



Will the Real Business Process Management Systems Please Stand Up: Separating the Pretenders from the Contenders

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From the responses to some of our “Third Wave” articles in *Darwin* it’s clear some readers are still skeptical about BPM, but skepticism is clearly on the wane. In “The Business Process Management Scenario: Strategy, Trends & Tactics,” a June 2003 Gartner research report, Jim Sinur and Jess Thompson provide confirmation with, “Business process management wins the ‘triple crown’ of saving money, saving time and adding value. It also spans the business and technological gap to create synergy, with proven results.”

“BPM is delivering both short-term return on investment (ROI) and long-term value (VOI). ... We are seeing BPM embedded in nearly every package solution and many horizontal technology offerings today. Many BPM pilot projects have evolved into more-impressive solutions, with positive case studies abounding. An example is the reduction of cost of claims processing by 20 percent in a property and casualty insurance company, with the claims processing requiring just one-third the time. Although the example is in the insurance industry, where BPM is strong, we are seeing uptake in use and benefits in the banking, finance, credit card, healthcare, pharmaceutical, government and discrete manufacturing industry sectors as well. ... Because BPM delivers solid ROI and both short-term and long-term VOI, we expect the business to gravitate to its use, and we expect process optimization to become a habit in many enterprises, driven by compliance acts and quality initiatives such as Six Sigma projects. In addition, we anticipate that many enterprises will use streamlined processes as a competitive weapon in the marketplace. ... Every U.S. business must comply with thousands of federal business regulations. Process management technologies and business rules engines can help companies understand new rules and enforce compliance policy.”

Case studies abound from the client companies of a host of established and start-up BPM technology and services providers, companies such as Action Technologies, FileNet, Fuego, HandySoft, Intalio, Lombardi Software, Metastorm, Pega Systems, Savvion and Staffware. Enterprise application integration and application server vendors are also all putting BPM center stage in their offerings. We are witnessing a clear shift towards process orientation and the rise of process oriented architecture (POA). The industry is reaching for the next step in the development of enterprise software systems as it responds to the urgent concerns of customers responding to new economic realities.

Gartner have identified the initial benefits companies seek when they deploy BPM, including: reduction in elapsed process time, higher productivity per person, improved quality/reduced errors in processes, reduced number of steps in processes, higher

employee satisfaction through process clarity, fewer people needed to execute processes, improved coordination across departments/geographies, automation of administrative tasks, reduced cost per transactions within process, enabling external users access to internal processes, improved regulatory/legal compliance, flexibility in processes/business agility, data/process integration across applications, reduced risk and ... finally, reduced waste/scrap.

Sounds like all is well in BPM land. But there is a catch.

As the momentum gains, so does the confusion, for BPM systems are defined in as many ways as the vendors you ask for definitions. The technologies marketed under the “BPM moniker” vary greatly in scope and functionality, adding to the market confusion. One major consulting firm’s analysis of the space has concluded that there are as many differences between BPM technologies as there are similarities. What is going on?

Gartner and others have reported that BPM is a composite market, that is, vendors are creating “BPM Suites.” But BPM isn’t just a matter of bringing together the pieces — workflow, EAI, B2B, Web services, business rules engines, and business activity monitoring—into a “process tier.” A true BPM system must have an over arching *business process architecture* and an *intrinsic process meta model*, not a bundle of preexisting technology models stacked together in a so-called process tier. Sure, collecting these technologies into a process tier can accomplish *business process automation* or *business process integration*, but it’s the “M” in BPM that can so easily go missing.

To cope with the inherent dynamics of business processes, the underlying process model must be based on a solid mathematical foundation (just as today’s databases are based on the mathematics of relational algebra), the computer science of distributed mobile processes, and process semantics like those specified in the BPMI.org’s Business Process Modeling Language (BPML). It’s this foundation that puts the “M” in BPM so that end-to-end processes can be managed over their complete lifecycle—from discovery, to design, deployment, execution, operations, interaction, optimization and analysis—from cradle to grave for each business process brought under the BPM umbrella. Further, these capabilities are needed by business people who aren’t about dip into the plumbing of the technologies corralled in a so-called process tier. They want business process semantics, not APIs.

From the business viewpoint business processes aren’t comprised of different pieces of applications, integrations, rules, Web services and workflows. Processes are *whole entities* (what Michael Hammer defines as end-to-end work) and need to be represented and managed as such. Indeed, in many applications the process model is mostly concerned with the white space in organizations, those activities and interactions that are not currently represented by IT or managed in any explicit manner. It is critical therefore for companies to realize that an effective BPM system is therefore more than a bundle of previously disjoint technologies. A true BPM system provides a digital representation of whole processes. It is this direct representation and manipulation of business processes that’s at the heart of a true BPM systems architecture, an architecture built from a consistent process model underpinning. Such an architecture not only makes possible reliable business process

automation and integration, it provides for higher-level capabilities, such as process query and simulation, that are needed for the “M” in BPM.

When similar conclusions were drawn with regard to business data, the data representation was taken outside of application technologies and managed in a separate environment, the relational database management systems (RDBMS). Way back then, emerging ERP vendors such as SAP capitalized on the separation of data management from applications and built high-tech empires. Oracle, a RDBMS innovator, later became a tier-one ERP provider in its own right, and now slugging it out in that market space as evidenced by Larry Ellison’s latest moves to acquire PeopleSoft. In short, a whole new business market sprang out of the separation of database management and applications. The BPMS will follow a similar path in its commercial evolution, creating the market for process, not data, centric solutions. Another analogy that has been drawn is the impact CAD/CAM had on productivity, innovation and mass customization in manufacturing.

From the end user’s viewpoint, requirements for managing this entity called a business process tend to fall into two categories:

1) “I need a new process.” For example, a mining company recently determined it could save hundreds of millions of dollars a year if it had visibility over the flow of spare parts and equipment into its mining operations worldwide. Similarly, a financial services firm decided it needed a brand new customer service process, one that would allow teams within and across different financial providers to work together to provide differentiated customer service, not just to high net worth individuals, but to all customers, without increasing service levels.

2) “I have a broken, or badly managed, process.” For example, a fast moving consumer goods (FMCG) company decided that although it had a supply chain system, it was not allowing the company to manage the process of optimizing the purchase of raw materials. Similarly, an aerospace company sought to significantly tighten up its change management processes so that parts were not manufactured by second- and third-tier suppliers to an earlier specification inconsistent with current aircraft design baseline.

To meet these requirements, BPM must move outside of applications, integration solutions and BPM suites alike, for processes must be managed across disparate systems and business units that span the entire the value chain. For this kind of cross-company collaboration to happen, process models must become the new sharable “enterprise data models” of the past. Indeed, business process management implies better visibility, the ability to make changes, improved automation, measurement and analysis, but the key strength needed is BPM’s ability to focus on the end-to-end business activities of an entire value chain, and that requires a universally understood process model.

Today, companies may not be asking directly for BPM, but many of the questions they ask are symptoms that need a BPM cure. Their questions, issues and concerns boil down to a painful lacking when it comes to process management, or even the absence of key business processes. A BPM technology strategy should aim to ensure that a company’s need for new processes, or better process management, is never held

up by IT programs that bake processes into software, or require organizations to adjust to pre-packaged software solutions. Rather than treating the need for new processes as a new software engineering project in an amalgamated process tier, with the true BPM system and its associated tools, business people are empowered to create the new processes or process variants they need, and at a pace they can accommodate.

Business people ask the darndest questions when it comes to business processes. They ask:

- How can they actually *see* processes, as opposed to ferreting around in numerous IT systems and deeply buried organizational practices?
- How can they effect changes to processes and keep the infrastructure and organizational transformations aligned?
- How can they eradicate process management bottlenecks to take *change* itself off the critical path?

The following snippet sourced from BPM thought leaders BPML.org, is the kind of scenario that generates such questions and makes a good acid test for BPM systems:

“A Fortune 500 marketer, processor and distributor of agricultural, food, financial and industrial products serves the need of Consumer-Packaged Goods manufacturers through 90 independently-managed business units, which are the result of successful mergers and acquisitions. One of its customers conducts business directly with 9 business units, through nine different order-to-cash processes. Unprecedented improvements in the business would result from the virtualization of a single order-to-cash process that would cater to the needs of this customer, without having to reengineer the processes of several business units all at once, *placing that process under process management for future optimization and change.*”

Can the BPM system offer a sufficient degree of visibility, agility, and accountability over such complex, distributed and collaborative business processes? And, can it handle the next round of mergers and acquisitions? It’s the capability to handle such scenarios, without dipping back into the technology plumbing, that separates the BPM contenders from the pretenders.

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