One Version of the Truth:

How Effective Data Management Can Help Your Organization Unlock Its True Potential

Overview
Companies today have complex organizations and stretched supply chains, face intense competition, and have demanding customers. Every day, executives and their support organizations sift through large amounts of non-standardized data trying to get to “One Version of the Truth” that will enable them to keep their organizations functioning and help them make strategic decisions. Our experience tells us that many companies are not adequately prepared to address operational and strategic challenges due to their inability to manage massive amounts of data across their diverse organizations.

Examples of poorly managed data include:
- Outdated and inaccurate product data hampers an organization’s ability to analyze sales trends, view product performance across geographical boundaries, forecast sales company-wide, and rationalize its SKUs.
- Fragmented supplier data leads to an inability to view spend data across organizational components, suboptimal procurement decisions, and less-productive vendor relationships. Companies spend more money than required on
purchases because they can’t adequately analyze what they are buying and who they are buying from.

- Scattered customer information leads to poor sales effectiveness (e.g., an inability to drive further sales), lower-than-desired customer satisfaction, less-than-optimal customer retention, and companies “scrambling” to address customer service and informational requests.
- Non-standardized data input hinders the performance of IT systems and data integrity.
- Misaligned information impedes strategic decisions on innovation and growth.

Capgemini believes, based on extensive implementation experience and research, that organizations require additional focus on data improvement in order to arrive at “One Version of the Truth” and improve their decision making processes. We further believe that companies can implement a series of business and technical improvements in order to standardize and organize data to make effective decisions.

The following graph illustrates the relationship of company transaction systems to what Capgemini believes are the “pillars” of “One Version of the Truth”: Master Data Management, Workflow & Process Management, and Analytic & Predictive Modeling.

- **Master Data Management** - Systems, governance processes, and organizational constructs designed to standardize and govern data throughout an organization.
- **Workflow & Process Management** - Systems that apply standard, governed, and system-controlled processes that support the governance of master data.
- **Analytical & Predictive Modeling** - The process and business intelligence applications that enable companies to analyze master and transactional data to drive effective decision making.

Implementing the individual “pillars” will result in organizations being better able to leverage both master data and transactional data in managing opportunities and challenges both internally and externally. To enable even greater success, Capgemini recommends that organizations implement the entire solution, which will make them better at capturing, maintaining, analyzing data “One Version of the Truth” can help companies obtain data and information that is timely and accurate, and allows executives to make well-informed decisions to improve the bottom line of their organizations.

**What are the components of “One Version of the Truth”?**

The following briefly describes the pillars/components of “One Version of the Truth”. Each can be implemented individually, however, in order to obtain the most value, Capgemini recommends implementing them as part of a program because they provide the most benefits when working together.

**Master Data Management (MDM):**
Master Data is foundational, non-transactional data that defines a
business entity based on an agreed-upon view across the organization. Master Data is key business information about major business entities such as products, customers, suppliers, employees, and financial accounts.

Based on our experience, we find that the “norm” is for companies to have master data stored in different systems across organizations without central control. This leads to duplicate and inaccurate master data that results in issues down the line when companies seek to analyze results in order to make decisions. The goal of MDM is to ensure timely, accurate and consistent data capture, and guarantee data integrity at a single point of reference. Different views of this singular data can then be made available to both internal and external users based on their business needs and requirements. Having a good MDM system also accelerates integration in the case of mergers and acquisitions. In our experience with Florida Crystals Corporation, one of the largest sugar marketers in the U.S., implementing a robust, centralized Master Data Management system enabled faster integration of Domino Sugar. It also opened the door for further cost savings in the area of corporate spend and materials planning.

**SAP NetWeaver Master Data Management (MDM) 5.5** provides the flexibility, process, integration and platform to meet the needs of complex data unification requirements.

**SAP MDM Consolidates** data from disparate sources - those targeted for reduction and/or for new visibility as during a merger or acquisition - across all major object types: vendor, product, customer, supplier, etc.

**SAP Master Data Consolidation** effectively aggregates master data from various SAP and non-SAP sources, with de-duplication and normalization as well as pre-integration to business intelligence. Master-data consolidation enables organizations to search for master data across linked systems, identify identical or similar objects spread across the local systems, build consolidated master data, and provide ID mapping for unified, company-wide analytics and reporting.

A complimentary service to MDM is Digital Asset Management (DAM) which is the process of streamlining the acquisition, storage and retrieval of digital content such as audio, video, and photo files. DAM involves “attaching” these assets to master data in order to provide access to digital media when accessing and reviewing master data. The benefits of DAM are an increased ability to pull and share digital content, thus reducing the cost and time of creating, maintaining and accessing it. SAP MDM supports the use of all forms of data, structured and unstructured.

**Workflow & Process Management (WPM):**

WPM is an intersection between Business Process and Information Technology. We define WPM as a “Master Process” that manages all processes. WPM uses tools and techniques to analyze, design, implement and control business processes built around humans, organizations, applications, documents, and other sources of information. Organizations without a robust WPM system can have data and information that is isolated and inconsistent across the organization. The use of WPM allows the creation of end-to-end processes that tie all information systems and business units together. Some of the benefits of WPM include:

- Better allocation of personnel and other resources
- Better tracking of performance metrics
Increased organizational flexibility and better change management

Improved productivity due to more efficient process management

As depicted in Figure 1, WPM is foundational to transactional systems, Master Data Management, and Analytical & Predictive Modeling.

In connection with MDM, WPM provides controls to enable the establishment of clean, complete, and accurate Master Data. It starts with the data inception process by routing data requests to appropriate users, continues within the data process by ensuring that the appropriate signoffs are obtained, and helps manage the data finalization process by providing a means by which final data is added, final approval is obtained, and data is posted to the appropriate databases.

Poor workflow and process management leads to low quality, inaccurate data and introduces data compliance issues. Conair Corporation, a global producer of trend-setting products, came under pressure from its largest customers (national retailers) to become Global Data Synchronization (GDS) compliant. When Capgemini was called in, Conair’s master data had errors in 99% of its products. The project team developed new business processes and workflows for product creation and maintenance that were adopted across the entire organization. As a result, Conair became GDS compliant and developed a roll-out strategy for all customers. But, most importantly, Conair began to develop a culture that recognized the value of leveraging process, data and system commonality. WPM clearly adds value in ensuring that established governance models are adhered to and data is clean and consistent throughout an organization.

SAP MDM features a robust workflow functionality that allows users to orchestrate a series of operations that include user tasks, validations, and approvals to automate business processes at the data management level.

Analytical & Predictive Modeling (APM):

APM encompasses a variety of techniques that include statistical modeling and data mining to make “predictions” about future events based on historical data. Such predictions rarely take the form of absolute statements, but offer business intelligence that provides strategic direction to the business. APM helps organizations gain a better understanding of specific actions that customers are likely to take, as well as the forces that drive those behaviors.

APM can aid executives in the process of decision making in order to improve a company’s competitive position in the marketplace. APM can be applied to many areas, including demand forecasting, customer segmentation, customer life-time valuation, credit risk analysis, product churn analysis, and cross-selling/up-selling opportunities. Benefits are demonstrable in terms of key performance indicators.
such as campaign response rate, customer retention rate, and revenue enhancement.

O2 Ireland, a large European mobile communications company, wanted to increase market share and sales through traditional direct marketing programs and deliver a personalized experience for each customer. As a partner, Capgemini recommended developing a best-in-breed inbound real-time marketing solution across multiple channels, supported by analytical and predictive modeling. It would help determine the best marketing product for a customer and provide opportunities to cross-sell, or up-sell other wireless services. Predictive analytic models resulted in 100% improvement in conversion rates for some campaigns and reduced prepaid customer churn to single-digit for target groups.

**Benefits**

All companies can benefit from “One Version of the Truth”. A company that implements “One Version of the Truth” will understand its business better, be more prepared to react to changes in its business environment, and be more intelligent about strategic moves that they can make. Specific benefits that Capgemini has seen in implementing “One Version of the Truth” include:

- Standardization and Simplification of Organization and IT Processes:
  - Streamlined operations that minimize costs of production
  - Improved quality of outputs of products and services
  - Increased speed of implementing complex organizational changes like mergers and acquisition integrations
  - Reduced need for, and elimination of, disparate IT integration systems to exchange data within organizations
  - Improved control over data security

- Improved Global and Integrated Applications:
  - A single organizational view across products, channels, operating companies, and geographies

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**Figure 2: Deployment**

[Diagram showing Lifecycle Management: Discover, Consolidate, Manage, Leverage, Event Change: Business Change causes the need to iterate]
- Improved quality of reference data
- Increased ROI on business projects through better data analysis and scoping

- Improved Supplier Consolidation and Collaboration:
  - Improved purchasing power through better understanding of aggregate spend by product and category
  - Improved supplier collaboration leading to higher-quality products
  - Increased internal ability to create projects through knowledge re-use and sharing of ideas

- Increased Enterprise Agility:
  - Increased responsiveness to market dynamics through trend analysis
  - Increased organizational speed in the strategic and tactical decision-making process
  - Decreased lag times in implementing organizational and business unit process changes
  - Improved ability to manage staff along with a reduction in redundant costs
  - Improved ability to respond to customer and regulatory requests for information

**Implementation and Approach**

Because of the complexity in implementing an end-to-end “One Version of the Truth” solution, Capgemini has developed a standard approach that can be tailored to an organization’s needs. There are four key steps to this approach:

1. **Discover**—Understand what currently exists and generate ideas around relationships within an organization’s data
   - Define requirements and build business case with executive support
   - Gain alignment through the use of Capgemini’s award-winning Accelerated Solutions Environment (ASE)
   - Identify the key users, business unit, and company relationships
   - Select the project team and business unit to start implementing the solution

2. **Consolidate**—Develop a logical model based on insights from the Discover phase
   - Develop and test the logical model
   - Confirm the model internally with executives, business users, and IT personnel and externally with customers and suppliers, as appropriate

3. **Manage**—Test the model in a physical environment
   - Define the physical and technical requirements of the model
   - Develop and test the physical application
   - Transfer the test business unit data into the new system / application(s)

4. **Leverage**—Utilize test implementation insights to increase the productivity of the entire system
   - Identify best practices and key insights from test model to optimize and improve deployment schedule
   - Deploy “One Version of the Truth” model company-wide
Bringing it all together
Do you believe in your organization’s data integrity? Are you able to make operational and strategic decisions confidently? Are you able to effectively manage your internal and external business environments using data? Are you ready to take your organization to the next level?

Capgemini’s "One Version of the Truth" can guide you in answering these questions and help you capture, manage, and draw insight from your data. To capture, one must build a robust Master Data Management system. To manage, one must create an effective Workflow & Process Management system. To draw insight, one must implement a rigorous approach toward Analytical & Predictive Modeling. Each component compliments the others and prepares organizations for today’s fast-changing business environment.

Capgemini develops customer-specific “One Version of the Truth” solutions for the Consumer Products & Retail, Automotive, High Technology, Life Sciences, Financial Services, Manufacturing, Telecommunications, and Government industries. Our goal is to help clients increase shareholder value by understanding their customers, collaborating with their suppliers, leveraging emerging trading communities, and making use of information within and across company and geographic boundaries.

Capgemini and SAP: The Collaborative Business Experience
As a team, Capgemini and SAP provide distinguished technology services to their clients. Capgemini has collaborated with more than 1,900 of its global clients in implementing nearly 4,000 SAP projects in all major industry sectors over the last 17 years. The Capgemini-SAP relationship has a demonstrated track record providing successful, client tailored solutions that meet or exceed client expectations. Capgemini’s SAP consultant’s average eight-plus years of experience with cross-industry SAP solutions. Capgemini has recognized expertise in key strategic areas including SAP Business Suite, NetWeaver – Enterprise SOA & EAF; Human Capital Management; Enterprise Performance Management; Corporate Performance Management; SAP Upgrades; Master Data Management; and preconfigured, industry specific “Ready-to-Run” solutions. Capgemini’s Rightshore® capability and Distributed Delivery Framework affords clients the opportunity to leverage centers all over the world to support SAP projects.

Our SAP Experience
Capgemini’s experience with SAP stretches back to 1993, when SAP first designated Capgemini as a Leading Global Integration Partner. Capgemini has been the first, and often only, implementation partner for many of SAP’s strategic initiatives, and was the first to create a NetWeaver roadmap and recently assisted SAP in the development of their Enterprise Architecture Framework. Together, Capgemini and SAP will continue to help companies expand their leverage of the SAP Business Process Platform to realize increased business value from their enterprise solutions and free their energies to drive market innovation. Whether its business case development or systems integration, Capgemini leverages proven methodologies to deliver value based solutions.
Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working—the Collaborative Business Experience®—and through a global delivery model called Rightshore®, which aims to offer the right resources in the right location at competitive cost. Present in 36 countries, Capgemini reported 2007 global revenues of 8.7 billion euros (approximately US$13 billion) and employs over 83,000 people worldwide.

More information about our services, offices and research is available at www.us.capgemini.com.