

Multi-Domain MDM: Can It Really Compete with CDI and PIM?

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If data is the lifeblood of an enterprise, a robust master data management (MDM) solution may well be the heart, pumping purified data downstream to vital applications and databases while simultaneously accepting inaccurate and old data for cleansing and enrichment. This “bloodstream,” as we know it, is comprised of a myriad of different subject areas, and/or domains. Though the MDM market may well consider itself conceptually and technically mature, end users still struggle to determine whether they should embrace specialist MDM solutions dedicated to supporting one subject area, or make one strategic acquisition and implement truly-multi domain software that addresses multiple subject areas.

Early on, organizations believed that MDM’s primary characteristics were its dedication to one subject area and a perception that MDM existed as a tool for managing either customer data integration (CDI) or product information management (PIM) related data. MDM solutions supporting either application were, and continue to be, defined and evaluated by the comprehensiveness of their customer or product data model and the type of system functionality required to import, consolidate, enrich, create and distribute this data throughout the enterprise landscape.

However today, multi-domain solutions can support both MDM for customer and product data all within the same solution or instance. Moreover, multi-domain MDM provides the same functionality and paradigm as above, but extends support to substantively incorporate additional subject areas including supplier, account, employee, organization and complex hierarchies. So why shouldn’t multi-domain MDM be the solution of choice?

Multi-Domain MDM: It’s (Relatively) New But What Took So Long?

The acceptance and purchase of a new MDM solution - much less, an organization’s first MDM solution - is a painstaking process because it often involves a culturally divisive process with numerous stakeholders.

Psychologically speaking, CDI and PIM benefit from their track record and familiarity in the marketplace. MDM PIM products began to emerge in the early 2000s. Only in the last few years has multi-domain MDM solutions emerged as a viable alternative to single-domain software, with the mega-vendors being slow in the development, marketing and acquisition of multi-domain products. Even the basic descriptions are problematic, as CDI and PIM solutions instantly imply their use cases where multi-domain does not.

Looking Under the Hood

So, can a multi-domain MDM solution support both CDI and PIM? Let’s consider a high-level view of functionality that has been shown to contribute to a solid and effective CDI solution:

- Pre-templated data model of customer and/or counterparty
- Support for appropriate architectural styles of MDM
- Address validation
- Matching/cleansing as part of data acquisition
- Adaptors to industry-specific data feeds such as Dun & Bradstreet
- High volume processing that can support tens of millions of records that are typical requirements of B2C organizations

Specific adaptors for data cleansing, address validation and custom acquisition are integral pieces in the CDI paradigm. For a multi-domain MDM vendor to successfully compete with specialist CDI vendors it would have to incorporate these tools and one or more prescribed model templates. Complicating the choice for multi-domain vendors is the fact that certain CDI functionality is not necessarily reusable for other subject areas.

Nonetheless, the standard templates, high volume processing, and generic cleansing capabilities of a good CDI solution can be used in a subject neutral context and therefore, are not limited only to CDI. Let's consider the following PIM configuration:

- Product attribute standardization
- Flexible and extensible model support
- Support of unstructured constructs
- Flexible data interchange both inbound and outbound
- Strong workflow capabilities

A multi-domain solution would not be expected to support, out-of-the-box, product attribute standardization, as this requires the integration of a data quality solution specializing in product data cleansing. However, flexible and extensible model support and support of unstructured constructs, are absolutely key for a successful multi-domain MDM solution.

Again, as with CDI, support of unstructured data, strong data interchange and sophisticated workflows are not in any way the exclusive province of MDM for PIM.

Keep in mind that the decision of multi-domain versus single domain is only one scoring factor in selecting an

MDM strategy, and it may not even be a decisive one. Individual vendor solutions have their own strength and weaknesses. Still, it makes sense to step back and actually evaluate which of the system qualifications in the CDI configuration is exclusive to the management of customer data, and which functionality is shared by both single and multi-domain approaches.

So does the multi-domain paradigm suggest "Jack of all trades, and master of none?" Does the concept provide too much accommodation? Is it too flexible or too open? Not surprisingly, the answers to these questions are vendor-driven. Today, there is the concept that a multi-domain solution would also provide add-ons, or optional modules supporting specific industries or domains, while retaining its multi-domain support and architecture.

MDM is still evolving, as is its mission in a continuously changing enterprise data management landscape. All of which suggests that in the future significant developments for multi- and single-domain systems will continue to be outwardly directed by emerging enterprise technologies, changing business conditions and - of course - the need to acquire a new competitive edge.

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