

## **Relationship between MDM and ADM: A Language analogy**

Over the past few years, Executives across all industries and companies of all sizes have rightly turned their attention towards managing their master data domains, in a quest to transform themselves into knowledge-driven businesses. In doing so, Business & IT leaders have turned to MDM solutions to get better understanding of their master data assets.

By implementing MDM applications to build data hubs, it was believed that the organization would benefit from having a single source of master data that ~~is~~ was authentic and authoritative, which could then be leveraged across all other IT initiatives of the organization that depended on master data to run their transactions and reports. Unfortunately, many MDM customer surveys report less-than-stellar results from such MDM projects – organizations continue to have quality and trust issues concerning master data usage in their applications. Most of these MDM hubs became and continue to become silos themselves serving only a small subset of enterprise application data needs.

How do we explain this under performance and disillusionment with MDM software? Weren't they supposed to be the panacea for all master data problems? What caused the poor ROI from these investments, in spite of starting out with promising business cases?

Rather than make this an exercise of apportioning blame, we make an attempt here to assess and understand what could be done differently to avoid similar failures with MDM initiatives. An inability to properly articulate the real contribution of a well-designed MDM system and its role in Enterprise Information Management lies at the root of this “over promise and under deliver” phenomenon. Overselling the potential of a new technology or software solution is not new in IT, and this seems to have affected even the MDM domain. Often times, it takes a small recalibration of our understanding of what a product / service can do within the context of a real or perceived need, that helps us to make informed buying decisions. Let's try to shine some light on our view of MDM and its relation to Application Data Management (ADM) by using an analogy.

### **Alphabet, Words, and sentences: The Language analogy**

It is well understood that there is a transformative power to language, to the words we choose, to the verbal expression of our ideas and feelings. Word choices have the potential to leave a powerful, lasting impression on both the speaker and the listener; the writer and the reader.

However, merely knowing the alphabet or words is not enough, since the goal of language is to help communicate higher-order thoughts, concepts and ideas that lead to actions in the pursuit of common objectives. Desired results can be achieved only when correct sentences are formed, with the help of appropriate building blocks, so that everyone understands the same, unambiguous message.

So, what's all this fuss about words, sentences, and language? Why bring it in the context of managing core information assets of an enterprise? Two reasons.

1. There is an important message in applying the analogy to help clear a misconception regarding MDM.
2. The terms used in MDM - semantic, lexicon etc., relate to language.

Let's have some definitions for setting the context. Master Data Management (MDM) is the set of enabling technologies and solutions that are used to create and maintain consistent and accurate master data for all stakeholders across and beyond the enterprise. Properly configured and deployed, MDM provides an authoritative source of master data that

- Provides a consistent understanding and trust of master data entities
- Facilitates consistent use of master data across the organization
- Is designed to accommodate and manage change

In a nutshell, MDM systems allow the creation of a **“business lingua franca”** – a medium of corporate communication to be employed within and outside an enterprise, comprising a well-defined set of words and terms with precise meanings – that enables enterprise-wide communication amongst the different business units and functions without any ambiguity and concerns regarding information quality.

In our opinion, MDM supplies the alphabets and words (master data is after all the nouns of the business) of this business language. Properly implemented, the MDM system provides a single trusted source of correct business terms and meanings to be used within the various business processes executed by the Enterprise. MDM is the “Go to source” whenever there are conflicts about structure or meaning of any business concept and its intended usage. It is the dictionary of the Enterprise – the definitive guide to truth.

## **Necessary but not sufficient**

We know from practical experience in everyday communication that alphabets are just the building blocks for communication. It is the user who applies rules of meaning and grammar to frame the right sentences to use them in the appropriate context. The onus of properly using the building blocks to communicate unambiguously is on the users themselves. Everyone understands and agrees with this!

In a similar vein, having an MDM hub with data is akin to having just the alphabet and basic words – the building blocks. The MDM system itself does not provide you the framework to help construct meaningful sentences used in business – the everyday conversations about buying and selling goods to customers, producing finished goods and components, pricing products, finding vendors, charging customers for sales etc. Some examples of the language and word equivalent in real-world business are described:

- Selection of the right item by the Sales clerk as part of creating a Sales Order using the order Management form of an Execution system like ERP. When item definitions are loosely done and a search shows many potential duplicates with similar/overlapping data values for other attributes associated with the item, the choice of the item becomes complicated.

- A Business Unit Manager trying to make a decision on rationalizing the product portfolio has several decisions to make. How much did this product make and should I continue to make this product available to customers or make it obsolete or should I increase its price because its demand is high?

These are the practical challenges business executives face every day.

So, who provides that capability to compose meaningful sentences? This is where Application Data Management (ADM) comes into the picture. A rough definition of ADM as per a Gartner analyst is “ADM hubs are those designed to manage semantic consistency of a wider range of data for a specific application or a suite of applications such that some local optimization is achieved”.

This is where consumers of master data – application systems such as ERP, CRM, SCM, HCM, Data Warehouses etc., – have to supply the right transactional context to make business operations meaningful for the rest of the participants in the information processing supply chain.

If master data is not constructed correctly (as per your desired definition of quality), ADM will not work as designed due to the absence of the right alphabets to execute the transactions. In other words, when there is trusted source for defining an item or a customer entity, one will not be able to execute transactions in the execution systems such as ERP. This cascades further downstream and analytical processes such as business reporting fail to provide the right information to support decision-making.

As they say, “Where the rubber meets the road” - this is where real business value addition takes place. Thus, to gain true business benefits of rationalizing master data, executives have to realize that the transactional and other downstream reporting / analytics systems should be architected to work seamlessly with the master data, without the need for someone or something to sit in the middle and try to transform or change the meaning of the master data to suit the needs of the application consumers.

## **Summary:**

We can all agree that alphabets and words alone in a language are not enough to communicate effectively. It is only when words using grammatical rules to form unambiguous complete sentences, that effective communication takes place. Similarly, MDM (alphabets and words) has little value in generating operational and BI reports without error free transactions that have no missing data in ERP (source application). These clean transactions created through ADM represent unambiguous communication, in the Language analogy. Miscommunication (in the language analogy) is the outcome without ADM. Unfortunately, delayed communication is as bad as poor communication for businesses that rely on timely data and hence BI initiatives have low success in those cases.

Having the latest MDM solution alone is not what brings value to the business. MDM is simply the alphabet and words. If the focus is only on the alphabet and words while underplaying the sentences and syntax and semantics, the alphabets have limited or no meaning at all. MDM will deliver business value only when viewed from the context of the applications that consume trusted master data as part of business operations.