

Master Data Management

A Key Tool for Managing Business Information Initiatives

White Paper

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Ventana Research performed this research for a fee to determine the needs and practices of organizations that are currently implementing or have plans to implement master data management (MDM). This document is based on our research and analysis of a quantitative survey administered via the Web to qualified respondents. Qualification was based upon involvement with or interest in implementing master data management.

This research was designed to investigate the practices and needs of individuals and organizations that use or wish to implement master data management. This research is not intended for use outside of this context and does not imply that organizations are guaranteed success by using only these results to improve organizational productivity. Moreover, gaining the most benefit from master data management requires an assessment of your organization's unique needs.

We certify that Ventana Research wrote and edited this report independently, that the analysis contained herein is a faithful representation of our evaluation based on our experience with and knowledge of master data management, and that the analysis and conclusions are entirely our own.

A stylized, handwritten signature of 'Ventana Research' in black ink.

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Executive Summary

The constant pressure on organizations today to increase transparency and accountability and improve compliance with fiscal regulations is having a strong effect on data management efforts. To meet these challenges, many organizations are turning to master data management (MDM) – and finding a dearth of accurate information about it. Although much has been said and written on this topic, useful details about interest in and implementations of MDM remain scarce. As a result, uncertainty is rampant among end users and vendors alike.

To address this lack of reliable guidance and offer some insight into this complex and rapidly growing area, Ventana Research undertook a primary research program on master data management, sponsored in part by IBM, that included a research study conducted in July 2006. We collected data for this study from a Web-based survey of 515 business and IT professionals. About 70 percent of respondents were from businesses that had revenue last year of more than US\$100 million.

In processing the survey responses, we applied the Ventana Research Maturity Model™. It ranks maturity in four levels: Tactical, Advanced, Strategic and Innovative. We determined maturity by analyzing the responses to specific questions from the survey. Overall, our analysis indicates, organizational maturity with respect to MDM currently stands at a point between Tactical (36% of respondents) and Advanced (34%), a finding that indicates there is substantial room for greater maturation in organizational MDM deployment and utilization. Our analysis by line of business found that financial and manufacturing enterprises are closest to the Advanced level, while the other industries matched the overall trend.

Although our analysis cannot claim to benchmark every aspect of MDM, it does provide a useful guide for organizations wanting to assess their position relative to others in this cutting-edge area of business technology usage.

This research reveals what Ventana Research believes to be several significant trends in MDM. Overall, we found a growing awareness of and interest in master data management. More than 80 percent of respondents reported that they were aware of the meaning of the term “master data management,” and 18 to 25 percent said they were actively investigating the possible benefits for their business unit or enterprise. Along similar lines, some 15 to 22 percent of organizations have already initiated MDM projects at either the business unit or enterprise level.

Of those who expressed a view as to the expected benefits from implementing MDM, 42 percent ranked improving timeliness and consistency of information as most important. Among master data objects, “Customer” was rated as the most important object to be managed, with “Product” and “Financial Reporting” tied for second. In a related finding, improving customer satisfaction was the key criterion used to measure performance improvement resulting from MDM.

In terms of where in the organization the main benefits of implementing MDM will accrue, respondents rated Sales and Marketing and Finance equally first and Customer Service second.

Of the organizations planning to implement MDM, less than half (39%) said they would seek to purchase packaged MDM software, and 20 percent expressed the intention to build it in-house. A significant number of organizations (51%) have already implemented a product

information management (PIM) or customer data integration (CDI) master data deployment.

On the negative side, almost half (47%) of organizations have made no attempt to estimate the costs of problems and errors directly attributable to errors in master data.

Based on our findings, Ventana Research recommends that organizations considering MDM deployment use the Ventana Research MDM Maturity Model™ to evaluate their position in this relatively immature but rapidly developing area and the business benefits MDM deployment may yield. A key step in this analysis is to calculate the costs to the business of errors that can be directly attributed to errors or inconsistencies in master data. With an understanding of the potential benefits, define the business drivers for implementing MDM in your business. Then identify the key performance indicators (KPIs) you will use to monitor any benefits that accrue. Our study reveals that the most common KPI is improvement in the level of customer satisfaction.

Remember that process comes before technology. Before seeking to identify the technology solution, ensure that you have a clear understanding of the requirements and business process changes that you will have to implement as well.

About This Study

Since 2004, Ventana Research has had a research practice covering master data management. Recently the technical press has discovered this topic, and increasing numbers of vendors have adopted MDM marketing messages. Nonetheless, there is little concrete information about the MDM marketplace, and end users and vendors alike see the current plethora of messages around MDM as confusing. The present study is an attempt to sharpen our understanding of this complex and rapidly growing area.

Master data is indispensable to doing business. It includes the business objects, definitions, classifications and terminology that describe business information, as well as the context for recording transaction data. In this survey, Ventana Research has explored the challenges that drive companies' interest in MDM, the complexity of their data and business process environments, their experiences with MDM and their plans to deploy it.

The survey for this research program was designed for finance, business and IT managers who have experience with or are involved in data governance as users, analysts or architects. Additionally, some solution providers, software vendors, consultants, media and systems integrators also participated in the survey. It seeks understand the trends, needs and practices of organizations that are implementing or intend to implement master data management.

Methodology

The data summarized and analyzed in this report comes from a survey Ventana Research conducted over the Web in July 2006. Survey participation was solicited via e-mail and Web site invitations. Both Ventana Research and the media sponsors of this research program originated the invitations.

The survey was targeted at respondents at CxO, vice president, director and senior management levels in the information management, operations, finance and IT areas of organizations from a variety of vertical industries located primarily in North America and Europe. To gain more detailed insights into the use of master data management, Ventana Research also drew on material from nine in-depth telephone interviews with respondents from major organizations that have implemented or are in the process of implementing MDM solutions.

Demographics

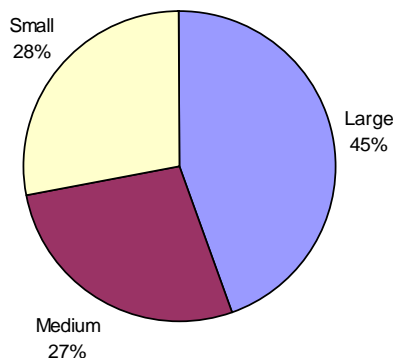
A total of 1,647 Web users clicked through to the survey. Of those, 515 respondents completely answered all questions. This report includes only results from this group.

Respondents fell into two basic categories, IT and business users. The large majority, 68 percent of the respondents, indicated they work in IT, while the remaining 32 percent of the final qualified survey population – the users – were business managers and executives. In terms of their job titles, 61 percent of all respondents were executives, a category that includes the CIO, CFO or CEO, vice presidents and directors. Some 32 percent had other IT roles.

Of the respondents, 45 percent were with Global 2,000 companies and 27 percent were with midsize businesses (that is, those having annual revenue between US\$100 million and US\$1 billion). Among the large companies, 34 percent had more than 10,000 employees. Small

businesses (having annual revenue of less than US\$100 million) made up the rest of the sample.

Figure 1
Respondents by Company Size



Source: Ventana Research

The Roles of MDM

Master data management plays a number of roles in the enterprise. It is not a single, undifferentiated definitional layer, but rather a set of layers crafted or shaped to improve organizational, operational or analytic efficiency and effectiveness.

Ventana Research sees two primary approaches to implementing master data management. Operational MDM (O-MDM) is focused on the distribution, synchronization or exchange of master data to ensure consistency in transactional operations. Analytic MDM (A-MDM) is concerned with the management of master data items and associated hierarchies required for aggregation and analysis. This is a meaningful distinction, but it is becoming clear that most global businesses will need both forms of MDM. Ventana Research believes their adoption largely is a question of timing – of when rather than whether.

To ensure consistency in transactional operations, Operational MDM synchronizes master data between two or more individual systems (or from some form of central data hub back to local systems). The focus here is specifically on transferring what are often basic master data items – such as a customer name and code – between transaction processing systems. For example, to ensure that customer data required both by an instance of SAP R/3 and by Siebel CRM is maintained in sync, when a new customer is defined in Siebel CRM, the data would be mapped automatically and transferred to the R/3 ERP system.

On the other hand, Analytic MDM is associated with the areas of business intelligence (BI) and management reporting. It addresses the requirement to reconcile, rationalize and organize master data at a hub to support efficient, consistent reporting for business performance management and regulatory compliance. Analytic MDM involves the management of master data items and associated hierarchies that are required for aggregation and analysis within a data warehouse and in BI reporting tools. The analyses in the rest of this report will refer to O-MDM and A-MDM as appropriate to clarify further the uses of the technology in enterprise information systems.

Note: Percentages cited below are those of qualified respondents to our survey.

The Systems Landscape

Most organizations have a complex systems landscape.

More than 70 percent of organizations have some variety of enterprise resource planning (ERP) or customer relationship management (CRM) software. Around one-third have supply chain management (SCM) systems. Fewer organizations (21%) have supplier relationship management (SRM) systems. Most organizations have systems from more than one vendor. Also, most have more than one instance of each system, ranging in some cases as many as 50 instances.

Thus, in most organizations the systems landscape is very complex. As a consequence, so is the data landscape, in that each instance of an application is a source of business data and master data associated with it. There is no guarantee that all of these systems contain the same standardized master data definitions. This analysis serves to confirm the need for master data management as a performance management tool; most organizations have a diverse range of transaction systems across which master data, whether operational or analytic, needs to be managed.

Most organizations have an enterprise data warehouse.

In an attempt to enable delivery of consistent business reports, most organizations (64%) have deployed an enterprise data warehouse in addition to their transactional systems. The largest group (45%) has implemented it as a single central system. Some 30 percent have implemented either regional or local data warehouses; they likely will need to turn to master data management to support consolidation of these multiple information sources.

Implementation of a central or enterprise data warehouse usually requires implementation of MDM in the analytics area, which, as noted above, Ventana Research calls Analytic MDM. A number of large organizations have embarked upon the creation of an enterprise data warehouse only to discover the need to implement master data management, either in parallel with or prior to implementing the data warehouse.

Feedback from our phone interviews also indicated that when a central data warehouse is created – drawing in and consolidating data from the disparate array of source systems – acute problems of inconsistent master data and lack of good data stewardship begin to surface. This then becomes the driver to institute data governance.

Few organizations have immediate plans to implement SOA.

In the process of synchronizing master data across the landscape of applications (which Ventana Research calls Operational MDM), a key step is inserting the standard or “golden” master data information back into the transaction systems, preferably from a single master source. Increasingly, vendors that offer MDM software in the O-MDM space – such as CDI and PIM vendors – are proposing to support this synchronization by means of service-oriented architectures. The survey indicates, though, that only 28 percent of organizations have to date implemented an SOA. Around 20 percent of organizations, however, plan to implement one within two years, and 17 percent believe that they will implement this together with MDM.

Customer satisfaction is the key criterion to measure performance improvement.

IT organizations planning to implement master data management will need to be able to measure and monitor the benefits MDM can deliver to the business. It is likely that such KPIs will be a requirement of any business case for the adoption of master data management. Asked to indicate the criteria they use currently to measure effectiveness in improving performance, most respondents (38%) indicated that their key metric is improvement in the level of customer satisfaction, with reduction of errors in deliveries (17%) second. This reflects a strong organizational focus on the customer and indicates that customer master data should receive major attention from both end users and vendors. It further indicates that any MDM solution must be capable of effectively managing customer master data – both attributes and hierarchies.

Master Data Management and Its Uses

Awareness of master data management is growing.

The results from all respondents to a series of individually scored but related questions showed that familiarity with the term “master data management” was widespread: Fewer than 20 percent claimed not to know the meaning of the term or to have heard of it but to have no experience with the concept. About a quarter (25%) indicated that they are actively investigating the potential benefits of MDM for their business unit (18%) or enterprise (25%), and a significant proportion already have begun a project at the business unit (15%) or enterprise (22%) level. A further 9 percent are aware that a project is under way elsewhere in their organization.

Nonetheless, the technology is new: Only 6 percent of respondents reported having previous experience with an MDM project. (The above percentages are for total respondents per question and do not add up to 100 percent.)

One in three organizations have initiated MDM projects.

Slightly more than one-third of organizations (37%) surveyed already have initiated a master data management project. However, less than 4 percent reported completing a project. Therefore, we may assume that most organizations are either in the early phases of implementation or are still engaged in investigating the potential benefits. This again serves to underline that master data management is still at the start of the adoption curve.

On the other hand, 44 percent of respondents reported no current or previous projects. An interesting related finding is that 12 percent of organizations noted that they had initiated and abandoned projects in the MDM area.

In terms of revenue, the sector currently most active in implementation of MDM is organizations with revenue greater than US\$10 billion annually. This finding is unsurprising given that these organizations likely have the most available resources and the greatest need to resolve problems of consistency of information.

Companies want most to improve timeliness and consistency of information.

A key objective of the survey was to gain insights into the business drivers that cause organizations to focus on master data management. The largest proportion of respondents (33%) was clearly concerned to reduce time spent reconciling data from disparate sources.

All the top five business drivers selected combine business and technology issues, in this order:

1. We spend more time reconciling data than analyzing it.
2. No one is accountable for the quality of information.
3. We cannot determine which spreadsheet has correct data.
4. It takes weeks to close our books.
5. We duplicate R&D efforts.

That these are the top-priority problems indicates that organizations are striving to generate consistent business information faster. The first and second drivers also indicate a desire for increased accountability in the quality of information provided.

Although duplication of research and development effort is tied less directly to business operations, its inclusion indicates that, given the escalating costs of research and development efforts, many organizations are anxious to ensure they have accurate data on previous work so as to avoid repeating it.

Responses ranking perceived business benefits from implementing MDM reflected the interest in timeliness and consistency, and added cost as well:

1. Increase the accuracy of reporting and business intelligence.
2. Improve operational efficiency.
3. Gain control over information needed to market and sell products effectively.
4. Reduce the costs of existing IT investments.
5. Eliminate various sources of customer or product data that contain different versions of “the truth.”

The most important MDM benefit already achieved is improved reporting.

We asked respondents from organizations that already have implemented MDM which business benefits they have realized to date. The top three were:

1. Increased accuracy of reporting and business intelligence (42%)
2. Improved operational efficiency (13%)
3. Improved customer care, retention and service (12%).

The finding again highlights the weight given to improving the quality, consistency and timeliness of information – in this case, business reporting. This topped more operational choices such as ensuring effective global data synchronization or supporting electronic commerce. We conclude that most organizations currently are focused on optimizing their business reporting rather than focusing on more operational areas.

Master Data in the Organization

Inconsistent results from current information systems are a key issue.

Some 70 percent of respondents said that a key issue for their organizations is inconsistent results produced from their current information systems. Only 16 percent indicated that they were currently able to obtain consistent reports. This coincides with results noted previously regarding the current focus on achieving consistent information reporting and business intelligence.

Many organizations don't maintain master data.

In the past, managing the creation and update (the maintenance process or life cycle management) of master data often has been delegated by default to the local IT function. But Ventana Research believes that effective master data management requires ownership and hence management from within the business units across the enterprise.

We wanted to know where in the organization master data is maintained: at a local business unit, a regional group or the enterprise level. Different types of master data may be maintained at different levels, but 40 percent of respondents indicated that Product, Customer and Employee master data is maintained at the enterprise level, and 30 percent said Location, Geography and Supplier items are managed at the enterprise level. However, some 33 to 46 percent (depending on the object) of master data is not maintained at all; that is, organizations have implemented no system for this purpose.

Half of organizations have begun a data governance initiative.

Nearly half of the organizations surveyed (49%) already have some form of data governance or data management initiative in progress. But almost half of the remaining 51 percent said they have no plans to implement such a program. Furthermore, for this group that has not yet implemented data governance, only 24 percent plan to do so in the next 12 months.

Where a data governance board exists, its scope tends to be enterprise-wide (76%). In more than half of the cases, the CIO and/or CFO is a member along with other director-level staff, such as the director of enterprise architecture and data management. In more than two-thirds of cases the board has executive authority on data matters.

Our interviews indicate that the governance board or group typically operates within the current business structure and meets on average twice monthly. One interviewee commented that often 30 or more people attend meetings. After an initial period of caution and mistrust, the respondent said, people have come to the conclusion that this is the only forum in the business where cross-process discussions take place, decisions are made and ownership agreed.

A key issue is convincing executives that master data management and data governance are ongoing activities – that they are processes, not projects, and have to be resourced and budgeted accordingly.

Business units are taking or sharing ownership of MDM.

In the past, the task of owning and managing master data usually has gone to the IT organization. That situation appears to be changing in many cases. We asked respondents whether key master data objects are owned and managed by a line of business, by IT or are shared. In approximately 20 percent of cases, these objects are still owned and administered by IT. But lines of business are starting to take a more active role: 33 to 40 percent, depending on the master data item – Customer (37%), Product (36%) or Employee (40%) – said those units own these key business master data objects, and 38 to 41 percent (again depending on the item) said responsibility is shared.

Almost half of organizations have a common chart of accounts.

Often the starting point for improving business reporting and operational performance is the implementation of a standard chart of accounts across the enterprise. Organizations that already have implemented such a chart may be better equipped to take the first steps into master data management. Along these lines, we found that 47 percent of organizations have a common chart of accounts in place. A further 22 percent have plans to introduce one in the next year or two.

Many organizations have not counted the costs of errors in master data.

An effective part of a business case for master data management is an estimate of the total annual cost to the business of errors such as wrong deliveries, invoicing mistakes and problems with global data synchronization, all of which can be attributed directly to inaccurate master data. These costs are substantial. For example, media sources have set the cost of errors due to unreliable and incorrect data as high as US\$40 billion annually in retail business.

Disturbingly, 47 percent of our respondents said they have not attempted to calculate this cost. In estimating it, 13 percent thought it was less than US\$50,000, while 11 percent believed that it lay in the range of US\$1 million to US\$10 million. There appears to be no direct link with geographical location, annual revenue or plans for the introduction of a common chart of accounts. Not surprisingly, the finance sector set the largest cost estimates.

It is noteworthy that end users have not calculated these costs, particularly in a period of stringent cost reduction. The total amount is far from trivial. If all the organizations that participated in the survey lost only US\$500,000 each annually, that would end up being some US\$500 million a year – ample reason for user organizations to pay immediate attention.

Technology Products and Purchases

Half of organizations would prefer to purchase packaged MDM software.

For end users the question often is whether to buy a software package or have IT build it in-house. The general trend is toward purchasing a package; our research indicates that less than 10 percent of companies that are implementing product information management

solutions, for example, have chosen to build in-house. In regard to adopting MDM in the future, 19 percent of our respondents indicated they would build the software, while 39 percent would rather purchase it from a vendor. A significant number (42%), however, were uncertain. Yet assuming that even half of these would purchase a package, we see a strong opportunity for vendors.

When asked whom they would expect to supply their MDM product, 44 percent selected MDM vendors and 43 percent their ERP vendor. When respondents rated vendors in terms of providing the most valuable MDM solution, the top five selections were, in order, IBM, Oracle, SAP, Cognos and Microsoft. While the top three are predictable, the presence of Cognos – which currently does not have an MDM offering – is somewhat surprising. Its inclusion suggests that all the main vendors need to re-evaluate the impact of their marketing messaging.

Many organizations have not implemented PIM or CDI.

The survey results establish the importance of the master data items Product and Customer. Yet when we asked whether companies have implemented a product information management system or a customer data integration system, more than one-third of respondents said no and another one-sixth didn't know whether they have – in other words, almost half have no active interest in either type of software.

Purchasing authority usually resides with the CIO.

Nearly half of respondents (46%) indicated that within their organization, the CIO has authority to purchase MDM solutions. The other persons or groups cited most often were the CFO (13%) and the data management or governance team (16%); this suggests that vendors should not target the CIO alone when prospecting for opportunities. Further supporting this advice, a number of the interviews revealed that although the CIO may have the formal final authority, he or she often seeks guidance from others, such as the director of enterprise architecture or data management, and may even defer to them.

Customers expect vendors to help implement MDM.

When it comes to implementing an MDM solution, responses were divided about equally between “We would do it ourselves” (28%) and “We would expect the vendor to do it” (30%). The latter suggests an opportunity for vendors to serve customers. However, our interviewees expressed skepticism, noting that vendors cannot always provide the supporting skills and resources users need. In particular, interviewees considered vendor knowledge of the business processes around managing master data to be weak. One interviewee commented that vendors focus most on implementing their software and fail to realize that master data management is not just about software.

Most organizations are at an early stage of maturity in MDM.

Ventana Research has developed a methodology by which organizations can assess their maturity in various aspects of business process and technology. We have applied the model here to the overall consolidated results from our master data management survey, but it can be used equally well to evaluate the maturity of individual organizations and compare it with that of the participants in this survey.

The Ventana Research Maturity Model™ ranks maturity in four levels: Tactical, Advanced, Strategic and Innovative. In applying these categories to MDM, we define them as follows:

Tactical – The organization has no data management, definitions or standards. It is not certain whether it has a problem with consistency of data but feels a general concern about it. It manages data discretely within applications, according to rules embedded in each. Some users are becoming aware of duplication of data within an application and/or inconsistencies between applications.

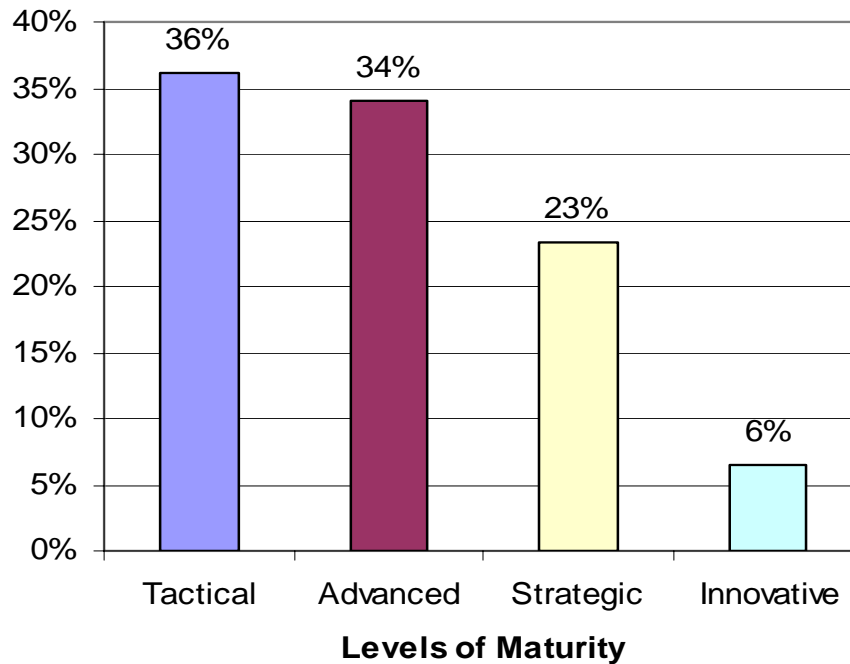
Advanced – The organization has no data management, definitions or standards. It acknowledges that it has a problem, although it is not certain of the cause or what to do about it. It is trying to take first steps to address the issues. To meet business requirements, the organization has started to deploy a form of data warehouse (at regional or local level) and is implementing metadata management rules to govern consistent definitions of data. Its enterprise reporting processes demonstrate inconsistencies across data managed in different applications.

Strategic – The organization is putting in place common data management, definitions and standards. It is aware it needs to implement MDM to resolve consistency issues. For example, it likely already has or is planning soon to implement a standard chart of accounts. It is aware also of the need to identify master versions of key business data for use across the business and its systems. It already has implemented an enterprise data warehouse.

Innovative – The organization has data standards and processes for data management and governance and has begun to shift responsibility for them to the business units. It is using an MDM system. It is developing a long-term vision for enterprise information management that is owned by the business and supported by IT. Management understands that master data management is not a one-time initiative but a continuing effort.

From the total of responses to all the maturity-related questions, we made a cumulative assessment of the overall state of maturity of master data management, as shown in the chart below. It illustrates that 70 percent of organizations we surveyed have reached only the lower two of the four levels of maturity in master data management, Tactical and Advanced. Slightly less than one-fourth are at the Strategic level, and only a few have attained the highest level, Innovative. This distribution indicates that MDM is still emerging, with relatively immature users in terms of both understanding and implementation; thus, vendors have opportunities to educate customers and extend their markets.

Figure 2
MDM Maturity Model



Source: Ventana Research

Most of the key individual findings support the average rating of a level of maturity in master data management between the lower two of the four levels, Tactical and Advanced. An exception to the general trend, however, is that organizations that have an enterprise data warehouse also have a higher level of maturity, with half of them being at the Strategic level. This supports the conclusion that MDM often accompanies or follows adoption of a data warehouse.

The maturity level in terms of understanding and awareness of MDM is Advanced (46%) - a finding supported by the relatively high proportion of respondents (25%) engaged in investigating MDM for their organization. But most organizations display a low level of maturity in terms of completed or ongoing MDM projects; here the maturity is firmly Tactical. This suggests that many organizations are still at the stage of investigating the potential of MDM.

Among the few categories where the maturity level is Strategic is the maturity of business processes for managing key business master data, which we believe is fueled by the growing amount of business reporting regulations, especially in the finance area.

What To Do Next

This research program seeks to understand the trends, needs and practices of organizations that are in the early stages of implementing or intend to implement master data management. We address the following recommendations to end users already engaged in or contemplating implementation of MDM. They are derived from the results of this research, including the one-on-one interviews, and from our knowledge of the master data management market.

Use the maturity analysis.

We advise end users to take advantage of the Ventana Research MDM Maturity Assessment™. We will work with you to carry out the maturity analysis shown in this report, assessing the position of your organization relative to the survey results. Our assessment will deliver a detailed plan showing the next steps that we recommend the organization take. If you are about to embark on implementing MDM, your responses to some of the key questions will help direct you toward the next steps. If you are implementing MDM already, the analysis will assist you to check whether you are including key aspects, such as introducing data governance or a common chart of accounts, in your program.

Calculate the costs of errors.

Our research makes clear that most organizations have made little or no attempt to evaluate the financial consequences to the business of errors, such as incorrect deliveries or invoicing mistakes, that can be directly linked to problems with master data. Such an evaluation is both an essential first step in constructing a business case for introducing master data management and an excellent way to highlight the real cost of poor quality data. We advise all end users exploring the benefits of MDM to undertake this assessment.

Start with business drivers and benefits.

Determine first the business drivers for your organization that MDM can address. Similarly, define the benefits you are seeking. These considerations also provide valuable input when constructing your business case.

Identify KPIs you will use to monitor benefits.

Once you have identified your business drivers for implementing MDM and the benefits you anticipate from doing so, the next step is to determine what business key performance indicators you will use to monitor the extent to which those benefits are being realized. Our research revealed that most organizations see improving customer satisfaction as their top KPI. Be sure to select KPIs that are important to the success of your own business.

Set criteria for selecting a vendor.

Most customers want an MDM vendor that can supply a complete solution that not only meets immediate needs – such as building consistent customer data – but will provide a foundation for tackling other areas of master data management. If a contender does not already have a complete product suite, make sure it has a clear strategy to provide the other components of a comprehensive solution. Ask for and contact current customer references from any vendor you consider, and insist that they have businesses or MDM needs are comparable to yours. If possible, seek independent advice.

Put process before technology.

Don't start by choosing MDM technology. Instead, focus first on identifying key business processes and how they need to change. Time spent up front on defining the requirements, which must be linked to your business drivers, will save you much time and money as you go forward. Any vendor that has confidence in its product will be willing to work with you during this phase to help identify what needs to be done and how.

Also before you embark on technology selection, you need to understand the degree of change in existing business processes that introducing MDM will require. For the implementation to succeed, your people and processes must be willing to accept and able to cope with whatever sort of change is indicated. You may even have to decide whether the benefits of MDM outweigh the disruption that the change will cause in your operations.

At this juncture, too, it is appropriate to consider the initial scope of your MDM initiative. In almost every case it is best to start small and demonstrate benefits early, in order to gain acceptance and wider commitment. Only when you have done all this is it time to look for the enabling technology.

Buy, don't build.

When you are ready to acquire software, we generally advise against having your IT group build a solution. The initial costs for a solution built in-house often are lower than for a commercial software package, but the expense of subsequent maintenance is likely to be much more. That said, we urge you to challenge vendors to prove that their product really is a package with widely applicable functionality that will not require substantial customization to perform in your environment. Ascertain as fully as possible what it will take to get the software up and running in the manner you need.

Build a process, not a project.

Remember that MDM entails an ongoing commitment to ensure that master data is maintained at the highest level of quality and that the business processes that support the master data management life cycle are sustained. There is no point in implementing MDM unless you are in for the long haul. Think of it as a process, not a project that begins and ends, and provide resources sufficient to keep it going.

Simplify your systems landscape.

The study reveals that most end users already have complex systems landscapes that require a flexible and adaptable MDM solution. Most successful MDM implementations rely on a service-oriented architecture for the integration and master data item synchronization layer. Increasingly, vendors are using SOA as the foundation layer for building complex applications such as ERP systems. We strongly advise end users, if they have not already done so, to develop a strategy for moving toward this form of system architecture, ideally within the next two years. While some standards exist now, they are inadequate to support the level of functionality required by most MDM applications, and therefore it's likely that for the near future this area will be dominated by proprietary solutions. When taking steps in this area it is essential to ensure that any vendor's version of SOA will support other application platforms.

About Ventana Research

Ventana Research is the leading Performance Management research and advisory services firm. By providing expert insight and detailed guidance, Ventana Research helps clients operate their companies more efficiently and effectively. Ventana Research delivers these business improvements through a top-down approach that connects people, processes, information and technology. What makes Ventana Research different from other analyst firms is a focus on Performance Management for finance, operations and IT. This focus, plus research as a foundation and reach into a community of more than 2 million corporate executives through extensive media partnerships, allows Ventana Research to deliver a high-value, low-risk method for achieving optimal business performance. To learn how Ventana Research's Performance Management workshops, assessments and advisory services can affect your bottom line, visit www.ventanaresearch.com.