Business-Focused Objectives Key to a Winning MDM Implementation

Successful MDM projects are defined by strong vision, structured business cases and a well-mapped ROI plan, all of which anticipate and overcome the obstacles that arise along the way.

During 2012, the conventional wisdom around master data management (MDM) shifted. Once seen as an IT enabler, MDM is now viewed as a critical business process enabler, one that directly impacts the implementing company’s bottom line. However, in spite of its rising operational importance, the future of MDM remains uncertain. The sad truth is, implementation success rates are substandard, and these complex projects remain a struggle for many organizations, at various stages of the process.

Our vast experience in delivering successful MDM projects leads us to believe that embracing a robust strategy early on — focused on people, process and technology and the goal of improving business effectiveness — can help push MDM projects over the finish line. This white paper discusses the operational and technical elements of a successful strategy and the ways organizations can overcome thorny challenges that threaten to extinguish early optimism and lead to unsatisfactory results.

Barriers to MDM Success

MDM proponents are increasingly concerned that if the failure rate of these programs continues to rise, the core benefits of MDM initiatives may be called into question. This will make it increasingly difficult to obtain business case sign-off for MDM programs, resulting in declining investment and projects. From past MDM implementations across industry verticals, we have found that the following six challenges typically lead to MDM project failures:

1. Budget allocation justification and ROI estimation.
2. MDM scope management and prioritization.
3. Lack of MDM readiness.
4. Complex delivery requirements.
5. Data governance and stewardship.
6. Uncertain MDM project ownership.

Technical complexities are commonly blamed as the reason behind MDM project failures; however, a more common reason is lack of business owner support. From our experience, roughly half of these projects fail due to a lack of business buy-in and executive sponsorship, arising from unclear tangible benefits and absence of measurable ROI.

In order to overcome the most common challenges, organizations need to understand the perceived critical barriers to adoption of MDM programs in greater detail.
Challenge 1: Budget Allocation Justification and ROI Estimation

The top barriers to investing in MDM programs are a lack of MDM vision, a structured business case and well-mapped ROI. In spite of strong recommendations by analysts and experts that MDM is more business-centric than technology-centric, business buy-in for MDM remains low.

Even though business leaders acknowledge that MDM can improve various operational aspects of the business, quantifying MDM’s direct impact on business processes remains a daunting challenge. Without such tangible benefits, business leaders are unlikely to embrace MDM or agree to sponsor this type of project.

A lack of business interest is evident in many analyst research studies; however, we believe that MDM is actually more of a business discipline enabled by technology, not vice versa, and that it cannot achieve success unless it is adopted and backed by the business.

Challenge 2: MDM Scope Management and Prioritization

A second challenge is determining and prioritizing the scope of an MDM program. Many believe that once the MDM vision is established as providing operational and analytical services for the enterprise, then almost every process and application in the organization becomes a potential candidate (consumer or contributor) of the MDM program. At this point, various business initiatives and projects also begin to add their own MDM requirements. However, many requirements described by the business are often not MDM requirements.

Businesses need to determine what can and cannot be done through MDM and evaluate the feasibility of the project scope early on, to ensure the success of the MDM implementation. Prioritizing requirements becomes critical at this stage to minimize conflicts. After this step, MDM can be implemented in phases, with earlier phases covering high-priority requirements and later phases addressing lower priority ones. It is extremely important to determine the overall scope of the MDM project and then logically group the requirements for delivering critical business needs through a realistic technical architecture and process migration.

Sometimes the scope becomes too large to meet the requirements. In this case, prioritization is essential. Understanding how to prioritize the scope – based on factors such as business urgency, technology implementation ease and project requirements – becomes a critical success driver for the program.

Challenge 3: Lack of MDM Readiness

The next roadblock is correctly assessing MDM readiness and then building a realistic and implementable project plan. Generally, an MDM program requires interfacing with multiple applications and processes. Due to the pervasive nature of MDM projects, many important business and technology processes require changes following the MDM implementation. These two dimensions create a high level of complexity in managing the processes and application dependencies during and after the implementation phase.

To handle these complexities, it is important to clearly identify the MDM ecosystem (which includes all the systems, interfaces, data, processes and people related to MDM) and then define how the MDM ecosystem will evolve through various phases of the entire program.

Quick Take

### Top-3 MDM Business Justification and ROI Challenges

- **Defining MDM utilities in business language and linking them to business processes:** This requires one-to-one mapping of MDM activities with business activities.
- **Evaluating the contribution of MDM to business process performance improvement:** For example, quantifying the increase in cross-sales attributable to MDM would be difficult, even if stakeholders were convinced of its benefits.
- **Measuring process improvement in terms of business KPIs** and converting the results to dollars.
Challenge 4: Complex Delivery Requirement

Another challenge to a successful MDM implementation is MDM’s complex delivery structure. MDM involves multiple applications, processes, data domains and user groups, all belonging to different lines of business and geographies. Creating a single delivery structure with such diversity poses significant complexities. A few important issues to address to mitigate these complexities include composing the MDM program team, identifying the application SMEs and business architects, understanding the external dependencies, creating a communication and governance model, defining the roles and responsibilities of all the stakeholders and understanding their availability for the project. The critical steps that ensure the MDM program meets the target operating model of the business include the following:

- **Identify workgroups**: Correctly identify and classify all important workgroups, such as data governance PMO, business PMO, source system owners, etc.
- **Define roles and responsibilities**: Define the workgroups’ roles and responsibilities, identifying the actual resources for the roles, defining the communication and escalation model and deciding how the workgroups fit into the overall delivery model.
- **Create actionable project plans**: Create an actionable project plan with dependencies, milestones, timelines, etc. after considering approval processes, infrastructure onboarding and setup requirements and other dependencies on third parties.

Due to the complexity of MDM projects’ delivery structure, an inherent risk of project failure arises from management of the project resources. A high degree of clarity on the structured deliverables can, however, mitigate this risk to a great extent.

Challenge 5: Data Governance and Data Stewardship

Data governance is another critical challenge of MDM program success. Without a proper data governance framework, the true benefits of MDM cannot be realized. A data governance framework helps create proper data policies and data stewardship structures, which in turn help increase the MDM project ROI. Data governance also helps create a culture in which creating and maintaining high-quality data becomes the essence of the organization. Proper data policies, data governance workflows and a data stewardship structure with proper roles and responsibilities not only help maintain existing data efficiently but also ensure that new data follows established standards.

Challenge 6: Uncertain MDM Project Ownership

Very often, like many other big-budget initiatives, MDM implementation programs fizzle out due to the lack of requisite support and direction from the major stakeholders and decision-makers. What is critical at this stage is the availability of guidance around MDM discovery, strategy, roadmap, governance and implementation from the business.

Also, since the scope of MDM projects is often cross-functional, if not cross-enterprise, it is difficult to coordinate the program throughout disparate parts of the organization. Lack of clear communication among different stakeholders in the organization blurs their understanding of the bigger picture behind the MDM project. Because MDM projects offer greater returns on investment when implemented on a large scale, many organizations attempt to take a big-bang approach. However, an enterprise-wide initiative, consisting of multiple waves of implementation, is extremely difficult to manage centrally without proper ownership of the project.

Data governance also helps create a culture in which creating and maintaining high-quality data becomes the essence of the organization.

Success Resides in Actionable Strategy Formulation

As is evident from the challenges discussed above, the major sources of project failure can be addressed through a well-structured and actionable strategic plan. Understanding the challenges and sources of risk is only the first step in addressing the problem. It is critical to map out the activities that can mitigate the risks during the implementation phase of the project. This means mapping each of the six challenges with the planned mitigation path of these risks (see Figure 1).

To do this, businesses need to define the activities and prioritize them based on their importance. Next, the activities should be sequentially mapped in a strategic roadmap so they can be linked to the six challenges listed above, to help mitigate risks as they arise.
This mapping of critical activities with the challenges ensures that the subsequent steps of developing the MDM implementation roadmap can be structured to minimize project risks. This enables the development of a process architecture within the MDM implementation plan that can provide a holistic solution to a company’s master data requirements.

A Structured Plan for MDM Implementation

An MDM strategy definition starts with processes, best practices, methodologies and standards to help assess the current state of data and processes before implementation begins. The overall exercise identifies gaps between the “as-is” and “to-be” states. After the gap analysis, an MDM roadmap can be prepared, defining the steps to reach the to-be state. Without a detailed roadmap, it is impossible to conduct a proper cost-benefit analysis of the MDM implementation.

Step 1: The first step requires a team of subject matter experts to evaluate the organization’s information management vision. The evaluation includes data governance and data quality business-case-building workshops, through which the organization’s actual state of information management requirement is evaluated.

Step 2: Second, through MDM vision and fit assessments, the critical business cases that can be enabled by MDM are identified.

Step 3: In step three, the possible returns on investment for these business cases are evaluated, and the overall ROI target for the MDM project is evaluated.

Step 4: Next comes the requirements analysis phase, which typically encompasses a five-step process:

- Identify key stakeholders of the project.
- Conduct workshops to finalize key requirements.
- Categorize requirements into various logical categories of data acquisition, data distribution, data management, authentication and control, etc.
- Design various requirement documents and iterate with the business to ensure all requirements are captured.
- Prepare test plans and traceability matrices for project tracking.

These steps help map the requirements with the required MDM architecture, data models, source system requirements and data quality requirements.

Mapping MDM Challenges with Solutions

| Challenge 1: Budget allocation justification and ROI estimation |
| Challenge 2: MDM scope management and prioritization |
| Challenge 3: Lack of MDM readiness |
| Challenge 4: Complex delivery requirement |
| Challenge 5: Data governance and stewardship |
| Challenge 6: MDM ownership |

- Defining the information management vision, familiarity with data governance and data quality.
- Defining the MDM vision and fit assessment.
- Developing the MDM business case and ROI.
- MDM discovery and assessment through architecture, data model, source system and data quality assessment.
- Defining the target operating model with details on the project plan, governance structure, roles and responsibilities and communication structure.
- Formulation of the data governance roadmap and implementation strategy, followed by the actual data governance rollout.
- Foundation of the data governance council and defining the data stewardship process.
- Development of a group to provide guidance on MDM discovery, strategy formulation, roadmap, governance and implementation, based on industry best practices through a one-stop-shop approach.
ments. Following a structured approach, they pave the path for creating the MDM project implementation roadmap and data governance strategic blueprint.

**Step 5:** In step five, the target operating model is detailed. This encompasses various facets of the operational processes, including a detailed plan for activities, deliverables and milestones for each phase of the MDM initiative, dependency among stakeholders, an overall program governance approach, final release and a continuance plan. This ensures that the MDM initiative is rolled out based on a feasible and measurable plan, with a specific timeline attached to it.

Simultaneously, MDM tool evaluation is undertaken. Since selection of a suitable MDM tool to fit the current master data requirements as well as future scalability is a key process for the MDM initiative, various factors need to be scrutinized before selection is completed. These factors include close mapping of MDM requirements against tool capability, scalability, ease of customization, ease of integration with the existing technology stack and total cost of ownership of the tool.

The roles and responsibilities of the stakeholders involved in the project, along with the governance and communication structure for the project implementation, are also finalized at this time. It is advisable to plan an MDM center of excellence (CoE) during this phase, which takes ownership of the entire project as the program is rolled out. The MDM CoE is a shared business service that provides guidance around MDM discovery, strategy formulation, roadmap, governance and implementation, based on industry best practices, through a one-stop-shop approach, and promotes early and tangible returns on MDM investments. It also provides end-to-end MDM support in terms of people, process and technology, necessary to meet the MDM vision of the organization.

**Step 6:** In the sixth and last stage, the sustainability plan for the MDM project is defined. This requires a data governance council to be established that can help align the business processes with which MDM will interact closely. Also, a data stewardship council is set up to ensure the ongoing operational sustainability of the MDM project. Finally, change management programs are initiated to ensure program stakeholders are aligned with the project so that the business continues to function smoothly and with greater efficiency, after the MDM project is completed.

**Final Words of Advice**

The need for advisory services in MDM becomes clear when you compare the double-digit growth of the MDM market to the success rate of MDM project implementations. MDM programs will continue to face challenges that can only be mitigated through a proper strategic initiative to create a roadmap for implementation.

All the challenges faced during an implementation necessitate a definite preparation process before undertaking an MDM journey. This will ensure the organization is ready for a successful MDM implementation that delivers the highest return on investment.

**References**

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 150,400 employees as of September 30, 2012, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

About the Author

Souparna Giri is the lead Business Consultant in Cognizant’s MDM Practice. He has over nine years of experience in the IT field, as well as rich domain experience in CRM and MDM within the banking and financial services industry. Souparna’s expertise spans MDM strategy, assessment and roadmap creation; business process modeling; data governance; business process understanding and feasibility studies; vendor evaluation; gap analysis; requirements analysis; functional specification design; and MDM implementation and program governance. He earned a bachelor’s degree in mechanical engineering from Bengal Engineering College and an MBA in marketing from Great Lakes Institute of Management. Souparna can be reached at Souparna.Giri@cognizant.com.