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Implementation: Issues and Strategies

BY DAVID MCGOVERAN

Embarking on a business process management (BPM) project is simultaneously full of promise and challenge. Technologists often overlook some of the more important aspects of BPM adoption, namely those having to do with business change and commitment. Successful BPM adoption, including implementation of the technology, requires that attention be given to the impact of BPM on the business, its organization, and its practices.

Become a Process-Centric Organization

To obtain the greatest benefit from BPM technology, the organization must ultimately become process-centric. As discussed elsewhere in this BPM Supplement, a BPM approach implies a commitment to understanding, measuring and managing business activities and decisions in terms of the business processes they underlie. Even for a reasonably well-bounded business process, with explicit, measurable objectives, changing the affected portion of a business to this mindset can take as much as a year.

Much has been written on how to become a process-centric organization. Although little of that literature has explicitly taken into account the potential impact of BPM technology on this effort, it's well worth reading. Keep in mind, however, that BPM ultimately requires more than adopting a mindset. BPM also requires a set of practices that are closely related to those found in Six Sigma companies.

Implementation of a BPMS requires a greater commitment to precise definition of processes, activities, goal specification, and measures at all levels of detail than is typically required in, for example, business process re-engineering efforts. Of course, this precision need not be achieved all at once (an extensive business process analysis isn't necessarily required upfront), but can be improved continuously over time. This is one of the key advantages of using a BPMS. It enables the incremental documentation of process knowledge, since definitional deficiencies become apparent through operation and are correctable.

Establishing a Process Competency Center, consisting of business and some technology leaders that will acquire the necessary knowledge of BPM and then guide BPM adoption, is highly recommended. Among the specific goals of the center should be making certain that the technology is aligned with the business, rather than the other way around. Among other things, this means the selected BPMS should enable business users to interact with it in terms of business concepts rather than technology components. This aspect of BPM technology is not yet mature, so the center must be vigilant in seeking improvements.

Most BPMS products force the user to learn something about the technical infrastructure that will ultimately implement a business process. Worse, users are often forced to redefine a business process to capture its description with the available tools. BPM process modeling tools generally focus on capturing a process definition that can be automatically converted into a process execution specification, which is usually highly structured and repeatable. By contrast, actual business processes range from highly structured and repeatable to unstructured and even ad hoc. >

BPM Goals and Technology Selection

Among the key steps in adopting BPM and implementing a BPMS is identifying goals. BPM addresses both strategic and logistic issues. Strategic goals include improving agility so the organization is more responsive to external events. This capability, unique to BPM, translates into support for rapid process change and innovation; it enhances an organization's ability to meet longer-term strategic objectives such as improving revenues or margins, lowering costs, competitiveness, and so on. The ability to address strategic issues is contingent upon understanding the relationship between strategic and logistic goals, and aligning the two. Logistic goals are the most commonly pursued, and pertain to efficiency of operations. Examples of logistic goals include:

- Improving process step quality, cycle times and repeatability
- Removing bottlenecks, reducing resource waste, idle time and unnecessary latencies
- Making certain that materials and information are available for activities.

Selecting an initial, feasible set of goals to be achieved through BPM is essential to scoping. The expected business benefits of achieving these goals through BPM should be clarified in advance.

Once reasonable goals are identified, it becomes possible to select and prioritize those key business processes which, when subjected to BPM implementation, will contribute most significantly to achieving those goals. This leads to a time-phased set of requirements determined by the complexity of the business processes in order of priority. There are many BPMS and BPM technology vendors whose products can be evaluated during the technology selection process. Care should be taken to ensure that the technology is evaluated with respect to its ability to support the key business processes and to achieving the target goals. Secondly, both the ability of the vendor to improve their product, and the alignment between the vendor's technology road map and time-phased requirements, should be taken into account.

Selecting and Implementing a Pilot

Some choices of business process are inappropriate subjects for a pilot (i.e., first) BPM project. On the one hand, if the selected business process is too simple, it's unlikely that BPM will deliver

much return on investment. On the other hand, if the selected business process is too complex, the entire organization can be put at risk. The selected business process should simultaneously be highly visible, have bounded but significant risk, some known inefficiencies, quantified exception processing and repeatability, and moderate resistance to change. Choosing such a business process for the BPM pilot forces management participation and experience with organizational and operational change, while providing the opportunities to learn the value of BPM in a reasonable time. In many cases, relatively simple business process changes can yield huge dividends. For example, consider selecting business processes in which automating the notification of exceptions, thereby enabling early response to costly inefficiencies is easily achieved with the BPMS.

The first step after selecting a specific business process should be to establish a baseline business process definition. This involves identifying both the normal processing activities and those exception-processing activities that will account for a high percentage of the throughput. It's then necessary to identify, for the entire process and each of the activities and decisions it comprises, the measurable objectives and the resources necessary to achieve those objectives. The concept of "measurable objectives" is loaded, implying that an objective is meaningless unless the degree of its success or failure (perhaps binary) can be assigned a quantitative or qualitative measure. In turn, this implies the identification of well-defined, repeatable, operational methods by which the measure can be assigned to a metric variable.

Note that this definition doesn't exclude the use of subjective or inferential judgment, but only requires that the method of obtaining that judgment is well-defined, repeatable, and operational. Obviously, developing more objective, quantitative measures should be an ongoing goal. Metrics associated with detailed activities should provide a base from which to derive higher-level metrics and ultimately key performance indicators, forming a metrics tree. Once the metrics tree is understood, it becomes possible to monitor the existing business process execution and establish an operational baseline. It's against this baseline that the effects of a BPM implementation are compared and contrasted to determine ROI or other measures of project value.

Adopting BPM must not be understood as a task to be completed (except in the unlikely case that the business process executes in isolation from the business environment's usual influences). It's a business philosophy that requires ongoing application. Not only is there tremendous opportunity to improve most business processes, but changing strategic goals, regulations, new technologies, competitive events, supply chain variability, workforce availability, acquisitions and merger, divestitures, and so on give rise to the need to modify or even to create new businesses. Active attention to, and maintenance of, a BPM implementation is required as long as the business can change. After all, from a process-centric view, business processes are the business.

Select an Implementation Strategy

Attempting to deploy a BPMS, or any mission-critical system for that matter, without having a strategy is asking for a lot of pain or something worse (like outright failure). A BPM implementation strategy is a well-defined plan of action with an identified schedule, objectives, risks, and quantifiable costs and benefits. A comprehensive discussion of specific strategy alternatives is too complex for this supplement, so we will explain the key types of strategy instead. Strategies are classified as bottom-up, dispersive, accretion, or top-down, according to the deployment plan used. The deployment plan dictates which business objectives can be met first, which components should be deployed first, and which portions of the organization will be affected most directly. Let's consider each of these strategies.

The most common type of strategy is bottom-up, which means the BPMS is layered on top of a technology integration infrastructure. For obvious reasons, EAI vendors and IT departments find this strategy type convenient since they've already begun tackling the problems of technology integration. Pilots are typically restricted to a department or to one interdepartmental (cross-functional) business process. In this context, BPMS is seen as providing process (or even message-flow) integration and technology orchestration, being a means of coordinating the various applications that support a business process.

The process engine will generally focus on process automation, possibly have human-centric workflow capabilities added, and provide more technical (vs. business) activity monitoring. The

process model will be only an idealized technical substitute for the actual business process. This means business managers will have some difficulty interacting with and benefiting directly from the BPMS, so that business objectives are reduced to simple overhead reduction or even to technical objectives (logistical effectiveness).

This type of strategy initially treats a BPMS as a new layer of middleware. Eventually, additional business process modeling (vs. modeling technical services orchestration or choreography), business activity monitoring (BAM), analysis, forecasting, and control are added. This strategy type permits the organization to learn the benefits of a BPMS over time. However, it risks losing the support and interest of business management, and failing to reach the potential the BPMS offers to the business. Only a concerted effort to achieve faithful mapping between business process definitions and technical flow definitions can mitigate this risk. It's particularly attractive to IT, which readily understands the implementation technology and its technical benefits as deriving from choreographing technical services.

The dispersive type of strategy introduces BPMS selectively to address specific business problems that occur throughout an organization. It starts as multiple islands or silos of BPM, usually in an attempt to implement operational standardization and gain control over targeted business costs (logistical efficiency). These islands are initially connected functionally rather than through process integration, and may eventually be replaced with a federated BPMS. Local business performance measures are often rolled up to higher organizational levels through data integration means, such as a data mart or an enterprise portal, rather than through integrated BAM and enterprise process management (EPM).

As additional business functions are treated, the scope of each local business process increases until the islands eventually become process-connected. The process engine will often emphasize human-centric workflow, with perhaps limited process automation capabilities. This type of strategy is tactical from a business perspective, and doesn't depend heavily on a common EAI infrastructure. Web Services interfaces tend to work well for local process integration of automated activities. It provides rapid, measurable business benefits that middle managers can easily understand, but

risks not having the support of sufficient technical integration as enterprise-level processes emerge and functional scope expands from operational to strategic business objectives. This type of strategy is becoming popular because it lets the organization adopt high-return vertical solutions of controlled scope, but without having to wait for BPMS maturity.

The accretion type of strategy selects a particular (perhaps small) business operation and introduces BPMS throughout. Its scope is initially limited to all the existing business processes under the control of a specific (perhaps quite small) management team, all of their objectives, and all of the technology infrastructure necessary to support the operation. The scope can grow both horizontally—through organizations that are process-connected to those already using the BPMS, and vertically—through the additional organizations that fall under the increasing managerial scope as we move up the corporate structure. At no time is this type of strategy a “big-bang” approach: it literally grows outward from a successful center or seed.

An accretion type of strategy requires a well-architected BPMS with all the components we've discussed elsewhere in the BPM supplement, even though these components need not be mature technologies. The type of strategy yields measurable business benefits (both tactical and strategic) in a reasonable timeframe, can grow with the development of an integration infrastructure, and offers strong alignment between business and IT objectives. It risks failure from improper scope, lack of coordinated corporate and IT commitment, and a poor understanding of BPM and BPMS concepts.

The top-down type of strategy is perhaps unique to BPMS as technology deployment goes. Initially, the top tiers of the selected business process hierarchy are implemented, with successively lower tiers implemented over time. The “back-filling” of detail need not be even across the entire business process, but may attend selectively to problem activities. It focuses on initial delivery of and acclimation to business process modeling, monitoring, analysis, and forecasting, with minimal reliance on technology integration. These capabilities are tools for business managers and business analysts rather than technologists. Monitoring may initially not be real-time or detailed. It will become more so as the process engine is used more extensively and business activities are eventually process-enabled through technology integration. Likewise,

analysis and forecasts become increasingly more accurate. Even if the process engine provides only e-mail or Web services integration, tremendous process agility can still be obtained.

Managers use the BPMS (perhaps indirectly) to understand existing processes, measure current levels of performance, identify opportunities for process improvement, determine appropriate business performance metrics, and identify mission-critical technology integration objectives. Over time, the desired technology integration infrastructure is developed, or the existing infrastructure appropriately modified and integrated with the BPMS.

A top-down type of strategy offers fast deployment and almost immediate results for business managers. It risks failure from poor commitment to BPM principles by management, poor understanding of analysis and forecasting techniques (especially estimating and improving uncertainty), and an inability by IT to provide adequate, timely process integration.

Although the other strategies may each be appropriately used, only the top-down strategy type places priority on enabling business management practices from a process-centric view. With a top-down type of strategy, an end-to-end enterprise process can be chosen as the pilot. While this doesn't remove the so-called “adoption drag” (that is, slowing down adoption due to the mismatch between portions of the organization that are BPM-enabled and coupled portions that are not), it can help minimize the effect.

No matter which BPM implementation strategy type you choose, make sure it matches your abilities and objectives, and that it's compatible with the selected business processes. Then choose a compatible BPMS. Continuing BPM success comes from focused, process-centric attention to the business. **bij**

About the Author



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