

Improve Business insight with *Business Performance Management*

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In today's economy, the pressure to improve performance is relentless. It comes from shareholders, directors, executives and leaders – all wanting more, wanting it better, wanting it faster. Responding to this pressure is a shared responsibility of the business and IT functions. BPM improves enterprises' performance by enabling them to plan, measure and adjust to the activities of their businesses.

This paper's motto emphasizes the decision makers need for timely, accurate and comprehensive information about business performance. In addition to Business Intelligence packages, the last years have brought many different business performance management (BPM) applications in response to the challenge of putting actionable information on every manager's desktop.

Keywords: *Business Intelligence, ERP, analytics, KPI, predictive analytics.*

Introduction: Business Intelligence and BPM

Today many organizations are realizing that to maximize the value of the information stored in their ERP systems, it is necessary to extend the ERP architectures to include more advanced reporting, analytical and decision support capabilities. This is best accomplished through the application of data warehousing tools and techniques, integrated in a business intelligence system.

As analysts estimate, Business Intelligence will continue to proliferate, especially into the mid-market. Unlike CRM (Customer Relationship Management), SCM (Supply Chain Management) and other large-scale projects which demand extraordinary amounts of money and time, BI is a strategic, manageable, and implement-able initiative for all sizes of companies. It is why Business Intelligence was listed in the *Top 10 Trends for 2005*: more and more companies realize they can implement BI in a cost-effective manner, while acquiring the benefits of finding information “hidden” in the company and being able to perform complex “what if” scenario planning in real-time.

Business intelligence can be a large “bucket” into which one can place many activities. The latest evolutionary step introduces the concept of business performance management (BPM). BPM is a promising *portfolio of applications and methodologies with busi-*

ness intelligence architectures and technologies at its core. Historically, BI applications have focused on measuring sales, profit, quality, costs, and many other indicators within an enterprise, but BPM goes well beyond these by introducing the concepts of management and feedback, by implementation of processes such as planning and forecasting as core beliefs of a business strategy.

What is Business Performance Management?

Business Performance Management (BPM) – also known as *Corporate Performance Management (CPM)*, *Enterprise Performance Management (EPM)*, or as simple as *Performance Management* – is the sum of the methodologies, metrics, processes, and technologies used to carry out the subsequent tasks:

- Clearly communicate organization's strategy and goals
- Meet all data access and information delivery requirements
- Involving as many people as possible in a closed-loop performance management process

Performance management incorporates top-down, as well as bottom-up accountability and visibility, by generating tactical processes and metrics throughout the organization that roll up and directly execute the strategic

goals. There are three main components of a BPM system:

1. *a measuring system*, which allows immediate and constant review of the metrics against the goals
2. *communication*, which is the key in a culture of accountability – the bonding agent that holds it all together
3. *execution*, continuously mapped back to the original strategy so everyone remembers the game plan.

In other words, BPM is defined as a strategic initiative that combines powerful tools with business processes to help businesses continuously manage and monitor the performance of their financial, operational, customer and organizational functions (www.applix.com, 2004).

Whereas BI helps companies to understand trends, patterns and business behavior, BPM extends that further to “operationalize” their analytics.

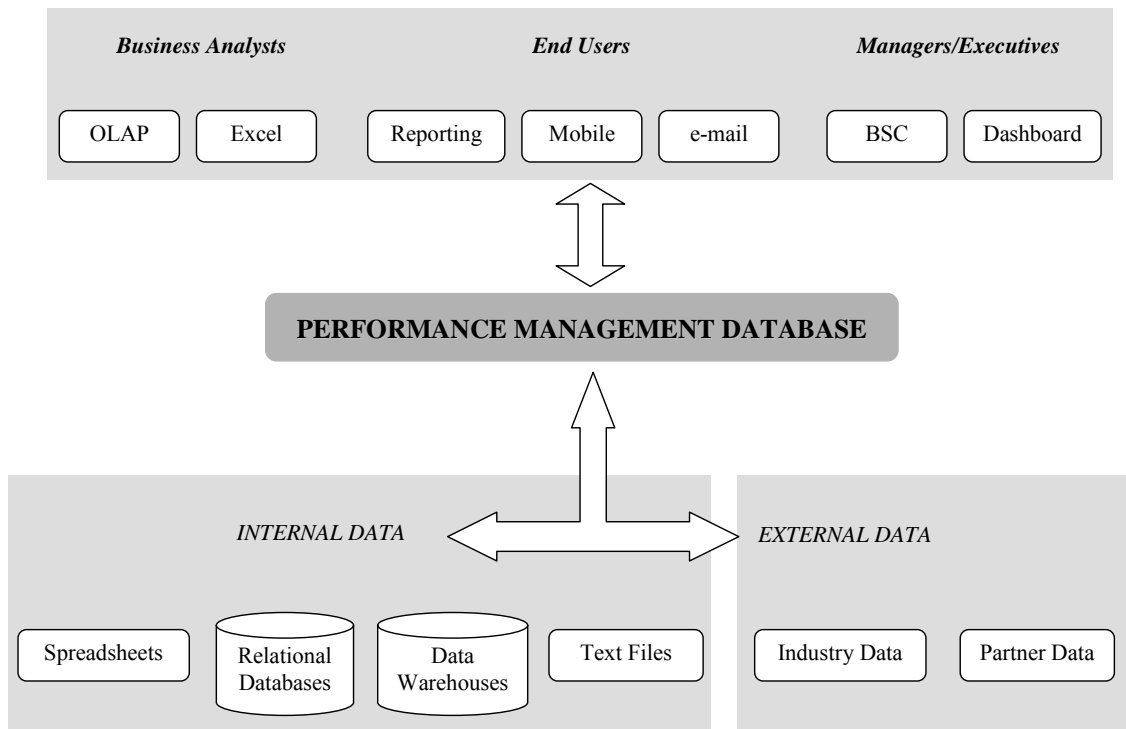


Fig 1. BPM: data sources and instruments

A BPM system should be capable of obtaining data from anywhere in the enterprise and delivering it as usable information to any type of user (see Figure 1).

BPM capabilities

BPM is an umbrella term used to describe the methodologies, metrics, processes and systems used to monitor and manage the business performance of an enterprise (<http://www.dmreview.com/resources/glossary.cfm>). BPM specifies the applications that help direct modeling or scenario exploration activities: rather than simply exploring what happened and why, the application can help the user *consider the implications of alterna-*

tive courses of action before they become operational.

Driven by technology and business, Business Performance Management combines management methodologies with long-standing business needs for executive reporting and budgeting, plus newer business needs for financial planning tools and enterprise-wide, web-based analysis and reporting.

The main purpose of BPM solutions consists of collecting, consolidating, validating and reporting enterprise data from a variety of sources in order to give decision makers a clearer overall view of how the business is performing. The most difficult task is analyzing what this data signifies about current per-

formance of the business – and, more significantly, where it’s headed in the future.

For example, a manager who wants to explain a variance in business results – like the difference between expected and actual performance – must first identify the key performance indicator that is out of tolerance and then manually drill down within the historic data for further detail. This task is not as difficult as it is time-consuming, leaving the manager with little time for actual decision making. Furthermore, it holds back the proactive manner of taking action.

Briefly, variance and root cause analysis are critical necessities for managers needing to better understand business performance, promptly perceive opportunities or problems, and take corrective action when necessary. If most of the BPM software is doing a good job in collecting, integrating and reporting data, only few are providing automated root cause discovery and analysis in context, along with the ability to predict future variances, in the appropriate context for each user.

BPM crosses traditional department boundaries to manage *the full life cycle of business decision-making*, combining business strategy alignment with business planning, forecasting, and modeling abilities. In other words, it would involve mapping a structured set of data against predefined reports, alerts,

dashboards, analysis tools, *key performance indicators* (KPIs), etc., to monitor and improve business processes based on the up-front established corporate strategic objectives. Further, BPM creates *a closed-loop process*, starting with developing high-level corporate goals and subsequent predefined KPIs, through measuring actual results against the KPIs and representing this comparison in a scorecard, with the results reported to management through intuitive reporting tools, and ultimately delivering these results back into the business modeling process for corrections in the next planning cycle. BPM augments BI applications, traditionally focused on measurement – mostly useless without the ability to act on it! BPM ensures the closed-loop management, leveraging the performance methodologies such as the balanced scorecard or activity-based costing (ABC). BPM represents a renewed focus on quantitative management, a “management by numbers” method using insight gained from data analysis and performance reporting.

Consequently, a confusing variety of existing tools and techniques can lay claim to being part of the BPM trend — ranging from BI tools and analytics (e.g., packaged data-marts, data mining tools, ETL tools, dashboards) to BPM applications and scorecard products. The most important are included in Table 1.

Table 1.

BPM	Business need	Capability	Addressed to	Technology
Analytical	Organization-wide accountability	Enterprise Scorecarding & Reporting	Entire organization and its partners	Business Intelligence
	Basic performance analysis	Pre-defined analysis	Entire organization	Business Intelligence
	Enterprise data investigation	Transaction-level analysis	Entire organization	Business Intelligence
	Future performance prediction	Advanced analysis & Statistics	Analysts and Statisticians	Business Intelligence
	“Red Zone” monitoring	Scanning and alerting	Entire organization and its partners	Business Intelligence
Operational	Target setting	Financial budgeting, planning & forecasting	Finance managers	ERP

The concept of *predictive analytics* represents the next evolutionary step beyond current BPM/CPM software offerings. Armed with deeper insights into the real causes of business performance variances, in addition

to the context surrounding them, managers can better predict tomorrow’s outcomes and make proactive decisions that enable the enterprise to stay ahead of competitors and market forces (Gheorghe C., 2004).

Predictive analytics consolidates data from all important business processes within a single application platform and offers the following core capabilities:

- *Discovery*: the ability to automatically discover variances in key performance indicators (under-performing or over-performing) and analyze the root cause in business performance data that exceed their limit.
- *Prediction*: tools that generate predictions (on-demand forecasts, alerts or early-warning indicators) about other likely performance deviation scenarios and their impact on business performance.
- *Delivery*: means of serving the above information to key decision makers in the appropriate format and context.

Conclusion

BPM represents an evolutionary combination of technology and philosophy, built on the foundation of technology and applications that many enterprises have likely already implemented. The demand for these applications lies in the fact that they incrementally add value to already installed business applications, even the legacy ones, to a degree that the enterprises may finally see some long belated benefits and feel somewhat better about implementing cumbersome ERP systems. Indeed, many enterprises have already deployed some BI products too, such as querying and reporting tools, planning and budgeting applications, analytic applications, incentive management systems, portals, and scorecards, along with data warehouse technology, data models, and integration software, and what not. Anyone attempting to conduct the technology inventory stocktaking will likely find some BPM components already in use.

Many management experts believe that the best way to manage business performance is to *create a culture of accountability*, in which corporate objectives are well communicated and everyone in the organization is continuously involved in measuring the results of their effort to meet those objectives. From the technology standpoint, to create a culture of accountability requires *implementing a BPM solution* that can:

- Handle large numbers and types of users and data
- Provide the means for clear communication, feedback and alerts
- Be easily modified when business situations change

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