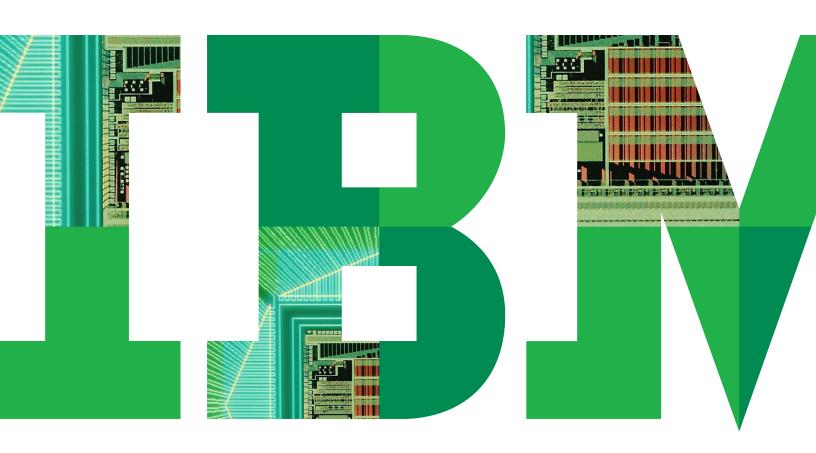
Driving information-led business innovation with IBM InfoSphere Information Server





Executive summary

In a perfect world, business information would be neatly organized into a single, coherent information infrastructure, easily accessible by the right people, processes and applications at the right time throughout the organization. And businesses would be able to deliver and consume information on demand. Unfortunately, the situation that exists in most enterprises today looks very different from the perfect world.

Businesses change as they grow; they go through reorganizations, mergers and acquisitions, tactical quick-fix projects and new system implementations. Departments continually add new data and content sources, and business units deploy their own applications with their own databases and repositories. Some information sources end up isolated from the users and applications that could benefit from them most, while others have questionable value because they are inconsistent, of poor quality or are unclear.

But at precisely the moment when information sources are growing more numerous and diverse, the need to integrate and access disparate information sources in consistent, trusted and reusable ways is becoming even more critical. Today's enterprises are rapidly extending their boundaries to encompass global suppliers, partners and customers. Meanwhile, regulatory compliance, information governance and risk control initiatives are getting more focus than ever before.

This white paper identifies a shift in corporate thinking about the value of trusted information to the organization and outlines reasons why this shift is occurring. It explores common information integration challenges and outlines a list of key characteristics needed for an effective information integration solution. Customer scenarios illustrate how these information integration challenges play out in typical business settings. And finally, this paper shows how IBM® InfoSphereTM Information Server can address information integration challenges and help companies achieve maximum business value from key business initiatives.

Introduction

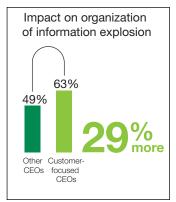
The corporate view of information architecture is changing. Successful businesses realize that information is a corporate asset and must be managed and governed just like any other asset that moves through the organizational supply chain. Delivering trusted, actionable information to decision makers at the right time is essential for business innovation in the global marketplace. Companies that effectively leverage information can improve their processes, collaborate better with partners and customers, and reduce risk.

Several business drivers are increasing the importance of information availability:

- A growing need to provide decision makers with a hub for actionable information (Data warehousing)
- The value of knowing the most profitable customers, products and business locations (Master data management)
- The efficient delivery of trusted information to the analytics infrastructure (Business intelligence)
- Cost-reduction initiatives focused on hardware and software consolidation (Infrastructure rationalization)
- The need to integrate SAP information with other enterprise/ departmental applications (SAP information integration)
- An emphasis on information governance practices for risk control and compliance (Information governance)
- The need to tie demand signals directly into supply chain replenishment (Business transformation)

All of these drivers sharpen the focus on delivering accurate and timely information. The importance of this cannot be overstated. Companies can lose market share or miss out on potential revenue from cross-selling opportunities if they do not have a precise understanding of their customers. And chief executives can face potential legal issues if they cannot accurately account for risk exposure and standards compliance. A key finding from the 2010 IBM Global CEO Study (see Figure 1) reveals that customer-focused CEOs were much better at creating business insights from today's information explosion than their counterparts.¹

Customer-focused CEOs use data to generate insight and intelligence



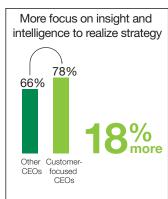


Figure 1: Customer-focused CEOs exploit the information explosion to better understand and serve customers.

What is needed to effect change?

Most companies already own the information they need, but they are unable to access it at critical times. In other words, they are not able to put this asset to valuable use. That's because business information is usually spread across many heterogeneous systems and is not understandable as a complete whole. Additionally, businesses often cannot trust the information they have because of issues related to timeliness, quality or completeness. Analytics software can provide actionable insights into business information, but these tools require clean and trusted data to be effective. As companies move to embrace multiple architectures for information consumption and delivery across the enterprise, this problem will only get worse.

Several technical and operational factors disrupt companies from developing solutions that support their business initiatives:

- Multiple versions of the truth prevent organizations from effectively complying with information-centric regulations or achieving a single view of customers, products, accounts or locations.
- Data resides in multiple databases and applications with little governance of consistency or accuracy.
- Companies deal with so much information that they cannot differentiate what is important.
- IT and business users share little about the specific meaning and usage of information because of a lack of metadata, which provides critical information about the data itself.
- Different answers to the same question from different information sources feed a lack of trust in the information.
- Inability to efficiently standardize, merge and correct information from multiple sources breeds disdain for inaccurate information and delays adoption of new business applications.
- Tightly coupling information to specific applications and processes creates a lack of agility within organizations, preventing them from innovating. Because multiple point-topoint integration connections must be maintained and updated, it becomes difficult and expensive to facilitate the natural evolution of IT architectures where new systems are implemented and obsolete ones are retired.

The inability to address any one of these issues greatly reduces opportunities for innovation to take advantage of new market opportunities, respond to new customer demands or counteract competitive threats.

Also, companies must take on the job of leveraging their information directly—working outside the scope of their existing applications. Organizations that wait for their application vendors to solve these problems for them lose their opportunity to differentiate. Reliance on application-vendor solutions puts these organizations on an equal playing field with their competitors—all companies get the exact same set of improvements at the same time.

The 2009 IBM Global CIO study revealed that CIOs of highgrowth companies are 34 percent more likely to suggest newer and more innovative ways of using enterprise data (see Figure 2).²

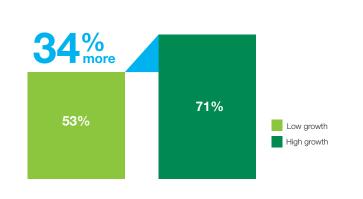


Figure 2: High-growth CIOs proactively suggest better ways to use data more often than CIOs of low-growth companies.

The blueprint for an effective information architecture

The key to delivering trusted information is a sustainable, agile and governable enterprise information architecture. Maintaining duplicate or obsolete systems only increases costs while making control of information virtually impossible due to the existence of redundant and disparate applications. Information must not only be accessible, authoritative, consistent and timely, but it also must be in context to help managers gain insight and make better business decisions.

To deliver trusted information wherever, whenever and however it is needed—across a full range of business requirements—a comprehensive information integration solution must provide six fundamental capabilities:

- 1. Connect to relevant applications, data and content, and recognize and respond to data changes in those sources whether structured or unstructured, mainframe or distributed, internal or external
- 2. Discover, model and govern information structure and content to completely understand data before it is integrated and proliferated throughout the enterprise-including understanding data lineage as well as associated metadata
- 3. Standardize, merge and correct information to provide authoritative, consistent and complete views of business information and its relationships across the extended enterprise
- 4. Effectively and efficiently collect, combine and restructure high volumes of data for new uses
- 5. Synchronize, virtualize and move information for in-line delivery
- 6. Flexibly publish and manage reusable information services in a Service Oriented Architecture (SOA) model

Customer scenario: Deliver trusted information across the enterprise

Consider the hypothetical case of ABC Corporation, a Fortune 500 organization. In recent years, the company has invested heavily in developing a data warehouse to manage and track all activities related to customer interactions: purchase and sales, customer support calls, seasonal buying patterns, promotional effectiveness and so on. ABC currently uses a data warehouse to aggregate, cleanse and standardize information from operational applications for historical analysis and business intelligence purposes. Given the level of investment and the robustness of the data contained in the data warehouse, the company has been seeking new ways to make this information available to other organizations and initiatives in the business to meet needs like these:

- · Conducting ongoing analytics to improve just-in-time manufacturing
- Providing a customer self-service portal for customer service and personalized shopping
- · Allowing historical, operational and transactional information to be plugged in line into new business processes and applications to improve responsiveness to customer demands, new market opportunities and competitive threats

ABC Corporation chose to leverage the capabilities of InfoSphere Information Server to deliver trusted information as a service to the entire organization.

To streamline supply chain operations, ABC decided to enable the data integration jobs to feed sales information in real time into the data warehouse and to subsequently feed that information to the manufacturing department. This process actively waits for new information delivered by order-entry applications, and then transforms, cleanses and loads individual orders into the data warehouse throughout the day.

By trickle-feeding the data warehouse in this way via change data capture (CDC) technology (which determines and tracks changes to data), ABC reduced the burden of bulk-loading large volumes of data into the warehouse during batch windows at the end of the day. Built with integrated data quality capabilities, these processes help ensure precise forecasts. Additionally, by making product order information available in real time to manufacturing, ABC is able to tie demand signals directly into the supply chain, enabling accurate just-in-time manufacturing operations.

To implement more cost-effective self-service portals and improve cross-selling effectiveness, ABC made the federation, cleansing and transformation capabilities of InfoSphere Information Server available as web services that can be called directly from the portal when needed. Also, the CDC capabilities help maintain the highest levels of data currency. Customers can now review their past orders and request new products or get product questions answered or search for new products in ABC and affiliate partners' catalogs. Web services give ABC the flexibility to install new merchandising applications without costly rewrites of integration logic, adapt marketing activities and sales promotions based on real-time

customer data and improve responsiveness to customer inquiries. And by offering information as a service to the other departments, ABC is able to provide information that is accurate, authoritative and reusable in consistent ways.

ABC is also a heavy user of analytics-driven processes. But the quality of analytic insights provided by analytic tools is directly dependent on the quality and currency of data that is input into the tools. InfoSphere Information Server helps ensure that the data fed into the analytics tools is complete, clean and up to date. ABC executives therefore can trust the analytic insights that are now driving business decisions. This enables ABC to increase its agility and adaptability to new market opportunities and customer demands.

With the help of InfoSphere Information Server, ABC is now successfully streamlining supply chain operations and improving customer service while reducing the costs associated with those tasks. It is also increasing revenue opportunities by presenting appropriate offers to customers at the time of purchase.

InfoSphere Information Server: Create a flexible information infrastructure

InfoSphere Information Server helps organizations derive more value from the complex, heterogeneous information spread across their systems. It enables organizations to integrate disparate data and deliver trusted information wherever and whenever needed, in line and in context, to specific people, applications and processes. InfoSphere Information Server helps business and IT personnel collaborate to understand the meaning, structure and content of any type of information across any source. It provides breakthrough productivity and performance for cleansing, transforming and moving this information consistently and securely throughout the enterprise so it can be accessed and used in new ways to drive innovation, increase operational efficiency and help lower risk. Plus, it helps organizations achieve new levels of information integration speed and flexibility by providing:

- A rich set of features to understand and effectively govern existing information infrastructures
- A comprehensive, unified foundation for enterprise information architectures, scalable to all levels of volume and processing requirements
- Auditable data quality as a foundation for trusted information across the enterprise
- Metadata-driven integration, providing breakthrough productivity and flexibility for defining, integrating and enriching information—and understanding data lineage for risk control and compliance
- Log-based CDC capabilities that help synchronize source and target repositories with minimal impact to database performance
- Consistent, reusable information services—along with application services and process services, an essential for enterprises
- Accelerated time to value with proven, industry-aligned solutions and expertise
- Broad and deep connectivity to information across diverse sources: structured, unstructured, mainframe and applications

IBM InfoSphere Information Server capabilities

InfoSphere Information Server includes capabilities to help users understand, cleanse, transfer and deliver information, drawing from a common metadata repository (see Figure 3).

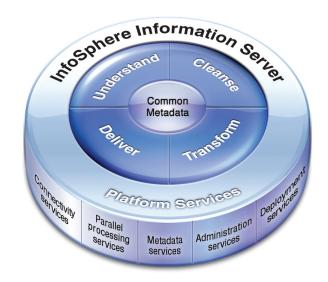


Figure 3: InfoSphere Information Server draws on a common metadata repository to provide a platform of information-centric services.

Understand information: Discover, design and govern information infrastructures

Businesses today deal with massive volumes of data—often without much insight into the content, quality and structure of that data. Complex business transactions from customers and partners plus operational information moving within the enterprise are often the basis upon which key business decisions are made. These decisions are often undermined by the lack of insight and understanding of the data, and common questions arise as a result: Where is my customer data? How do I discover Personally Identifiable Information (PII)? How do I find the information I need? What does this information mean in the current business context? Can I trust this information? Additionally, the lack of a common understanding of the relevance of information between technical and business users affects the usefulness of delivered information.

InfoSphere Information Server has a rich set of features designed to help organizations fully understand and utilize their information, as well as establish an information governance strategy for defining, tracking and improving data quality across the enterprise. It enables organizations to discover related data that is spread across heterogeneous systems, and to design trusted information structures for business optimization and govern them over time. It offers capabilities for blueprinting information projects, data discovery, creating a common business vocabulary, data quality compliance, data modeling and mapping, creating transformation rule specifications and determining information lineage. These capabilities are connected through a shared metadata repository.

Key capabilities to understand information include:

- Collaborate on actionable information blueprints that connect the business vision with the corresponding technical metadata, while applying best practices based on reference architectures and methodology
- Create a shared, enterprise-wide vocabulary to help business and IT leaders achieve a common understanding of key terminology to support project requirements
- Discover the hidden relationships between disparate data elements and understand the transformation logic that links them into logical groupings of related data or business objects
- Perform a thorough source analysis to uncover data quality problems, such as duplication, incompleteness, invalid values and rule violations, and identify anomalies that violate defined business rules
- Design and optimize a data model to the specific requirements of a data integration project
- Define source-to-target transformation rules by creating mapping specifications to transform data from various sources into a consumable format based on business requirements, for the target application
- Govern, audit and trace information by insight into information lineage
- Visualize and trace information flows and model the impact of additional changes on the information environment

Support collaboration with shared metadata and vocabulary

There are many different roles in a typical development project, on both the technical and the business side. The problem is that the sides speak different languages, even when they're describing the same data. The descriptions are called metadata, and it's difficult to collaborate efficiently without effectively sharing metadata; for example, the technical team may not understand why a given set of data is important to the business, or how to process the data to deliver valuable information. Sharing metadata can be difficult—it's often not organized or indexed, and the communications path is fraught, as participants also typically work in a vacuum, mostly sharing information offline or through documents and spreadsheets. This can make efficient collaboration difficult.

InfoSphere Information Server manages the metadata that all project participants use. As each role creates new metadata, that metadata is immediately available to others working on the project. For example, data analysts who are profiling a source system can link columns to specific business definitions entered in the IBM InfoSphere Business Glossary module by subject-matter experts. Once that link is created, business users can see the link and understand how and where their business terms are implemented in various source systems.

This use of metadata provides an enormous amount of downstream leverage within projects, helping to dramatically reduce the time between specification and build, and thereby reducing project cycle times. The metadata can be used to help shorten the time needed to design integration logic and sometimes even to automate the creation of code. It also creates an ongoing record of shared understanding that carries forward to future projects. The metadata itself becomes an asset that can be used to govern information and improve the overall understanding of the business.

Cleanse information: Data quality can determine business success or failure

Having a clear understanding of customers, products, partners and suppliers can mean the difference between growing a business and failing to compete. Critical initiatives for information governance, compliance and master data integration simply will not succeed unless the quality of the data in systems is clearly understood and actively managed.

Put another way, bad data is like a virus. If left undetected or misdiagnosed, it can spread and become more aggressive, eventually even crippling its host. Imagine that one of your core information systems contained some unchecked or inaccurate data. The data might start out in a part of your strategic ERP system and then get reused for essential business decisions by data warehouses, business intelligence tools, trading partners or regulatory reporting staff. That bad data will also be used by workers across the information supply chain—and they will consume, process and spread the "infected" information to others. Along the way, it will skew metrics, reduce report accuracy and ultimately affect business decisions.

Transform information: Accelerate time to value

Business information today moves in, through and out of business systems. To achieve competitive advantage and drive innovation, businesses need to tap into that data flow to transform and deliver data of any complexity and volume, from any source—structured or unstructured—for new or existing business contexts, within or outside the enterprise, at exactly the right time.

InfoSphere Information Server provides a comprehensive breadth and depth of connectivity to information across diverse data sources, from databases and files to enterprise applications (including cloud-based applications such as salesforce.com), on both mainframe and distributed platforms. Metadata-driven connectivity is shared across the platform and connection objects are reusable across functions, making it easier than ever to get to any type of information across the enterprise.

As the volume and variety of information grows, so does the need to process that information in batch, real-time or service-oriented ways. InfoSphere Information Server leverages powerful parallel processing technology to process huge volumes of information very quickly and its connectors are optimized for multiple modes of usage—bulk movement of large volumes of data for data warehousing and historical analysis, and real-time and event-driven processing of operational and transactional data with low latency. With this technology, processing capacity is not an inhibitor to achieving project results, and solutions can expand to incorporate new hardware and to fully leverage the processing power of all available hardware.

InfoSphere Information Server dramatically simplifies how organizations deal with heterogeneous information, allowing information to be quickly and easily understood, integrated and delivered to meet any business requirement:

 Combined data quality and transformation functions reduce the complexity of common tasks; IBM experience shows that it helps to reduce the number of steps and the development time by up to 40 percent compared with development using separate tools and engines

- The integration process is optimized for reuse of objects across data flows throughout the enterprise
- Codeless, visual design of integration procedures enables faster job development
- Hundreds of prebuilt transformation rules come right out of the box
- Sophisticated tooling helps automate the creation of data integration jobs directly from business requirements along with in-line context-specific documentation
- A rich set of features support push-down optimization of jobs to source or target systems

With InfoSphere Information Server, you can begin with any function and then expand to additional functions, flexibly addressing many types of project needs and tailoring the implementation to your business and technical requirements and available skills.

Deliver information: Provide trusted, timely, synchronized information

For enterprises to effectively leverage their information, they must deliver it from disparate data sources in real time, in bulk or virtually, while retaining the integrity of the sources and minimizing any additional processing impact.

To address the variety of enterprise data integration requirements, InfoSphere Information Server supports three styles of data delivery: incremental (CDC), bulk (extract, transform, load, or ETL) and virtual (data federation). Having multiple styles of data delivery provides flexibility to address exploding data volumes and shrinking batch windows, and helps enterprises to continually meet increasingly challenging service-level agreements and business requirements. Whether the requirements are for virtualized access to operational

systems for business intelligence, moving and transforming massive amounts of source system data to feed warehouses with enriched/reformatted information, or publishing only changed data from transactional systems to various consuming applications, InfoSphere Information Server has optimized approaches to deliver trusted, timely, information.

InfoSphere Information Server data delivery capabilities are designed from the ground up to provide:

- · Increased timeliness of information through low-impact, log-based CDC from all major databases for real-time data synchronization and distribution to databases, warehouses, message queues, master data management (MDM) systems and ETL tools on both mainframe and distributed platforms
- Continuous data availability to help reduce downtime costs and business interruptions through robust, high-throughput data replication between primary and secondary sites with no geographic limitations
- Simplified, virtualized access to diverse data sources to easily extend data warehouses and enable live reporting through optimized, enterprise-level federation capabilities
- Trusted, current data warehouses through extensive bulk-load capabilities based on a parallel processing architecture that scales to handle extremely demanding data volumes

The need for reuse: Delivering information as a service

In the realm of enterprise data management, SOA principles are being applied to the way information is created and distributed throughout the organization. An information service is a type of service that provides managers of shared information assets, such as customer records or product descriptions, with a consistent, auditable and secure way to share an asset while maintaining control over how it is used.

For the service consumer, the information service is a trusted information source provisioned by people who understand the meaning of the data and can ensure its accuracy and completeness. By separating the interface from the implementation, service providers are free to change how and where the data is produced and managed internally.

By decoupling information from the complex, heterogeneous data sources and offering it as reusable services, organizations can reuse core logic for information access, transformation and cleansing across systems. Data transformation services can be reused and applied not only to large batch jobs, but also to enterprise application integration (EAI) flows for consistent information delivery. Data quality services can be utilized within direct feeds from applications—packaged and home-grown for delivery of deduplicated and standardized information. Reporting tools and portals benefit from the consistent access to multiple structured and unstructured data sources in real time provided by data federation services. Additionally, integrated business and technical metadata about those information services and the information they deliver facilitates a common understanding across roles in the organization, greatly enhancing reuse and rapid adoption of information services as a preferred information integration mechanism.

By providing information as a service, businesses can improve the availability and consistency of information and remove the traditional barriers to information sharing. Information services can be reused across the enterprise, dramatically improving the productivity of IT resources. Once in place, this information integration infrastructure provides great downstream leverage, allowing IT to address new challenges with more flexibility and to gain better control over information quality and accessibility.

InfoSphere Information Server delivers information services using an SOA framework that provides:

- Metadata visibility from services to data sources for increased data lineage and an understanding of the impact of any data structure change on deployed services
- Rapid deployment through a single administrative interface to deploy a service—including service definitions in Web Services Description Language (WSDL), directory entries and service artifacts in application servers—in minutes without requiring special programming skills
- Increased ability for reuse through leveraging a common metadata repository
- Flexible bindings—services can be deployed as Enterprise
 JavaBeansTM (EJBs), JavaTM Message Services (JMS) or web
 services, including Web 2.0 services such as REST or RSS, to
 meet diverse project requirements
- A scalable, fault-tolerant architecture—load balancing provides the performance and high availability that customers need
- Direct tooling connections into popular IBM WebSphere® SOA products such as WebSphere Portlet Factory, WebSphere Enterprise Service Bus and WebSphere Process Server; and direct publishing services to WebSphere Service Registry and Repository for seamless end-to-end SOA management

IBM Information Management Software Services: Delivering effective information integration solutions

To meet internal and external demands for new applications and functionalities, organizations may have a patchwork of servers, storage devices, specialty software and general business applications. What today's companies need is a strategic information agenda based on an information infrastructure that clearly defines where data lives and how it flows through

various systems—and also helps to eliminate bottlenecks that often slow the movement of data through the various systems that require it.

Determining the best way to address your information agenda and to fully integrate a heterogeneous environment can be daunting. IBM Information Management Software Services has extensive experience in deploying information integration solutions and can provide an expert assessment of your IT landscape to help you chart the best course for increasing data performance and reliability.

Information Management Software Services should be included as part of your total information management decision. Worldwide technology and industry-experienced IBM professionals can help you speed the investment-to-payoff cycle. They will help you establish a solid data system design and architecture to meet your information agenda and integration goals from project conception through deployment and validation. Each client solution is customized based on its unique needs and optimized to its existing IT assets. IBM Information Management Software Services can help clients deploy their solutions by:

- Integrating data to support business initiatives
- Helping to improve the productivity of employees, customers and partners
- Raising the confidence levels in data validity and integrity
- Simplifying existing information assets to reduce or avoid costs associated with new applications
- Helping customers become self-sufficient with their enterprise information integration solutions

Professional engagements are designed to ensure a proven IT architecture that allows you to adopt new business solutions without fear of overburdening systems or losing investments in

current assets. The IBM approach will help you avoid silos of functionality, and by supporting an integrated IT environment, the services aspect can increase your confidence that the critical data produced by one user is the same, accurate data available to another user—in real time.

Business initiatives drive information integration

Information availability is at the heart of most critical business objectives of companies today. Companies are investing heavily in initiatives focused on managing information complexity and providing better information across the enterprise. The following initiatives are frequently listed as top priorities. Within each of these initiatives, information integration serves as a component of the foundation. Leveraging InfoSphere Information Server can help you achieve success.

"We've standardized our customer name and address data using IBM InfoSphere QualityStage. This allows us to identify, match and merge duplicate records so we have a single view of our customers."

- Executive Manager, Irish Life & Permanent

Data warehousing: Providing a hub for actionable information

Every large organization has a goal of turning data into actionable information that will optimize business processes. To accomplish this, organizations must leverage information across business channels, offerings and territories in a highly dynamic and real-time fashion.

InfoSphere Information Server is a key component of a data warehouse infrastructure for business intelligence. With a metadata-driven driven platform for enterprise data integration, it provides breakthrough productivity and flexibility to deliver trusted information, in real time, on demand or in batch to either the data warehouse for analysis or to operational systems for immediate action.

Master data management: Enabling a single view of the enterprise

Every business has elements of core reference data that are used in multiple types of applications and business processes. They represent the organization's understanding of its most important business information, including customers, suppliers, products, locations, accounts and more. This type of data, known as master data, comprises the most important information assets for any company. For example, customer reference data is vital to understanding customer buying patterns, identifying up-sell opportunities, providing a higher level of customer service, tailoring and optimizing marketing activities, and predicting and addressing business triggers such as renewals, recalls and upgrades. However, the importance of master data is not always fully understood.

Organizations that recognize the importance of this data often develop master data management initiatives. In this context, InfoSphere Information Server helps organizations develop authoritative master data by enabling master data integration helping companies understand where and how information is stored across source systems; consolidating disparate data into a single, reliable record; cleansing and standardizing the information; removing duplicates; and linking records across systems. This master record can be loaded into operational data stores, data warehouses or master data applications. It also can be assembled either completely or partially—on demand. In addition, InfoSphere Information Server project-blueprinting

capabilities offer certified best practices and methodology for deploying and managing a complete MDM solution that leverages the full breath of IBM data integration capabilities.

Business intelligence: Driving business insights

The discipline of business intelligence is being used by organizations, via applications and dashboards, to answer key strategic and operational business questions. Unfortunately, the lack of data transparency and data quality across the sources that feed these analytical applications inhibits the success of almost every initiative. Data stored in data warehouses or datamarts forms the basis of the analytical application and needs to represent a superset of data available across multiple applications. The source and definition of the data must be easily understood by the business user.

By decoupling the information contained within these data warehouses or datamarts and making it available as a service to the organization, businesses can leverage some of the highest-quality data available in new and innovative ways. Injecting this information in real time into business applications allows companies to streamline supply chains and optimize inventory levels.

For business intelligence, InfoSphere Information Server helps organizations develop a unified view of the business. It enables better decisions by helping companies:

- Understand existing data sources, business-term definitions and data lineage
- Cleanse, correct and standardize information
- Load analytical views that can be reused throughout the enterprise

Infrastructure rationalization: Saving money through simplification

Mergers and acquisitions are often founded on leveraging the economies of scale of two or more organizations coming together. This invariably means standardizing on a fewer number of existing or new core systems. The task of migrating and consolidating data across multiple applications can be extremely complex. Frequently, the task of re-engineering the data, keeping systems in transition synchronized and ensuring data integrity is the biggest determinant in the level of project risk. Taking a systematic, application-neutral approach to the problem and using an experienced data integration offering can ensure your project is delivered on time.

Trusted data starts by accurately understanding, cleansing and reconciling data appropriate to the business rules of the system. This simplifies the process of data migration by defining and automating what needs to be done to the data. Information Server can expedite your infrastructure consolidation projects with trusted data. Key advantages include:

- Best-practices blueprints for very large multiple system, platform and site migrations
- Scale to any level of data volume, transformation and cleansing complexity
- Rapidly turn analysis of source system data into data reengineering specifications
- Complete data audit trail using sophisticated metadata management capabilities
- Multiple consolidation and migration options using CDC and replication for data synchronization
- Proven client success in billing, general ledger and HR consolidations

SAP information integration: Enhancing data quality

Customers who make the strategic choice of implementing SAP solutions can optimize their business operations, reduce costs, improve performance and gain agility to respond to changing business needs. With SAP NetWeaver, businesses are able to integrate their operations with their suppliers, partners and customers. SAP NetWeaver Business Intelligence (SAP NetWeaver BI) is increasingly the business analytics platform of choice to make key business decisions.

In all cases, SAP systems are built with data that is scattered in different departmental IT and legacy ERP systems. Standards, quality controls and governance processes rarely exist around legacy data. To achieve the full business benefits of SAP initiatives, it is important to improve the quality of data and make the data trusted before bringing it into SAP.

That's where InfoSphere Information Server can deliver real value. It helps ensure that the data being brought into SAP becomes trusted. Key data quality features include:

- · Broad enterprise connectivity to structured and unstructured data sources
- Metadata management capabilities for data definition and collaboration
- Parallel processing capabilities to enhance processing speed
- Capabilities to better understand and define source data to ensure trusted information in SAP
- Data cleansing capabilities to create trusted survivor records
- Data transformation capabilities to fit data to SAP data models
- Data delivery capabilities certified by SAP
- State-of-the-art data federation capabilities to bring in information from different sources and get a consolidated view
- Certified-by-SAP interface that provides continuous quality improvement information

Information governance: Reducing risk and enabling compliance

The information required for both managing and regulating businesses continues to grow at an unprecedented rate, and management of this information is increasingly under the scrutiny of industry regulators. The typical large organization must comply with literally thousands of regulations involving information management. IT managers must comply with a wide variety of government standards and regulations, many recently enacted, that specify how to handle information.

For risk and compliance projects, InfoSphere Information Server helps organizations improve visibility and data governance by enabling them to define and maintain complete, authoritative views of information with proof of lineage and quality. These views can be made widely available and reusable as shared services, while the rules inherent in them are maintained centrally.

"We are leveraging the capabilities of Business Glossary to share information about the business and technical metadata stored in our research repositories so that users can have the relevant information at their fingertips."

Director, Melbourne Health

Business transformation: Becoming an on demand business

The simple fact that businesses need to respond faster to the information demands placed on them is fueling a reconsideration of the requirements to make business transformation work. In many cases, inhibitors to the timely flow of information must be removed. Once information is made available in a timely, accurate and reliable manner, it can enrich operational processes and decisions.

For business transformation initiatives, InfoSphere Information Server helps organizations speed development and increase business agility by providing reusable information services that seamlessly plug into applications, business processes and portals. These standards-based services are maintained centrally by information specialists, with a single point of maintenance, but are widely accessible throughout the enterprise.

Conclusion

Using information effectively can help your organization outperform competitors, create innovation and build shareholder value. Effective information integration can help accelerate success in key business initiatives. Whether the focus is a single integration project or a broad infrastructure initiative, IBM InfoSphere Information Server provides the proven, scalable and reliable technology needed for risk reduction and accelerated success. It offers the capabilities your organization needs to connect information from and across diverse data sources, make information reusable and easier to share, process high volumes of information in different ways based on business demands and provide applications, people and systems with the real-time information necessary to build an agile, effective business.

For more information

For more information about IBM InfoSphere Information Server and related services, please visit ibm.com/software/data/integration



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- ¹ "Capitalizing on Complexity: Insights from the IBM Global Chief Executive Officer Study." IBM Institute for Business Value. May 2010. ibm.com/ceostudy
- ² "The New Voice of the CIO: Insights from the Global Chief Information Officer Study." IBM Institute for Business Value." September 2009. ibm.com/ciostudy



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