / systems will provide a trusted record of truth and support operational decisioning.	<ul style="list-style-type: none"> ✓ IBM (UDM) ✓ Oracle (UDM) ✓ SAP ✓ Siperian 	Enterprises that require high data accuracy when processing both operational transactions and analytical reports.
SaaS or Managed Service Providers (MSP)	Low cost of ownership and rapid deployment to address immediate pain around customer data enrichment, quality, synchronization, validation, and/or integration among multiple stakeholders.	<ul style="list-style-type: none"> ✓ Experian ✓ Pervasive Software (UDM) ✓ Princeton SoftTech ✓ Sterling Commerce ✓ ValueCentric 	Enterprises with minimal IT support, or who seek to focus on core competencies. Greatest value when used with CRM / ERP systems, data warehouses and/or consulting services.

Key Considerations:

Companies seeking customer data management solutions should evaluate multiple choices among the four vendor sectors to ensure a ‘best fit’ for a particular organization. While some of the software vendors have professional service teams to manage implementation and integration, others partner with Systems Integrators. Outsourcing

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all of an organization's customer data management processes on a persistent basis is an option best explored through specialized service providers (MSP's) and/or consulting firms. Some areas to investigate include:

- ✓ **Consulting services:** What strategic consultative value will be part of the annual license? Will the software vendor / service provider offer a set amount of on-going consulting services as part of the package?
- ✓ **Accountability.** Will the responsibilities for customer data management be assigned to a business user, analyst or require IT support? How much training is provided during the deployment process and with each software upgrade? Will a business analyst or data steward acquire enough expertise to manage, configure, and update workflows as necessary within the organization's business environment?
- ✓ **Data accuracy:** What level of data accuracy is good enough given your organization's requirements? Accuracy levels vary among providers—match rates will range from 50% to 90% depending on the granularity of the system and/or business processes deployed and utilized. There are benefits and operational costs associated with both high and low rates of data accuracy. Understand the trade-offs and impact of each.
- ✓ **Deployment option evaluation:** Each option impacts short-term costs as well as long-term total cost of ownership in regards to: IT resource usage, deployment times, training and configuration.
 - On-demand
 - Outsourced managed services
 - Traditional enterprise license
 - Selective outsourcing on a project basis
- ✓ **External data sources:** Many B2C / B2B organizations purchase third-party lists to augment or enhance existing customer records. Facilitating the extraction, normalization, quality and integration of third-party data may require additional resources, expertise, custom API's or service levels. Understand which vendors support multiple data sources, (external/internal), legacy systems, workflow processes, and timeframes necessary for frequent updates. With collaborative B2B supply chain processes, such as in Collaborative Planning, Forecasting, and Replenishment (CPFR), product manufacturers should consider vendors who offer: domain expertise, consulting services, and established relationships with distributors of their products.
- ✓ **CDM or MDM:** Should organizations select a best of breed CDM vendor or consider a staged approach comprised of either an Enterprise Data Management or Master Data Management

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solution? Best of breed CDM vendors currently offer greater flexibility in workflow configuration and consume less IT resources after deployment. Master Data Management solutions are evolving and require more standardization of data models for use in various applications. Customer Data Management, Product Information Management, Asset Information Management, Financial Information Management, Supplier Information Management, and Human Capital Management are all subsets of MDM. Carefully evaluate current requirements against long-term goals in selecting vendors.

- ✓ **Timeliness:** Investigate whether updates are manual, automated, bi-directional, or batched on a nightly basis. Organizations with frequent customer interactions may seek real-time, automated, bi-directional updates for a competitive edge.
- ✓ **Process & Performance:** Establishment of consistent data management and analysis processes as well as performance metrics are major challenges for many organizations. Which vendors or service providers have cultivated techniques, processes, tools, and performance metrics to measure customer data management success?

Contacting Vendors:

Below are the website contacts for companies briefed by Hypatia Research, LLC as part of our ongoing Customer Intelligence Research & Advisory services:

- ✓ **DataFlux, a SAS Company:** www.dataflux.com
- ✓ **Experian / QAS:** www.qas.com / www.experian.com
- ✓ **FirstLogic, Business Objects:** www.businessobjects.com
- ✓ **IBM DWL:** www.ibm.com
- ✓ **Informatica / Similarity:** www.Informatica.com
- ✓ **Initiate Systems:** www.initiatesystems.com
- ✓ **Innovative Systems:** www.innovativesystems.com
- ✓ **Oracle:** www.oracle.com

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- ✓ **Pervasive Software:** www.pervasive.com
- ✓ **Purisma, acquired by Dun & Bradstreet:** www.purisma.com

To request a briefing or to share your customer success story please contact us at: Info@HypatiaResearch.com or 617-230-0067.

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