The IBM Cognos-PeopleSoft Connection

Why leading companies choose IBM Cognos solutions for PeopleSoft

Cognos.
software

Abstract

Corporate performance management (CPM) is the key to improving processes throughout the enterprise — in customer relations, marketing, sales, human resources, and more — and seizing the advantages that drive profitability.

To enable CPM, organizations are turning to business intelligence (BI). BI solutions tap into data from a variety of sources, turning it into meaningful information. By making information available through reporting and analysis, companies empower employees to make better business decisions.

Overview

The two main components of an effective BI solution are a data warehouse and a suite of BI applications. From the bottom up, the solution begins with a method of consolidating data from a wide range of disparate sources and organizing it into a meaningful foundation for reporting and analysis. Data from a wide array of operational, e-business, third-party, and back office enterprise resource planning (ERP) systems must be centralized and made consistent and accessible.

A data warehouse uses metadata (data about data) to organize related components and specify how they can be used. To be effective, it must not only provide a solid foundation for analysis and reporting by business users, but must be easy for IT personnel to maintain and administer. The second essential component is a suite of BI applications that add value to the database by providing ways to access and use data, and turn it into information that can be understood and acted on.

A BI platform enables users throughout the organization to plan effectively, monitor their performance, understand what is happening and why, and take appropriate action. The BI component must make it easy for personnel throughout the organization to monitor key performance indicators and perform standard and ad-hoc reporting and analysis.

IBM Cognos solutions, the world leader in business intelligence and performance management solutions, and ERP leader PeopleSoft, have combined forces to create an end-to-end enterprise business intelligence solution. Cognos has been a PeopleSoft partner since 1996, before IBM acquired Cognos, and is also a PeopleSoft Certified Software Partner. IBM Cognos solutions embrace PeopleSoft Enterprise, JD Edwards EnterpriseOne and JD Edwards World, and Oracle Enterprise Performance Management (EPM) and extends them with the industry-leading business intelligence solution.

This paper explains how integrating IBM Cognos BI solutions, including IBM Cognos® ReportNet, the first all-in one Web-based reporting solution, and IBM Cognos PowerCube, the leading OLAP solution, with PeopleSoft EPM solutions lets organizations effectively manage performance.

Business Drivers

**The Benefits of an IBM
Cognos-PeopleSoft Deployment**

Industry analysts and experts recognize the leadership of IBM Cognos software in BI and in the field of corporate performance management. These analysts and experts point to the breadth and excellence of IBM Cognos performance management software as the source of this leadership.

IBM Cognos software backs up this leadership with the highest awards for customer service in the industry. More importantly, the return on investment IBM Cognos solutions deliver to its customers is proven by independent industry watchers, and backed up by customers across all major verticals.

IBM Cognos software offers PeopleSoft customers these important benefits:
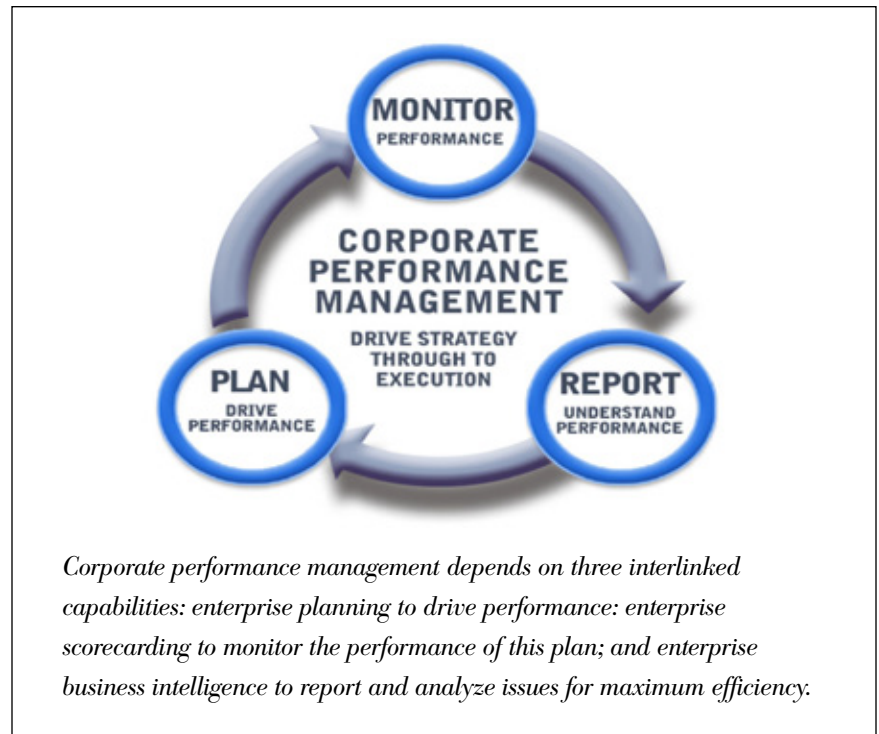
Lower Total Cost of Ownership (TCO)

Many organizations currently use multiple solutions to meet their reporting requirements. These solutions, which are most often deployed departmentally, must all be supported concurrently. IT managers can decrease the costs and complexity of their reporting environment with a single, Web-based reporting solution that can address all reporting needs.

Higher ROI for your PeopleSoft platform

IBM Cognos BI software is a tightly integrated and certified solution for PeopleSoft EPM. It automatically leverages defined content and the PeopleSoft security infrastructure. This ensures that all investments with PeopleSoft EPM are fully leveraged and secure, maximizing your return on your investment with PeopleSoft.

Less work for IT

With a zero-footprint BI solution, users don't have to download additional software to get the information they need. Zero-footprint, Web-based business intelligence capabilities eliminate the need for IT to install and manage client desktop software, saving IT time and money.

Corporate performance management depends on three interlinked capabilities: enterprise planning to drive performance: enterprise scorecarding to monitor the performance of this plan; and enterprise business intelligence to report and analyze issues for maximum efficiency.

Flexible options for presenting information

The adaptive IBM Cognos report-authoring environment automatically arranges report objects in the window each time one is added or removed. IBM Cognos multidimensional analysis software uses familiar, Web-like actions such as drag-and-drop to simplify the task of exploring corporate information. New capabilities let users project current data forward to see trends better.

The Benefits of an IBM Cognos-PeopleSoft Deployment corporate performance management depends on three interlinked capabilities: enterprise planning to drive performance: enterprise scorecarding to monitor the performance of this plan; and enterprise business intelligence to report and analyze issues for maximum efficiency.

Broad-based information delivery

IBM Cognos BI software lets customers deliver alerts and notifications on key events, to mobile employees. Event detection and business intelligence shortens the time between an event happening and the response to it. Reducing that gap is a competitive advantage.

Business Problems

Scalability
The scalability of IBM Cognos software is proven in the lab and with customers. IBM Cognos reporting architecture is built from the ground up to scale to any size of deployment. The flexible, n-tier architecture ensures failover protection and dynamic load-balancing for around-the- clock availability. IBM Cognos reporting supports both Windows and UNIX operating systems, including mixed environments.

Quick to deploy
For IT departments, IBM Cognos BI is easy to move from design and test environments to full deployment. Administrators can configure entire systems centrally. Centralized administration gives IT the functionality to manage business intelligence applications from one location. With a continuing commitment to ease of use, IBM Cognos software reduces the day-to-day impact on valuable IT resources.

Easy to customize

IBM Cognos software provides an integration framework that brings business intelligence to a wider range of applications and environments. It enables integrators and developers to add custom features applicable in their own environments. In addition, companies can adapt IBM Cognos business intelligence capabilities and customize their BI portal using IBM Cognos Web Services.

A truly global solution

With IBM Cognos BI, companies can run reports in multiple languages, with out-of-the-box support for English, French, German, and Japanese, and more as well as incorporate all your data sources—all with one metadata model. This reduces IT workload, lowers the TCO for BI software, and helps companies compete in the global marketplace.

The Opportunity to Standardize

When technologies become strategic, they trigger companies to look at standardization. That is the case now for business intelligence. Companies can reap substantial cost saving by standardizing with a vendor that can meet the diverse needs of various departments, user types, and IT infrastructures.

In order to standardize, companies should look for the following characteristics in a BI solution:

• Broad coverage.

• Modern services-oriented architectures.

• Scalability.

• Heterogeneous data access.

• Globally capability.

• Security.

The Solution

IBM Cognos BI solutions offer the deepest and broadest BI footprint in the industry. Our key offerings in enterprise reporting, multidimensional analysis (OLAP) and scorecarding are complemented by data integration, dashboarding, and event management capabilities. You can link these capabilities together for context and greater understanding to guide people to the best business decisions. Our "write once—deploy globally" architecture gives you the simplest and most cost-effective way to deploy BI across your organization and beyond to your customers and suppliers. These benefits combined make IBM Cognos BI the right solution for implementation with your PeopleSoft data warehouse and applications.

An Integrated Solution: IBM Cognos BI and PeopleSoft EPM

The IBM Cognos solution integrates at two critical areas; the IBM Cognos JumpStart Service offering for operational reporting and the data marts for enterprise analytics to support ad-hoc, batch, production, and managed reporting as well as analysis, scorecarding, and visualization. The solution is designed for high return on investment and productivity for all levels of users (business users, power users, and IT).
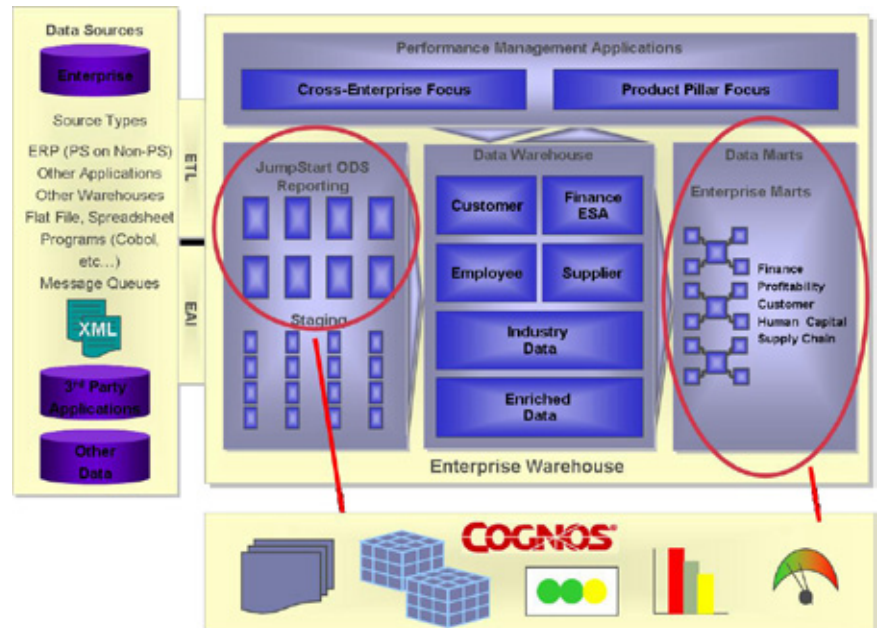
Because IBM Cognos software can provide a single metadata model that spans the JumpStart ODS and data marts, business users can access reports across the whole PeopleSoft EPM solution. An example of this could include a summarized report on accounts receivable and the ability to drill through to an individual record. In addition, other external data sources are included in the metadata layer to deliver reporting across the enterprise, not just for PeopleSoft. The reporting metadata model is easily extended to support personal customizations, multilingual deployments, and connectivity to other data sources.

IBM Cognos BI and PeopleSoft EPM Data Mart Integration

IBM Cognos BI offers a certified metadata and security integration with PeopleSoft EPM. Through IBM Cognos StrategyPlus 3.1.0, PeopleSoft metadata and security is analyzed and published to the IBM Cognos environment, immediately enabling secured reporting and multidimensional analysis directly on your PeopleSoft EPM deployment.

Metadata

The IBM Cognos StrategyPlus utility extracts PeopleSoft EPM metadata into custom views built with PeopleSoft's proprietary PeopleTools code. This includes automatically leveraging customizations a company has made to its EPM data marts.

A PeopleTools project automates the building of the IBM Cognos metadata model by creating a view of the model that contains all the metadata about the underlying tables and the relationships, cardinality, and join strategies. IBM Cognos StrategyPlus also creates a business presentation view to deliver field and table names in folders that provide context for business users to understand and navigate. This eliminates having to understand complex technical metadata and how that data is related. The business user can concentrate on the business requirements.

The IBM Cognos metadata environment is dimensionally aware. The model also populates the dimensional information. This ensures that the SQL generated for reports is fully optimized for fast query. It also ensures proper aggregation to avoid double counting when dealing with aggregate tables and multi-fact queries with different level of granularity.

The IBM Cognos metadata model can easily be extended to support additional personal customizations, multilingual deployments, or connectivity to other data sources. In many cases, by leveraging multiple data sources, organizations can report across the business, instead of within a single functional area.

The IBM Cognos StrategyPlus utility, in conjunction with the synchronization feature of the IBM Cognos metadata modeling environment, can be applied to automatically apply changes to the EPM model without manual intervention. These changes can be published out to business users with minimal impact. This capability dramatically reduces the IT effort needed and lowers TCO.

The same metadata model created by StrategyPlus for reporting can also be used for analysis. Queries are automatically generated to provide a fast start to creating OLAP models in each subject area.

Security

The IBM Cognos solution provides an automated mechanism for leveraging PeopleSoft EPM security to define column/ row security and authentication. There are fundamentally five levels of security including:

1. **Authentication**— is the user allowed to use the system based on an external security repository of names and IDs?

2. **Data security**— what data is returned to a user based on visibility rights?

3. **Metadata Security**— which columns/tables/filters a user has access to?

4. **Object Security**— which reports/folders can a user has access to and the permissions therein (read, write, execute, traverse, etc.)?

5. **Functionality Security**— what sort of activities can a user conduct (administration, report generation, etc.)?

Using StrategyPlus, PeopleSoft EPM security is analyzed and published to the IBM Cognos environment, immediately enabling secured reporting and analysis. StrategyPlus creates the appropriate user classes within the IBM Cognos security environment and builds IBM Cognos roles within the BI platform for each of these distinct user classes. The utility then automates the application of data filters for row/column security against the reporting and analysis environments. This integration provides a seamless and automated way of integrating security between PeopleSoft EPM, where data security is defined, and the IBM Cognos environment, where the users access the data.

**PeopleSoft EPM JumpStart
Implementation Service Offering**

In addition to providing the framework for business analytics applications, PeopleSoft Enterprise Performance Management also provides a flexible, high-speed reporting platform for operational reporting. JumpStart is a new rapid incremental approach to implementing EPM with a unique extension of EPM's Operational Data Store (ODS) to support operational reporting.

JumpStart is available for HRMS, and Financial Warehouses, as well as Student Administration. This unique service offering addresses the critical needs of managers and analysts who rely on quick data access and up-to-date detailed information for operational reporting including ad-hoc queries of transactional data. The JumpStart EPM service offering enables a rapid ROI on your PeopleSoft EPM investment by providing a framework for information delivery.
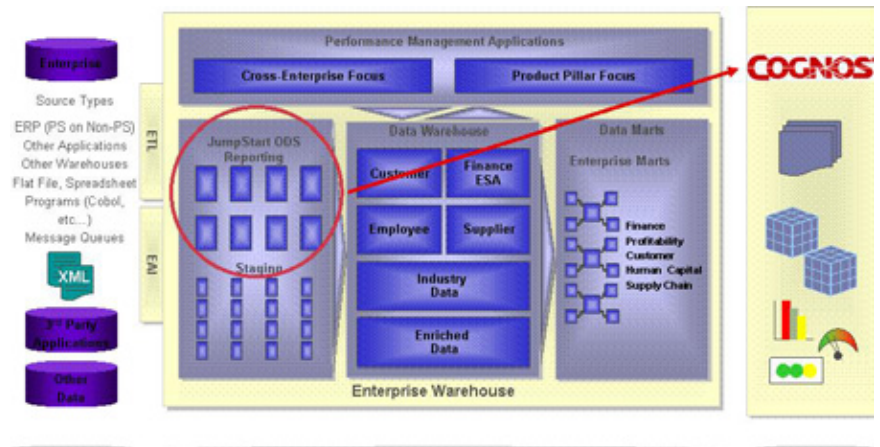
IBM Cognos BI and PeopleSoft EPM JumpStart Integration
PeopleSoft EPM's JumpStart architecture is the vehicle for IBM Cognos BI software to deliver operational reporting. IBM Cognos BI leverages JumpStart to support ad-hoc, batch, production, and managed reporting as well as analysis, scorecarding, and visualization. The solution is designed for high return on investment and productivity for all levels of users (business users, power users, and IT).

Complex technical information is presented in a business context and IT can be assured that all the correct joins, relationships, and cardinality of underlying tables are hidden from an end-user and the data returned in all reports is accurate. There is no longer a need for end-users to understand the complexities of the underlying tables and IT to worry about runaway queries.

To accelerate time to results, IBM Cognos solutions offer an out-of- the-box IBM Cognos ReportNet package on top of the JumpStart EPM table structure for the HRMS Warehouse. The IBM Cognos JumpStart service delivers a default IBM Cognos ReportNet metadata model of your PeopleSoft data grouped by business subject area.

The subject areas that are included are HR, benefits, and payroll. Furthermore, the IBM Cognos offering also leverages JumpStart's value-based security for reporting and analysis. Several key HR report templates are also included in this offering. The metadata model and report templates can be used out of the box or customized to meet the needs of your business. For example, alternate data sources, including other PeopleSoft and or non- PeopleSoft data, can be incorporated in order to achieve your reporting goals.

The default IBM Cognos ReportNet metadata model maps to EPM tables and predefines all the relationships, cardinality, and joins of the underlying tables, including the relationships between the different subject areas. This ensures that all reports (ad-hoc, personalized, managed, and more) deliver accurate business data. A business presentation layer for each of these subject areas has also been created.

This presentation layer uses business terminology instead of the technical underlying field/table names. Delivering information in a business context in this manner makes information easy to find, understand and for business users.

IT and programmers can elect to use the "business terminology" and/or the "original field name terminology." This ensures complete flexibility for all user types within the organization and faster time to results by providing a single reporting solution. The same relational metadata model can easily be leveraged to build IBM Cognos PowerCube models for connected or disconnected analysis.

Conclusion

Effective BI needs to serve up the appropriate report for the given user. Some users may need a high-level scorecard or graphical representation of data. Others need powerful multi-dimensional reports and ad-hoc reporting capabilities. Still others require standard static reports that are updated on a regularly scheduled basis. Providing the appropriate level of functionality and detail in a report makes a world of difference when attempting to please the user and deliver BI value.

Delivering value for the IT department is a different matter. The solution must be highly scalable, easy to customize, reliable, secure, and it must have a single, consistent metadata model.

By providing a consistent metadata model across your PeopleSoft EPM solution, IBM Cognos software delivers a single and consistent view of all your data across your enterprise. IBM Cognos solutions offer the fastest time to deliver and deploy the most comprehensive BI solution with the deepest depth and breadth and is able to serve up the right functionality for novice to advanced BI users.

IBM Cognos business intelligence integration with PeopleSoft simplifies report creation, modification, and viewing for all users by pushing all reporting to the Web. The time needed to build and deploy simple to complex reports is dramatically reduced.

By streamlining the creation, deployment, and modification of reports, IBM Cognos BI dramatically decreases the demands on IT by alleviating the report creation and modification backlog. Leveraging the PeopleSoft security for authentication and authorization ensures that your existing platform and protocols are leveraged and that all reporting across your enterprise is secured.

Whether users simply require links to static reports or to conduct deep multidimensional analysis, IBM Cognos software provides helpful functionality. Whether they need reports in different types and formats such as in HTML, Adobe® PDF®s, or Microsoft® Excel®, IBM Cognos software has the right output. And, whether they want to incorporate scorecarding, dashboarding, event notification, planning, or a host of other functionality, IBM Cognos software offers the functionality. IBM Cognos software provides employees with the capabilities to create influential reports that are appropriate for coworkers, customers, and all the key stakeholders in your company.

About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

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