ENTERPRISE DATA MANAGEMENT & LEVERAGING SAP’S EIM SOLUTION

Preparing for ERP, Customer Insight, and Merger & Acquisition Activity

AN EXECUTIVE SUMMARY

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Utopia, Inc. is a leading services and consulting firm dedicated exclusively to enterprise data lifecycle management. As an established consultancy we require the right enabling technologies to help us execute effectively. SAP BusinessObjects’ enterprise information management (EIM) solutions (SAP® BusinessObjects™ Data Services, SAP NetWeaver® Master Data Management and SAP Archiving and SAP Document Access applications by Open Text) will help you get the most from your investments in business-critical data management and vastly reduce data maintenance costs. These technologies are platform neutral, open, and extensible to support an SAP and legacy application landscape.

Consider the following areas as possible drivers for an increased focus on the creation and maintenance of mission critical data:

- Accelerating enterprise resource planning (ERP) deployments
- Rolling out an enterprise data warehouse (EDW)
- Streamlining and consolidating mergers & acquisitions (M&A)
- Enabling a “single view” of the customer

This paper will help you understand these drivers and the importance of your data as a strategic asset. We will describe the steps and approach used by SAP and Utopia to help you realize a key business goal for the creation and maintenance of clean, accurate, and relevant master data in your company.

Master data is best described as:

“The information required to create and maintain an enterprise-wide “system of record” for your core business entities, in order to capture business transactions and measure results for these entities.”

Over the past few years, we have seen a trend in which organizations are looking to the quality of their master data as the next best way to optimize their business processes. Unified and accurate data allows for better business process integration, timely decision making, and streamlined process execution. Therefore, it is imperative to achieve information consistency across the business and IT landscape.

ACCELERATING AN ERP IMPLEMENTATION

A frequently overlooked aspect of any new ERP deployment is the integrity of the data, which the new ERP or business application executes against. ERP projects typically involve the migration of data from one or more systems into the new ERP. Historically, the data migration efforts associated with ERP implementations suggest that they are fraught with risk, often delay go-live events, have costly budget overruns and result in lots of finger pointing. All too often, data migrations are thought of as a simple data transfer between systems. In the final steps before an ERP go-live, multiple silos of data are hastily copied into the new system creating a new set of “internal data silos.” Indeed, the business impact can be quite significant and detrimental to business continuity when proper data management is not applied during a migration. Without a thorough review and understanding of the business processes and reporting considerations of how the data will be consumed, it is likely that history will repeat itself.

The data migration process should encompass all areas of the business that consume the data to ensure it is properly populated in the new system. In essence, the effort to implement data must be orchestrated with sound business processes, tables, and field mappings. Additionally, the data must be validated and of business ready quality.

Aside from the “excel spreadsheet wars” where decisions are made or not made based on whose report you trust; the foundational master data which is consumed by ERP and other enterprise applications must have integrity in order to support business continuity and provide reporting integrity.

“Systems are temporary, the data lives forever.”
– Jolene Jonas, Intel Corp.

The question remains, “are you leveraging data as an asset?”

How quickly can your organization obtain accurate information on the following?

- Identify your top ten customers by revenue and product?
- Understand corporate spend with your top vendors in order to negotiate discounts?
- Obtain a clean and non-redundant set of products with consistent pricing within their product families?
- Create a consistent material master across all factories?
The challenge of course, is that master data is often stored in multiple and disconnected systems/ databases. There can even be data management issues with companies implementing a new ERP, especially companies with multiple geographies on disparate instances. Unmanaged master data is notoriously inaccurate, full of discrepancies, incomplete, and leads to poor business decisions. Effectively, your applications and reporting tools are only as good as the data they execute against. As illustrated below in Figure 1, poor master data quality exposes companies to an array of business risks:

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Figure 1: Risks caused by poor master data quality
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“Your applications and reporting tools are only as good as the data they execute against.”
SUPPORTING THE DATA LIFECYCLE

Customers have given us clear feedback that the initial task of data cleansing has limited value unless it is followed by governance processes that ensure the future integrity of the data. Not only does SAP provide the data management platform for consolidation, cleansing, and syndication of all master and reference data; they are the world leader in facilitating business processes. SAP is unique in having the tools to define and execute a business process that happens to involve, almost by definition, the creation and management of data. The ability to enforce data standards and apply governance through SAP enabling technologies such as SAP® BusinessObjects™ Data Services (SBO Data Services) and SAP NetWeaver® Master Data Management (SAP NetWeaver MDM) allows companies to gain greater control over their data and ensure process and reporting integrity.

Rather than a onetime cleansing exercise, we suggest building in a process for data integrity and governance to manage data as an asset. The appropriate flow would be for data to be created via a data workflow, cleansed, normalized to a standard taxonomy, validated by data trustees, and then imported into the central repository as a “single version of the truth.” Once complete, the master and transactional data can be leveraged and exported to your data warehouse or enterprise reporting solutions. Without this discipline and the supporting technologies, data quality will degenerate over time and undermine the effectiveness of business processes and trust in business intelligence/reporting.

With an enabled and enforced enterprise data management (EDM) strategy, operational and analytical excellence can be obtained. It is important to note that data does have a lifecycle and SAP provides a significant capability along with their partner, Open Text, to support:

- Data archival
- Automation of your data retention policy
- Legacy decommissioning scenarios
- Enterprise content management (ECM)

SAP Archiving and SAP Document Access applications by Open Text allows for the management of unstructured content as well as facilitating transparency to historical transactions and tying enterprise content, such as documents, images, schematics, or diagrams to SAP business processes. When considering a data strategy we recommend a holistic approach that incorporates people, processes and technologies across the data lifecycle from creation through archival.
COMPLIMENTING AN ENTERPRISE DATA WAREHOUSING PROJECT

Effective business intelligence (BI) enables a company to make “good quality decisions.” A “good quality decision” is one that brings a company closer to its business goals. The problem is when you try to leverage global spend analytics and your report shows that your top five customers are HP, H-P, Hewlett-Packard, Hewlett-Packard Inc. and H-P Corp.!

There are hundreds of detailed examples of how effective BI improves decision making including: better operational efficiencies; fewer report backlogs; root cause analysis; improved contract negotiation (spend analysis); more effective customer promotions and marketing campaigns; an empowered sales force; improved customer satisfaction, loyalty; and faster and more adaptive supply chain response to market change, to name a few. In all cases business performance improvement and dollar value can be quantified through use of metrics. It is further possible (and recommended) to link these metrics to the quality of the master data objects supporting business processes or transactions.

Consistent master data management (MDM) has a direct correlation to BI effectiveness. It is understood that a business priority is to improve BI for effective decision making and actionable reporting. SBO Data Services and SAP NetWeaver MDM achieve this by ensuring that your BI/analytical and reporting tools have consolidated, up-to-date, accurate, relevant, and complete business information. To put in other words, “a single version of the truth.” Without these technologies, data tends to be scattered, out of date, inaccurate and not always relevant which makes it unusable for BI. Further, these technologies are enforcement vehicles for your data governance strategies.

RISKS: EDWs can be exceptional at providing cost savings, greater performance and improve reporting efficiencies, however, without data governance and data management, the EDW is often fraught with poor, inaccurate and in-actionable data. Therefore, it is critical to manage the quality of the data going into the EDW and maintain its integrity. “Garbage in – Garbage out,” as the expression goes.

“I don't care about the report; I care about the integrity of the report”
Support and Streamline Mergers & Acquisitions

Leading companies look to the quality of their master data as the next best way to improve their ability to optimize their business processes, support changing business models, and accelerate integration of their businesses via mergers and acquisitions (M&A). With many clients undergoing expansion and M&A, their IT environment has become more heterogeneous; effectively, the business case for data consolidation is clear. With symptoms of poor data quality and data spread across many applications, the ability to quickly adapt the IT environment to business changes is hampered.

Along the way, consider the benefits of integrated and accurate data across your organization. To support an effective M&A activity, master data must be made consistent, reliable, and available for effective business process enablement. The clear value of a “single view” of your master data is the aligned synergies that can be leveraged through a consolidated view of your customers, suppliers, materials, and even chart of accounts and financial data. The end result is the ability to deliver viable reporting and analytical insight to your newly merged organization.

“During M&A, consolidating the master data is the first step so that business intelligence tools can produce consistent and reliable information for new business synergies.”

The magnitude of executing a post-M&A integration in an enterprise solutions environment is often grossly underestimated. This is because the process is often considered primarily an IT integration project rather than a strategic business consolidation. One of the biggest inhibitors to achieving economies of scale and synergies are the conversion and consolidation of the disparate operations at a data level. This is likely the costliest part of the consolidation process if not done properly. The sooner it can be completed, the faster the merged entity can unlock shareholder value. Being able to identify the value and synergies of your merged companies is locked within your data; and that value is determined by your data integrity. But this process will not be possible without a solid foundation of common master data; SAP NetWeaver MDM and SBO Data Services provide the integrated technology foundation to enable faster M&A's, data and system consolidation and better post merger integration success.
ACHIEVING A “SINGLE VIEW” OF THE CUSTOMER

Customer intimacy – Customer Insight – Cross Referencing Buying – Customer Profitability Analysis – Improved Promotions and Marketing Campaigns - Empowering your sales force – Improved Customer Satisfaction – Customer Support – Customer Loyalty … these are the cannons of value associated with a “single view of the Customer.”

Traditionally, organizations used accumulated knowledge and rule of thumb to do this. The reality today is that with increased business volume and complexity, compliance drivers, inherent bias, decision traps and time to accumulate knowledge, this approach is increasingly non-viable. In order to achieve these goals, applications and reporting tools must have a common denominator that is accurate, relevant and actionable; that denominator is consistent customer master data.

Consistent customer master data has a direct correlation to BI effectiveness. SBO Data Services and SAP NetWeaver MDM achieves this by ensuring that your transaction applications, BI/analytical and reporting tools, have consolidated, up-to-date, accurate, relevant, and complete customer business information. Without these enforcement and enabling technologies, data tends to be scattered, out of date, inaccurate and not always relevant, which makes it unusable for decision making.

Therefore, data must be managed as an asset. Customer data must have established standards and must be captured via a designed workflow and validation process to ensure “consistency for consumption” across your diverse application landscape. Experience shows that silo-based customer creation is not serving the requirements of the enterprise. Customer data must be standardized, checked for duplicates, and enriched with content at the point of creation. For example, the relevant financial data is just as critical to the customer master record as are the ‘bill to’ and ‘ship to’ fields. A central customer master creation process and data repository can properly manage all the related fields, attributes and hierarchies for downstream consumption by SAP and non-SAP applications. The data creation process for the customer object must capture the appropriate fields, be mapped to groups, and related hierarchies. This will enable the insight provided by the analytics and executive dashboards to be actionable. SAP provides the enabling technologies to enact your data strategy to a real-time process in support of a “single view” of the customer.

From this central master data hub, data can be distributed to subscribing applications, and can ensure that the proper data is mapped to deliver business process execution. Once data is consumed by your applications the corresponding transactional data can be leveraged in a consistent fashion for business reporting and deliver analytics with integrity. And finally, customer value has a lifecycle. So retention policies can be automated and enforced for compliance or transactional continuity - you can then execute your archival strategy with SAP Archiving application by Open Text.
SOLVING THE PROBLEM FOR THE LONG TERM
Leveraging an Enterprise Data Management Framework

According to a recent Americas SAP User Group (ASUG) study, “data management” is often identified as the root cause of problems in process improvement projects. Data issues are often unanticipated on projects, which are typically resource constrained, and are addressed with costly workarounds or patchwork solutions which are fragile and short-sighted. Data quality solutions require a comprehensive approach, Figure 2.

Figure 2: Comprehensive approach to enterprise data management

According to the benchmarking study, SAP projects that apply a comprehensive approach to EDM best practices outperform those who do not. The five dimensions of the EDM best practices are the most reliable method for achieving consistent results.

Data management issues are recognized barriers to process improvement efforts, but few businesses attempt to understand or value the impact. Businesses that established data quality targets and analyzed cause-and-effect were more successful in achieving full scope and value for their projects. Establishing effective data management is a clear opportunity to improve project value and the enabling technologies from SAP, which support the execution of your data strategy.

“93% of process improvement projects were significantly impacted by data problems”
– ASUG Benchmarking Study 2008
LEVERAGING ENABLING TECHNOLOGIES

SAP provides the most comprehensive integrated solutions that address EIM. SAP uniquely understands the balance between business applications, reporting solutions and the data they execute against. SBO Data Services solution addresses the data quality and data integration elements and is integrated with SAP NetWeaver MDM. These integrated solutions support the notion of “get it clean/keep it clean.” In consideration of your architecture, these solutions are platform neutral and support SAP and non-SAP environments. Further, they are integrated with business content with SAP ERP, SAP® BusinessObjects™ Enterprise reporting solutions, SAP’s enterprise data warehouse and SAP Archiving and SAP Document Access applications by Open Text. This capability will be unique to SAP due to their singular position as the only company that can deliver data services, master data, enterprise content and industry specific transactional processes, and enterprise reporting in one integrated platform.

The solutions share a common architecture, workflow, integration roadmap, and data flows that enable greater total cost of ownership (TCO), reduce learning curves, and promote adoption and repurposing technologies for multiple scenarios. They also support the enterprise data lifecycle roadmap and framework (Figure 3) – managing data as an asset from creation through archival.

Figure 3: Utopia’s Enterprise Data Lifecycle Management Framework
SUMMARY

Ultimately, if an enterprise is struggling to identify the ways in which efficiencies can be gained through ERP, customer data integration (CDI), EDW or M&A activity, it is Utopia’s position that the foundational master data is a logical starting point. EDMs key tenant is that data is a business asset that intersects and pulls together data throughout the people, processes, and technology of an enterprise. This data must be designed, used, and governed to add maximum value to organizations.

Achieving an optimized landscape demands that people, processes, and information are all in sync, and this includes your extended supply chain and business partners. The reality is that without the right data and information your best efforts and decision making abilities are often compromised. Simply stated, your ability to meet business goals and metrics are often jeopardized due to the integrity of your data.

The sustainable management of data via an EDM strategy will not only support your project’s event, but also yield significant process improvement and financial benefits over the long-term by leveraging data as a corporate asset. And while technology by itself is not the only answer, we suggest that when combined with people and processes; technology should be leveraged for the enablement, enforcement and execution of your EDM strategy.

UTOPIA CORPORATE PROFILE

Utopia, Inc. is a global services and strategy consulting firm focused exclusively on Enterprise Data Lifecycle Management (EDLM). EDLM is an umbrella strategy that combines business processes, people, and applied technologies to manage and improve the lifecycle of data across an enterprise (from creation through archiving). Net outcomes of EDLM are business process optimization, hard dollar savings and reporting integrity.

Utopia’s offerings range from enterprise data strategy and systems integration to data migration, data quality, and data governance services. We help our clients reduce overall costs and improve efficiencies by enabling them to manage and sustain (structured and unstructured) data as a key asset.

We serve customers in a variety of industries including: oil & gas, utilities, process and discrete manufacturing, consumer packaged goods, transportation, engineering and construction, distribution, telecom, healthcare, and financial services where large volumes of data often exist in disparate systems, multiple locations and inconsistent formats.

We are an approved SAP®, SAP® BusinessObjects™, SAP Consulting and Open Text partner with satisfied customers worldwide. The company is headquartered in the Chicagoland area with offices in Dubai, Singapore, and an ISO 9000:2001 certified center of excellence in Bangalore.