



## **DATA WAREHOUSING WITH mySAP™ BUSINESS INTELLIGENCE**

### **DATA WAREHOUSING: THE SEARCH FOR VALUE**

**With mySAP BI, you have the full range of technologies needed to design and manage the complete enterprise-wide data warehousing program. The solution lets you integrate data from a variety of sources; store, update, maintain, and aggregate information to create a common view of enterprise data; and provide integrated, consistent information for analysis. And mySAP BI has the flexibility and the depth to support strategic and tactical decision making – which means people across the organization can put it to work to turn insights into action.**

Businesses today have to contend with a growing flood of data. And as companies in virtually every industry have learned, being able to understand that data is critical to everything from increasing efficiency to retaining customers and growing revenues.

To take advantage of that flow of information, companies have turned to data warehousing. The idea: Pull together large amounts of data and create a unified, consistent view of customers, operations, and other areas of the business.

But many companies have struggled to achieve clear results from their data warehousing efforts. Too often, they have used piecemeal solutions, which leads to higher costs and isolated stovepipes of information. And just as often, they have found themselves unable to incorporate the wide range of fragmented data found in various systems around the company. Because of those obstacles, the data delivered to workers is often inconsistent or irrelevant to their jobs. Usage of the system is limited – which in turn limits the return on investment in the technology as well as decision makers' ability to understand and guide the business.

But you can avoid those pitfalls and get the most out of data warehousing technology with mySAP® Business Intelligence (mySAP® BI) and its underlying component SAP® Business Information Warehouse (SAP® BW) that delivers enterprise-wide data warehousing, a business intelligence platform, and a suite of business intelligence tools. mySAP BI gives you comprehensive integration across data warehousing processes. And it enables you to deliver valuable, business-oriented information that helps decision makers keep your company ahead of changing customers and competitors.

## MODELING THE BUSINESS

mySAP BI was designed from the ground up to provide superior capabilities for modeling the business and matching the design of your data warehouse with your business. As a result, you can deliver practical, business-oriented information to employees – and you can quickly adapt and realign your data warehouse to keep up with changes in the business.

mySAP BI also includes a preconfigured repository of metadata – information about data in the warehouse, such as its origin and its history. This centralized repository enables you to reuse metadata across the enterprise; to ensure that data is integrated, consistent, and accurate; and to provide the business context that gives workers a deep understanding of the information they are analyzing.

To support the broad range of decision makers found in most companies, the information model of mySAP BI supports three conceptual layers of data warehousing:

- **Multidimensional models**, which provide the views of data needed to perform online analytical processing and to answer complex business questions on topics such as revenues per region, revenues per office within each region, year-to-date revenues, and comparisons with previous periods
- **The operational data store**, which supports numerous queries on small amounts of nearly real-time data – data that is updated frequently as business is conducted – a valuable tool for tactical, day-to-day decision making on the front line of the company
- **The data warehouse**, which supports queries on large amounts of historical data, for use in strategic, long-range decision making

To ensure that your view of the business reaches across the enterprise – and transcends data stovepipes and departmental barriers – mySAP BI provides a broad set of extraction, transformation, and loading (ETL) capabilities. You can integrate, standardize, and enrich data in one of the three conceptual layers with ease. Data can be extracted from applications or directly from relational database tables or files, and cleansed and prepared for the data warehouse using the extensive library of transformation rules provided with mySAP BI.

The solution's open interface also lets you connect third-party ETL tools to mySAP BI and use custom extraction applications. That means that data can be loaded in mySAP BI from virtually any source inside or outside the company.

mySAP BI also comes with ready-made business content that incorporates best practices and the business process knowledge of SAP and its partners. This content includes preconfigured programs for extracting data, data models, and a wide range of predefined templates for reports and analyses. Content supports both industry-specific and domain-specific models and templates in areas such as customer relationship management and supply chain management. You can use the content as is, modify it to meet your needs, or create your own content. Ultimately, the wealth of supplied content helps speed implementation, shortens your time to results, and makes you better able to adapt to changing business processes over time.

## **FLEXIBILITY FOR THE LONG RUN**

mySAP BI is designed to deliver business-oriented, consistent data today – and keep delivering it tomorrow, as your business evolves. The solution, which works with virtually all major database management systems, runs as a separate business layer on top of your database system. When your business changes, you can easily modify your data models in mySAP BI, and those changes are applied automatically to the underlying database.

mySAP BI also includes an administrator's workbench that gives you a single, central environment for managing the entire data warehouse. Through the workbench's user-friendly graphical interface, you can graphically display the flow of data through the data warehouse, search for and classify metadata, and manage and automate data warehouse processes such as authorization and error detection – all of which helps you respond to business changes quickly.

mySAP BI is a solution for enterprise-wide data warehousing that is closely integrated, giving you a seamless flow of information across all data warehousing conceptual layers and processes. What's more, mySAP BI is a complete solution for business intelligence. Your data warehouse works smoothly with mySAP BI comprehensive reporting, analysis, and decision support tools and enterprise portal technology, which allows decision makers to work together to analyze and use information.

Overall, mySAP BI integrated approach helps eliminate the high maintenance and upgrade costs associated with stand-alone, piecemeal technologies.

## **SUPPORTING THE BUSINESS AND A SOLID RETURN ON INVESTMENT**

With mySAP BI, you have a complete, integrated solution that lets you match your data warehouse with your business needs and integrate information across the enterprise. The solution helps you to:

- Ensure data consistency and quality by simplifying the transformation and cleansing of data
- Enhance flexibility by reducing complexity and giving you tools for easily managing and modifying the data warehouse
- Reduce total cost of ownership through reduced implementation and maintenance expenses
- Make sure that workers have useful, business-relevant data that drives effective decision making and shortens the time to action
- Support employees in a broad range of functions and departments – from strategic decision making to front-line service – thereby driving wide usage and a solid return on investment

Data warehousing with mySAP BI gives you a solid foundation for an overall business intelligence strategy – and the ability to use data to move with speed and accuracy to take advantage of fast-moving opportunities.

## **GETTING STARTED**

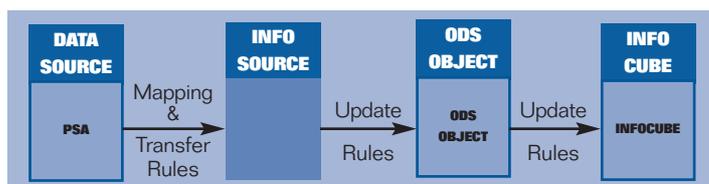
With mySAP BI, you can design and manage an integrated, business-oriented data warehouse and give decision makers the information, insights, and knowledge they need to drive action and produce business results.

To find out more about how data warehousing with mySAP Business Intelligence can help your company, visit [www.sap.com/solutions/bi/](http://www.sap.com/solutions/bi/)

## THE mySAP BI INFORMATION MODEL

The mySAP BI information model is based on fundamental building blocks called InfoObjects that contain data about customers, sales orders, and so forth, as well as meta-data describing that business information. InfoObjects can be reused across all elements of the information model, including:

- **InfoSources.** InfoObjects that belong together logically from a business point of view are grouped into InfoSources, which can include data from within the enterprise or from external sources.
- **ODS objects.** ODS objects describe a consolidated dataset from one or several InfoSources. Data in ODS objects is stored in transparent, flat database tables.
- **InfoCubes.** InfoCubes organize InfoObjects in terms of business dimensions so that you can analyze information from various business perspectives, such as by geographic region or sales channel.

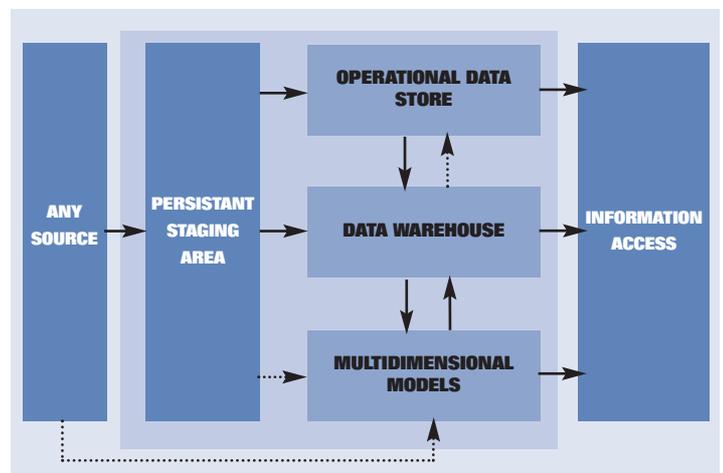


In the mySAP BI information model, data being transferred into the data warehouse is initially stored in a persistent staging area (PSA), unchanged from the source system. When data moves from the DataSource to the InfoSource, it is cleansed and transformed into information through the application of transformation rules. In this step, DataSource fields are assigned to the corresponding InfoObjects that make up the InfoSource.

The use of InfoObjects across the information model give you a single, consistent approach to data – one that helps improve accuracy and make sure that your data warehouse provides the level of detail and timeliness that your decision makers need.

## BUILDING ON A WIDE RANGE OF DATA

mySAP BI enables companies to support the needs of many different types of decision makers. It does so by allowing companies to draw on virtually any source of data to create the data warehouse, the operational data store, and the multi-dimensional models used to support analyses.



As you would expect, mySAP BI offers seamless integration with SAP applications, which enables and simplifies the extraction of data at the application level. And its open interface allows you to easily incorporate data from non-SAP applications and to integrate click-stream data from e-business sites. mySAP BI lets you extract data at the file or database level, so that you can use data directly from relational databases and flat files, and import data that's in XML format. As a result, mySAP BI lets you use the broad range of data you need to obtain a complete, integrated view of your business.