

# Enterprise integrity

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## BPMS Concepts, Part I

**B**PMS (Business Process Management Systems) is a widely used, but poorly understood term, associated with a number of misconceptions. Having encountered numerous very loose definitions (most implicit), I've decided it is important to start a short series of columns that explain the BPMS concept in a little more detail. Of course, this is my definition and so it will probably differ from that of other writers. Hopefully, you'll find my arguments convincing as you follow the column.

By a business process, we mean an interconnected set of business functions, constrained by various business rules in order to achieve a specific set of business goals pertaining to a specific enterprise over time. These business functions are defined abstractly: The specific implementation of a business function depends on the resources available at the time it must be executed. What constitutes a business function is determined by objectives: any task, activity, or operation that contributes to the objectives of the endeavor (a.k.a. the enterprise). The assertion of business rules in a BPMS are nothing more than the implementation of business management decisions. In a business process, these appear as both constraints and as nodes where process path alternatives branch and fan out, or where parallel process paths merge.

The ideal BPMS technology would provide those having the need to manage business operations with several defining benefits:


- The ability to rapidly specify controlled changes to business operations in business terms and objectives, and to implement many of those changes directly in near real-time (business agility and integrity)
- The ability to measure the effectiveness of those changes in business terms (business metrics and analysis)
- The ability to provide implementation services — such as IT and HR — aligned with business objectives goals, thereby optimizing operational costs and efficiency (operational services alignment)
- Separation of the “what” (goals) from the “how” (resource management), except insofar as knowledge and use of specific processes are dictated by the goals (process and data independence).

A BPMS provides those who must use business processes (and by implication, supporting processes) with benefits analogous to those provided to business data users by a relational

DBMS, an analogy that I have touched upon briefly in the past. Although both DBMS and BPMS technologies may require skilled professionals to design the organization of information (data or process, respectively) and to administer and maintain the technology, the user need not be technically inclined. Users need only understand the facilities for use, the meanings of elements (of the process or of the database, respectively), and relationships among elements in order to gain tremendous value.

Without a DBMS (and especially a relational DBMS), users need to know a great deal about the facilities that are used to store, access, and maintain data. As such, they are unable to concentrate on the goals of querying and updating and are disenfranchised from managing the business information. Without a BPMS, users need to know a great deal about the facilities that are used to implement a business process. As such, they are not able to concentrate on the goals of the business process and are disenfranchised from managing the business itself. Such disenfranchisement is an intolerable effect given the need for business agility demanded by the Internet economy.

From a business perspective, it is important that the business process be defined in terms of business goals, functions, and constraints rather than in terms of the resources that implement the process. In the evolution of a business process design, there is an interactive interaction that takes place between business managers and those who manage the resources that will be used to implement the business process.

This brings us to a key point: a BPMS provides a means to capture and implement decisions made by those who manage. The realization of those management decisions are business processes. BPMS technology provides managers with the means for defining, changing, and implementing (via integration services) a business's processes with agility and consistency, irrespective of a manager's responsibilities, the customer, product, service, or resources used to deliver those products and services. And therein lies its essential value, whether for B2B, B2C, or back-office integration. Until next issue, may all your enterprise processes have integrity. 

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