Master Data Management Drivers: Fantasy, Reality and Quality

A Review and Classification of Potential Benefits of Implementing Master Data Management

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ABSTRACT

By looking at the suggested benefits of Master Data Management in greater detail, you gain better understanding of the value propositions. Most importantly, you will know which value propositions lead to reasonable expectations and which objectives are feasible. Drivers that truly center on maintaining measurably high quality data result in more effective data management.
A SURPRISING LIST OF POTENTIAL BUSINESS BENEFITS CAN BE ACHIEVED AS A RESULT OF MASTER DATA CONSOLIDATION

There is no doubt that implementing a master data management (MDM) program will add significant value to the organization. Or is there?

All too frequently, we are lulled into a false sense of value that can be achieved as a result of technology. Seemingly intractable problems are expected to disappear when we acquire and implement the latest and greatest tools. However, our belief in the silver bullet is often shattered when it becomes obvious that there is no way that “technology” alone can satisfy our inflated expectations without a significant injection of hard work to prepare the organization as well as deploy the solution.

When it comes to MDM, it is worth reviewing the proposed benefits to determine whether inflated expectations are the exception or the rule. This article reviews the results of a survey of a variety of analyst reports, data management articles, independent and vendor white papers, as well as other MDM content artifacts to explore the “conventional wisdom” about the business drivers for launching a master data management program. In general, the suggested benefits that can be achieved through master data management can essentially be classified into three categories:

• Vague statements with no measurable performance metrics (such as “becoming a smarter organization”);
• True business drivers for which MDM is necessary but not sufficient (such as “upselling and cross-selling”); and
• Fundamentally good data management practices (such as “reducing inconsistency in customer data”).

This article looks at the suggested benefits in greater detail to explore which value propositions lead to reasonable expectations and which objectives are feasibly achievable as a result of master data management. We will see that the core value propositions that are measurable mostly relate to improved data quality and enterprise-wide semantic consistency. In turn, when combined with improved business processes, improved data quality and data governance can lead to better success across the true business drivers, even beyond the scope of creating a master data environment.

Conventional Wisdom: The MDM Value Proposition

A survey of a variety of analyst reports, data management articles, independent and vendor white papers, as well as other MDM content artifacts yields a surprising list of potential business benefits that can be achieved as a result of master data consolidation:

- Complements a services-oriented architecture (SOA)
- Reduces errors
- Reduces merger and acquisition costs
- Increases reporting accuracy
- Improves product and brand management
- Provides visibility into customer behavior
- Improves data usability
- Enables the ability to cross-sell and up-sell
- Simplifies design by standardizing data validation
- Provides trustworthy data
- Improves compliance with privacy legislation
- Enables people to make better decisions more quickly
- Reduces the count of vendor records
- Breaks down organizational silos
- Eliminates data inconsistency and improves accuracy and consistency
- Improves data sharing
- Increases employee productivity
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- Makes your organization a “smarter and more efficient company”
- Facilitates a drop in the number of purchase order errors
- Enables consistent interactions between systems
- Increases the quality and reliability of data
- Helps to prevent fraud
- Helps staff members use information consistently
- Provides a “single customer view”
- Improves customer retention
- Enables better decision-making
- Provides clean data for the system
- Increases revenue and customer share
- Establishes an authoritative source of information
- Helps to recognize bad customers

In fact, the proposed set of benefits continues on, and presumably, given this list of benefits, it would be criminal not to immediately deploy a master data program. However, some rational thought might shed some light on what is true added value and what is just wishful thinking…”

Peeling the Onion 1: Eliminating Vagueness

In any organization, the business sponsors concentrate on achieving the organization’s strategic objectives and demonstrate business success through measurable performance metrics. In that light, any potential benefit that is to be achieved through any technology implementation should initially be validated using the “metrics filter.” The metrics filter specifies that for any expected benefit, the current state can be baselined and improvements can be measured and quantified.

Applying the metrics filter to our list of MDM benefits immediately differentiates between reasonable expectations and vague notions that sound good but are not directly tied to any business value drivers. As an example consider this benefit: “Making your organization smarter and more efficient.” Of course we want our organization to be smart, but what does that really mean, if anything? First, do measures exist for quantifying corporate smartness? Second, how does corporate smartness contribute to achieving the organization’s strategic objectives?

The same can be said for other examples, such as “reducing the count of vendor records” or “breaking down organizational silos.” These may be desirable general outcomes, but they must be tied to some specific value driver such as increasing revenue or lowering operational costs. Without a way to quantify the business value proposition of a purported benefit of a technology, it would be difficult to justify moving forward with that technology.

The conclusion is that using vague notions as part of a business justification for the investment in MDM is ill-advised, and applying the metrics filter to our list of MDM benefits slims it down a bit.

Peeling the Onion 2: Necessary, but not Sufficient

Having eliminated the vague items, it is worth focusing on those that successfully pass through the metrics filter: real business value drivers with business value, such as improving customer retention, increasing revenue, increasing market share, or preventing fraud. These are indeed real business benefits that can be measured. And business processes that lead to improvements in these areas are definitely enhanced through the use of trustworthy master data.
A MAJOR BENEFIT IS ESTABLISHING GOOD DATA MANAGEMENT PRACTICES LEADING TO OPERATIONAL EFFICIENCY IMPROVEMENTS

But while master data management may contribute to the business value improvement, it alone does not guarantee the business benefit. For example, better customer data will help in understanding the many ways that a customer interacts with the company, but there must be good business processes exploiting a combination of customer visibility, behavior profiling, predictive analytics, and most importantly, operational integration of the above to forestall attrition and thereby improve customer retention. All the analytics and master data in the world is worthless if the call center representative is not trained in how to engage the customer.

In fact, the tendency to lean towards technology to solve business problems is indicative of organizations less likely to reap benefits. While MDM supports business process valuable benefits, instituting an MDM program does not guarantee the results. In turn, we can yet again narrow down our list and focus on the remaining benefits.

**True Value: Data Quality and Data Governance**

Now that we have narrowed our list of MDM benefits by removing the vague, unmeasurable value drivers as well as those for which MDM is not sufficient, we are left with an interesting list:

- Complements a services-oriented architecture (SOA)
- Reduces errors
- Increases reporting accuracy
- Improves data usability
- Simplifies design by standardizing data validation
- Provides trustworthy data
- Eliminates data inconsistency and improves accuracy and consistency
- Improves data sharing
- Enables consistent interactions between systems
- Increases the quality and reliability of data
- Helps staff members use information consistently
- Provides clean data for the system
- Establishes an authoritative source of information

The MDM benefits that remain all focus on either improved data quality or improvements in data governance. In fact, the remaining value drivers frame major aspects of a well-governed enterprise information management program: standardizing business term and data element definitions as part of a metadata strategy, data modeling standards, data interoperability across application systems and lines of business, data quality assurance, and stewardship and accountability.

Providing a unified view of core business concepts and streamlining the provision of high quality, consistent, and synchronized data is an outcome of master data management, and our conclusion is that one of the major benefits of MDM is establishing those good data management practices leading to operational efficiency improvements as well as increased productivity, reliable reporting, and visibility into product performance, staff performance, and customer insight.

At the same time, the savvy managers within the organization will be able to provide a “line of sight” from those key data concepts to accomplishing the corporate mission, which establishes the context for quantifying value in alignment with business processes reengineering. And once the organization is ready to change both the technical processes for data management and the business processes that rely on transparency and data visibility, those business benefits suddenly appear to be within reach.
Considerations

This suggests the need for adjusting our expectations for any technology-driven activity such as MDM. In anticipation of the ability to recognize bad customers or to improve product management, before kicking off the Information Technology procurement process for MDM tools, take a step back and ask some questions:

- Who are the business clients?
- What are their business objectives?
- What business processes are performed to achieve those business objectives?
- What data is necessary to perform the business processes?
- Is the absence of a high quality unified view of that data impeding business success?
- If so, what are the quality, consistency, completeness, and synchronization characteristics that will close any perceived gap?

Essentially, these questions help to establish the line of sight from the data to corporate mission. In turn, linking high quality data to clearly-defined business drivers deliver two advantages. The first is enabling a reasonable business justification for a technology program that is defensible, and the second is a set of clearly-defined data metrics and performance goals for master data management.

More interestingly, though, is that soliciting enterprise requirements for master data prior to attempting any data consolidation may simplify the “data mastering” process, especially if one can determine that the underlying drivers truly center on maintaining measurably high quality data. If so, then perhaps the strategic business objectives can be attained through more effective data management!
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