MDM Script

Organizations today are managing vast amounts of data -- processing up to millions of transactions daily. The data includes critical information pertaining to customers, products, suppliers, employees and locations. But while information is the lifeblood of a company, it can become a severe disadvantage if not managed properly.

An organization's data comes from myriad sources -- billing, administration, ERP, front-end and multi-channel systems. Customer, product and account information resides in most. But data is typically maintained in a non-uniform way.

What results is outdated and often inaccurate information that lacks synchronization. In short, the company has no single version of the truth about its critical data. As a result, the cost to the organization is significant. Studies have shown that incorrect or duplicate customer information is costing corporations more than 600 billion dollars annually.

Customers are being exposed to broken and inefficient processes as a result of this unmanaged data. Over time, as companies introduce new products and processes, new applications with functionality to manage those processes are either purchased or built. Add newly acquired systems from mergers and acquisitions and the problem escalates. The majority of these systems were not designed to manage data – in fact -- in today's environment -- they're more suited to be the consumers of data.

Take for example CRM systems. Designed principally to provide service to customers -- the functionality within manages complex business rules and workflows for screen navigation, call handling or call resolution. Simply put, these applications feed on data. Databases -- built on fairly simple data models -- were embedded into these applications to handle customer, account and product information. The same is true for billing, ERP and data warehouse systems -- which all consist of some amount of data.

The symptom of the problem is inaccurate, incomplete data that is not harmonized across applications for a single view. And the root of the problem -- data and data function in these systems are siloed!

Much of the product, account, and customer data across these systems is considered common.

This 'common' data should serve all systems -- principal data domains that are critical to an organization, including customer, product and account. Combined, these represent a company's 'master data' -- data used by front- and back-office systems to support transactions across the entire organization. This master data represents a unique data set governed by its own application principles -- designed to ensure it is accurate and valid for the consuming application's functional requirements.

While data is the foundation of a Master Data Management solution, it can not be effective without a secondary component -- functionality to govern the data. Data on its own has no ability to maintain 'data readiness'. Or more simply – the accuracy of the data. Clearly, master data cannot stand on its own – and that is where the concept of 'management' becomes so critical in the definition of Master Data Management.

Let's consider how master data management -- both the data and functionality -- come into play in an organization's call center

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A customer calls into a company's call center to notify them of a billing address change. The customer service rep pulls up the current record for the customer, changes the address information and saves it, while the information is updated in the master data management system. But, what about changes in other systems?

MDM manages changes, event triggers and notifications across all applications, enterprise-wide. In our example of the billing address change, the billing system is recording the critical data change initiated by the MDM system.

MDM must do more than simply house the data, it must manage its use in processes across the enterprise.

In the same example, the address change triggers a notification that the customer's new location makes them eligible for a recently introduced promotional bundle. Because the CSR can see the customer owns two of the three products in the bundle, he makes the offer to upgrade and provides the discounted price.

The offer is accepted and the CSR makes an additional change to the account information, indicating a bundle purchase agreement now exists.

The billing system is now fully updated.

An MDM solution provides execution on all critical data changes and event notifications – from simple to complex. Everything from resolving a duplicate record to determining which systems get specific updates.

A solution should be modeled on a services-oriented architecture, be flexible and scalable, and have some predefined set of out-of-the-box functions to support the management and integrity of data. MDM systems have the flexibility to extend functionality to support new or additional business processes.

MDM is about two critical components -- the data itself and the functionality to ensure the data is accurate and timely.

An MDM solution addresses multiple types of data as well as various usage styles to address the way data is used in various business processes. There are three distinct styles:

- Collaborative, to create and define master data

- Operational, for real-time data access, and

- Analytical, for data analysis.

Many organizations execute all three styles, allowing them to extend and optimize how they define and use master data across their organizations. Let's explore each of these usage styles.

Collaborative MDM manages the process of creating, defining, and synchronizing master data. The definition of the master data can then be synchronized with operational and analytical systems and applications. Collaborative MDM provides a platform to aggregate, enrich, and publish definitional data and requires workflow and advanced security capabilities.

In our call center example, collaborative MDM processes occurred days before the actual transaction. Collaborative workflow functionality provided a template for developing and pricing out the bundle and determined a location factor for the offer.

In Operational MDM, the use and maintenance of master data occurs within operational processes and applications. The master data is leveraged by other systems using these services. Operational MDM can leverage and become a significant part of a services-oriented architecture to support a variety of application needs. It requires performance to handle high transaction levels and should have open integration with operational applications. Operational MDM uses pre-defined, out-of-the-box business services.

In our call center example operational MDM was used repeatedly. The CSR began by pulling up the customer record and making the address change, which was then updated to both the call-center system and the billing system. Had that change triggered other notifications for possible up and cross-sell, the alerts would also be part of an operational MDM process.

Analytical MDM provides accurate, consistent, and up-to-date master data to data warehouses. It feeds business intelligence insight data back into collaborative and operational MDM.

In our call center example, pre-determination that the customer was eligible for a bundle offer was the result of earlier analysis performed in the data warehouse. The insight was then loaded in the MDM system to trigger a real time notification.

So across any organization there are multiple consumers of data, multiple types of demands on master data, and multiple functionality requirements.

Often, all three usage styles are needed.

As companies increasingly rely on MDM solutions to provide their data infrastructure, they will begin managing their 'data lifecycles' from the data's definition, to its use and analysis. The linkages between usage styles is critical -- and organizations achieve maximum business value when all three are working together.

Linkages also exist between data domains, and this is a key aspect of an MDM solution. In order to fully optimize business processes, it's vitally important for an organization to understand the relationships that exist between data domains.

We've talked about three primary domains:

- Customer or 'party' -- which can be a supplier, an employee, a citizen or a retail or commercial customer

- Product -- a service, physical good, or catalogue, and

- Account -- which includes agreements, contracts, and accounts.

Additionally, 'location' can be a domain, representing a service location, fixed residential or a business location.

Every company deals in multi-domain transactions.

MDM's value is its ability to bring master data together and make sense of the relationships between domains.

The tools to manage these relationships, coupled with the data itself, allows companies increased flexibility with their data. Leveraging these rich relationship models allows companies to react to market needs and quickly respond to competition.

Ultimately, an organization will come to understand who their customers are, the products they purchase, the ones they already own, and where they're located.   This knowledge will be updated across the organization to the systems that will benefit from that data.

When both domain and usage styles come into a play for a complete transaction -- multiform MDM is fully leveraged -- the optimal example of how data and function come together for business value.

In our call-center example, the organization linked multiple data domains and usage styles.

- Operational MDM for real-time updates about the customers billing information

- Collaborative MDM to create the product bundle, and

- Analytical, to offer the bundle to the right customer.

In the end, multiform MDM allowed the business to deliver a seamless and successful transaction.

Styles can govern which domains get used most frequently. Trends exist in the way MDM usage styles get deployed across industries. With Collaborative MDM, product is generally used as the primary data domain. With classic operational MDM, the primary data domain is party, but organizations realistically use some product, location and account for most transactions. And with analytical MDM party is generally the primary data domain.

Financial Services and Telecoms are major users of Operational MDM.

Manufacturing and Retail deploy a lot of Collaborative MDM. And the

Government sector often uses Analytical MDM.

Bottom line, an organization must ensure it can address all critical aspects of

its domain and usage styles to meet its day-to-day needs.

With this presentation, we've shown how Multiform MDM delivers the

functionality to manage key business facts that significantly impact critical

business processes.

Multiform MDM:

- Enables companies to increase revenue and customer retention

- Reduce and avoid costs, and

- Increase flexibility to support their business strategy and meet

  compliance requirements.

It's the only solution that provides the ultimate in robust capabilities, both in

multi-domain and multi-style.

IBM offers these critical aspects of a stellar business solution with its Multiform MDM offering. You benefit from a rich product set that is tailor made to handle operational, collaborative and analytical MDM.

Coupled with IBM's best-of-breed data quality tools -- IBM Information Server --IBM MDM provides an end-to-end solution for managing critical data. As part of its Information on Demand solution strategy, IBM has designed these solutions to meet the complex and unique needs of every industry.

Ask your IBM representative about this market leading product and get ready to drive real value from your organization's critical master data

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