

Master Data Management & Data Governance Strategic Planning Assumptions for 2013-14

subtitle: Next-Generation MDM is Coming Sooner Than You Think (Big Data, Social, Cloud, Mobile & Real-Time)

Monday, April 1, 2013

(Note: If you have trouble accessing the hyperlinked articles, please go directly to [MDM Alerts](#))

SUMMARY

Master Data Management (MDM), and Data Governance are among the most widely adopted IT strategies in recent years. That's because both are critical for vital business outcomes such as 360 degree views of customers/products/suppliers, regulatory reporting and compliance, and in general treating data as an enterprise asset.

Across both private and public sectors, many organizations of all sizes continue to struggle to provide a single view of the truth -- whether for "party" (customer, citizen, supplier, etc.) or "thing" (product, location, measurements, etc.) across the enterprise.

Data Governance is critical to achieving sustainable and effective MDM. Failure to execute Data Governance concurrently with an MDM program greatly decreases the probability of success and economic sustainability of MDM programs.

Master data management (MDM) is no longer a "fast follower" technology but is now a mature solution providing tangible benefits for private and public sector organizations. The desired economic outcomes are new ways to drive down costs, enable better regulatory compliance, provide higher levels of customer satisfaction, and to provide increased agility -- whether to add new channels or products, or to prepare for and execute on mergers and acquisitions (M&A).

Why is Data Governance so important? MDM provides a trusted, consistent view of key information assets across the enterprise – ranging from “customers”, “products”, and “suppliers” to “locations” and more. In large corporations, MDM is becoming a business transformation strategy as the cornerstone of every critical business process and business decision. Data is an important asset to most companies and leveraging that data properly can result in operational & IT cost savings as well as drive business growth. Furthermore, managing strategic data assets is foundational to a service-oriented architecture (SOA), which in turn facilitates business process management (BPM). Clearly, MDM is an enticing proposition for many enterprises but to achieve these results, a proper “Data Governance” strategy must be in place. When deploying MDM, a proper Data Governance discipline should consider the business drivers, project scope, roles and people filling each role, policies and procedures, data quality, inheritability, social norms, and the business operating model. Data Governance is more than a single product or process, rather, it is an ecosystem of products, processes, people, and information. Based on recognition of issues at hand, an improving economy, and increasing regulatory requirements, businesses are now recognizing the opportunity to take a more strategic view of enterprise Data Governance. Clearly, MDM and Data Governance are codependent/interdependent. During 2013-15, savvy enterprises must invest upfront in Data Governance to realize MDM sustainability and ROI.

MDM is both pervasive and pandemic. MDM provides a trusted, consistent view of key information assets across the enterprise – ranging from “customers”, “products”, and “suppliers” to “locations” and more. In large corporations, MDM is becoming a business transformation strategy as the cornerstone of every critical business process and business decision. Over the past seven years as conference chairman for [MDM & Data Governance Summit](#), I have observed hundreds of MDM implementations in almost every industry around the world ranging from very large, highly-heterogeneous distributed enterprises to midsize, mostly-homogeneous centralized/local enterprises. In this same time frame, more than 6,000 IT professionals have attended our workshops and tutorials in London, Frankfurt, Madrid, Moscow, New York City, San Francisco, Singapore, Sydney, Tokyo, and Toronto. In turn, we have distilled our findings into candid insight and experience-based guidance for IT professionals embarking upon their MDM and Data Governance programs. Moreover, during 2012, analysts at the MDM Institute reviewed more than 750 MDM and Data Governance case studies as part of the process to arrive at the ten strategic planning assumptions reviewed in this summary report. The typical audience for such guidelines includes: CTOs, CIOs, enterprise (data, solution) architects, vendor product management and product marketing, and investors.

2013-14 “MDM & Data Governance Road Map”. Part of the deliverables for our client advisory council is an annual set of milestones to serve as a "road map" to help Global 5000 enterprises focus efforts for their own MDM programs. For planning purposes, we thus annually identify ten milestones which we then explore, refine and publish via our MDM Alert research newsletter. This set of "strategic planning assumptions" presents an experience-based view of the key trends and issues facing IT organizations by highlighting:

- Master data management
- Data governance
- Customer data integration (CDI)
- Product information management (PIM)
- Reference data management (RDM)

A “Global” View of MDM

(survey findings presented at MDM & Data Governance Summit Europe – April 2013 in London)

- 1. Compliance, single customer view (SCV), etc. are “universal” drivers**
- 2. Data Governance is both synergistic & co-dependent with MDM**
- 3. Enterprises have stopped calling out multi-domain & now assume MDM includes multiple domains**
- 4. Enterprises have moved beyond CDI & PIM to include reference master data**
- 5. Big data requires both MDM & Data Governance to be effective & sustainable**

Thus the 2013-14 MDM road map helps Global 5000 enterprises (and IT vendors selling into this space) utilize these “strategic planning assumptions” to help focus their own road maps on large-scale and mission-critical MDM projects. During the following year, we use these milestones as the focus for our analyst research in that every research report we write either confirms or evolves one or more milestones as its premise:

1. [Pervasive MDM](#)
2. [Data governance](#)
3. [Business process hubs](#)
4. [Business-critical MDM](#)
5. [Universal MDM](#)
6. [Reference data](#)
7. [Cloud MDM](#)
8. [Social & Mobile MDM](#)
9. [Public MDM](#)
10. [Temporal MDM](#)
11. [Big Data](#)
12. [Budgets/skills](#)

BOTTOM LINE:

MDM is quickly broadening its attractiveness both as a key enabler of strategic business initiatives as well tactical P&L initiatives. As of 2013, MDM is no longer “fast follower” technology strategy but is clearly a business strategy “for the masses”.

Seasoned MDM and Data Governance professionals acknowledge that successful MDM requires a significant up front Data Governance investment ... while Data Governance as a discrete discipline benefits tremendously from the application of MDM software.

These two initiatives really are co-dependent in *so* many ways ... yet the market (vendors, SIs, et al) remains late in bringing the two together to optimize the people, process, and technology.

Proactive, integrated Data Governance will remain problematic during 2013, however as software vendors struggle to rationalize MDM and BPM.

1. Pervasive MDM (MDM as a Service)

During 2013, enterprise application providers will continue to deploy en masse, the next generation of MDM-innate (as opposed to MDM-aware) applications. Concurrently SaaS vendors will struggle to provide integrated/native MDM; select SaaS providers will finesse this issue via strategic partnerships & investments in MDM.

Through 2013-14, mega vendors Microsoft and Oracle will effectively give away departmental MDM– via Microsoft MDS and Oracle DRM respectively.

By 2014-15, the market for MDM-innate applications will exceed that for MDM platform software. MDM-innate (e.g., Fusion MDM) will overwhelm MDM-enabled applications.

2. Data Governance

Data Governance for MDM is moving beyond simple stewardship to convergence of task management, workflow, policy management and enforcement. Through 2013, most enterprises will struggle with enterprise DG while they initially focus on customer, vendor, or product; integrated DG that includes E2E data lifecycle will increasingly be mandated as a phase 1 deliverable.

During 2013-14, major SIs and MDM boutiques will focus on productizing DG frameworks while mega MDM software providers struggle to link governance process with process hub technologies.

By 2014-15, vendor MDM solutions will finally move from “passive-aggressive” mode to “proactive” Data Governance mode.

3. Business Process Hubs

From the enterprise perspective, a complete MDM solution requires Rules and Reference data to be applied across domains. During 2013, MDM solution providers and BPM solution providers will increasingly collide in market as former acquire or build out BPM-centric MDM; both camps will be challenged to unify domains as there exist different business processes for CDI and PIM.

Through 2013-14, however, BPM-centric MDM will suffer from BPM's traditional focus on modeling and not executing MDM rules, as well as BPM-centric vendors' ineffectiveness in mktg against MDM-centric vendors.

By 2014-15, all mega MDM and BPM vendors will have overcome this dogmatic bias as enterprise BPM needs to execute within governance and vice versa be able to execute MDM workflows within BPM.

4. Business-Critical MDM

MDM is about improving business processes – enterprises expect enterprise-strength MDM-powered applications targeted at their industry or problem set. Through 2013, dogmatic spats regarding analytical vs. operational vs. collaborative MDM use cases will become historic artifacts as each become business-critical MDM which demands zero downtime; certain MDM vendors will continue to sell better in reference data user use cases due to lack of scalability imposed by their semantic flexibility.

During 2013-14, MDM platforms will provide in-situ capabilities to change data model, business rules, etc. ... without taking MDM services offline.

By 2014-15, this will impact way master data svcs are syndicated and delivered ... regardless of regular ablutions such as software upgrades.

5. Universal MDM (Multi-Domain MDM)

Most Product Information Management (PIM) hubs are multi-domain to some degree as they always include SUPPLIER; correspondingly, Customer Data Integration (CDI) hubs have always supported entitlements to some degree. During 2013-14, MDM evaluation teams will assume (and insist) that all MDM software platforms targeted for enterprise-level deployment or major role in mission-critical systems fully support both PARTY and THING entity types.

Through 2014, mega vendors will continue to deploy separate CDI and PIM stacks while nouveau MDM vendors attempt to position this as "legacy MDM" failing.

By 2014-15, all operational CDI hub vendors will add "PIM light" capabilities, and all PIM vendors will add B2C PARTY entity.

6. Reference Data

Managing "simple" reference data will prove to be a key sales entry point for MDM vendors. Through 2013, reference data will emerge as a key entry point for enterprises and in turn unduly influence choice of MDM for Customer, Product and other domains; large enterprises will continue to mandate that REFERENCE data be part of MDM platform's native entity types.

During 2013-14, MDM vendors will begin to market RDM to apply an MDM approach for centralized governance, stewardship and control; SIs will move into this market via OEMing of Informatica and IBM MDM into "securities master" market under the pricing umbrella of GoldenSource.

By 2015, pervasive, low cost RDM will be commoditized via the efforts of Ataccama, Microsoft and Oracle.

7. Cloud MDM

During 2013, single- and multi-tenant Cloud MDM will continue to attract SMBs to achieve MDM benefits without long-term project and major expense; while offering enticing entry point for large enterprises (opex vs. capex, federated architecture for geo-distributed organizations, POCs).

Through 2013-14, integration of on-premise MDM w/ SaaS apps will arrive via SFDC, Workday HRMS, et al, however enterprises will wrestle with data integration issues between on-premise and cloud with the majority of organizations unwilling to house master data (especially CUSTOMER) in public cloud.

By 2014-15, Cloud-innate services for DQ and DG will be more prevalent; however, enterprise MDM will remain “on premise” with increasing integration to Cloud applications.

8. Social & Mobile MDM

Data-related processes need to align with real world intricacies— especially complex relationships and hierarchies of mobile customers and extended social networks. During 2013, 360° view of “X” will take on new meaning due to “data blind spots” of traditional MDM; enterprises will realize the need to reconcile social identity with corporate/household identity to provide authoritative master data to drive e-marketing and commerce within social networks.

Through 2013-14, next-gen MDM will address “sphere of influence” to incorporate both extended & non-obvious relationships to grow share of wallet from individual to exo-ego network as disruptive sales strategy (vs. ego-centric mktg).

By 2014-15, mobile location-based services enhanced with location-specific customer info will raise ante for e-commerce within and outside major social networks.

9. Public MDM

Through 2013-14, MDM of customer/citizen must increase its innate support for the social customer master (i.e. Amazon, Facebook, Google+, et al). Clearly, these “public MDM hubs” are increasingly becoming repositories of high-value demographic info directly and indirectly managed and shared by consumers.

Maintenance of B2C and B2B customer data will increasingly evolve to the self-service model wherein the customer continuously updates the quality of both demographic and firmographic data in a continuous data quality improvement cycle.

By 2014-15, such self-service evergreening of customer data will further incorporate data from both on-premise and off-premise MDM hubs—both private and public. Examples include the (optional) integration of LINKED IN data (and images) from LINKED IN with Outlook 2013, and smart phone apps such as JUJUMA again self-populating conference attendee social networking data for public and private events on an “opt in” basis.

This need to link traditional customer master data with social media network data creates both new challenges and opportunities. New approaches are required which will provide improved customer segmentation, lead gen, retention and targeted marketing to leverage “sphere of influence”.

By 2016, mass consumer acceptance and use of such social networks will ultimately serve as marketing and sales delivery channels wherein the blending of private and public master data will serve as the dominant and default social model (social MDM).

As a business strategy, MDM will both enhance & benefit from such personally relevant transactions that are initiated from & integrated into social networking platforms such as Facebook, LINKED IN, Xing & Google+.

10. Temporal MDM (Real-Time & Time-Travel)

During 2013, MDM requirements will increasingly evolve from myriad of batch match/merge processes for evergreening master data into near real-time best of breed data consolidation architectures; mega vendor MDM platforms with RDBMS underpinnings will compete to outperform each other, while next-generation MDM solutions will lag due to overhead of semantic models.

Through 2013-14, compliance and other corporate functions will increasingly mandate temporal MDM to view and manage entities and hierarchical relationships at a specific point in time (past, present or future).

By 2015, temporal MDM will be standard feature of the majority of MDM platforms. Object/Graph DB-based MDM will dominate in time-travel; while RDBMS-based MDM will continue to dominate real-time MDM updating.

11. Big Data

Big Data innately requires both MDM and Data Governance to be effective and sustainable. During 2013, performance of all major aspects of base MDM functionality will benefit from performance-enhancing capabilities of big memory configurations— from batch loading of MDM hubs to identity resolution to operational updates.

Through 2013-14, Big Data will repatriate itself into MDM fabric via registry overlays as yet another source; mining of Big Data to populate Social MDM and perform entity matching on Big Data stores to help provision 360° view of entity from public, subscription & enterprise data.

By 2014-15, very large enterprises (e.g., fin svcs, large government agencies) will look to real-time MDM flows and scaling of MDM solutions via elasticity of Cloud-based solutions, in-memory DBs, and next-generation ETL/MDM.

12. Budgets/Skills

Given substantial investment businesses undertake with SI partners, this must be scrutinized— not only in effort to contain costs, but also to insure success of this vital infrastructure investment. During 2013, the raw number of IT professionals trained in a specific MDM solution will increase 100% Y2Y, however, IT organizations and consultancies will struggle to recruit and retain MDM veterans who have had a major role in a successful MDM deployment (and Data Governance professionals will command even higher compensation packages).

Through 2013-14, enterprises will continue to spend 3X to 4X in “plan” and “build” services vs. MDM software acquisition costs.

By 2014-15, the supply of MDM-experienced consultants will catch up with demand and SIs will scramble to find new opportunities for their expensively recruited and trained talent.

BOTTOM LINE REDUX

Enterprise MDM is a major IT initiative underway at the majority of market-leading Global 5000 enterprises. Most enterprises and solutions vendors are finding near-term success with single-faceted approach inherent with 3rd generation MDM solutions (single domain, lacking integrated Data Governance, etc.). Myopically focusing solely on a single data domain and usage style is detrimental to the longer term business strategy of integrating supply, demand, and information chains across both intra- and extra-enterprise boundaries. Coming to market during 2012 are 4th generation multi-entity MDM solutions which address the requirement for multiple domains and styles as well as providing active, integrated Data Governance.

Data Governance remains the “X” factor. It is common business strategy now that while good MDM is the savvy foundation for multiple business and technology strategies, integrated Data Governance is mandated for long-term sustainability and ROI of MDM. Clearly, manual Data Governance is error prone, time-consuming and unable to ensure compliance or measure business impact.

MDM is increasingly pervasive and pandemic ... not just by market-leading type “A” or “fast follower” enterprises but also the mainstream type “B” organizations. While the overall market for MDM and related software and services has rapidly evolved and matured over the past three years, most organizations are still challenged by the discontinuous offerings that are required to be mated up to craft an MDM environment ... often from the same vendor!

MDM and Data Governance are codependent/interdependent. Savvy organizations must invest upfront in Data Governance for MDM sustainability and ROI.

“Go early, go governance”.

About the MDM Institute

To provide feedback on our client's MDM initiatives we have two levels of sponsorship for IT organizations: (1) free membership (by invitation) in our MDM Institute Advisory Council providing unlimited MDM consultation by phone, and (2) free membership in our MDM Institute Business Council (survey base) which provides bi-weekly updates on key MDM trends and issues via an email newsletter.

- **MDM Institute Advisory Council™** of 150 organizations who receive unlimited MDM advice to key individuals, e.g. CTOs, CIOs, and MDM project leads
- **MDM Institute Business Council™** of 25,000+ Global 5000 IT executives who receive a limited distribution, bi-weekly newsletter with MDM industry updates
- **MDM Alert™** newsletter provides IT organizations, MDM vendors, and investors hard-hitting insights into best practices as well as market observations derived from interactions with the MDM Institute Advisory Council™ and the MDM Institute Business Council™. Free to qualified individuals, the MDM Alert™ is also posted on the company's website (www.the-MDM-Institute.com). The intended audience includes: enterprise architects, MDM project managers, CIOs, CISOs, CTOs, chief customer officers, chief privacy officers, data quality managers, data stewards, and project teams responsible for MDM and Data Governance solutions.
- **MDM MarketPulse™** monthly survey results, e.g. budgets, success/failure rates, mindshare based on ongoing surveys of the MDM Institute Advisory Council and the MDM Institute Business Council
- **MDM Fast Track™** quarterly 1-day workshop – fee-based and rotating through the major North American, European and Asia-Pacific metropolitan areas
- **MDM & Data Governance Summit™** annual conference and exposition – London, New York City, San Francisco, Shanghai, Singapore, Sydney, Tokyo and Toronto.

TO UNSUBSCRIBE

We take your privacy very seriously. This e-mail was sent to you because you are a current subscriber to MDM Alert newsletters which is provided complementary to members of the MDM Advisory Council and the MDM Business Council.

To automatically subscribe/unsubscribe, enter your e-mail address on the form at this [link](#).

You may also unsubscribe by sending a blank e-mail to MDM-Alert@tcdii.com with the subject: UNSUBSCRIBE.

© 2013 The MDM Institute. MDM Alert™ and MDM Field Report™ are registered trademarks of The MDM Institute.

This communication is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, proprietary, confidential and exempt from disclosure. If you are not the intended recipient, or person responsible for delivering the material to the intended recipient, you are notified that any dissemination, distribution, or copying of the communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately by a return Email or telephone and destroy this material accordingly.
