

# Achieving enterprise process agility through BPM and SOA



Creating streamlined, repeatable business processes

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public organizations alike will need to look at an Enterprise Process Architecture that includes both Business Process Management (BPM) and Service Oriented Architecture (SOA).

#### Enterprise process agility

As business leaders demand responsive, adaptable and agile business processes, the challenge for IT professionals is to automate those processes. Many today see BPM and SOA as a way to do that, to create the required architectures, build the infrastructure and provide a new breed of tooling.

BPM enables organizations to design, automate, monitor and actively control their process assets. By automating processes, an organization can lower operational costs, increase productivity and provide a higher quality of service to its customers.

BPM orchestrates the services defined by SOA. One of the key objectives of SOA is to design and implement loosely coupled, coarse-grained, reusable artifacts ("services"), which can be consumed by business processes through a wide array of platform-independent service interfaces. As a result, BPM processes can quickly consume SOA Web Services to allow the rapid development of what Forrester Research terms "Dynamic Business Applications." This new paradigm enables application and enterprise process agility by reducing the custom code that traditionally was critical to integrating legacy client and business application systems.

The importance of the BPM-SOA alignment is evidenced in Gartner's prediction that, "Organizations that align their BPM and SOA initiatives in 2007 will double their likelihood of becoming an industry leader by 2011." (SOA and BPM Are Better Together, February 9, 2007.)

#### Creating business value

In a Service Oriented Architecture, applications communicate using a standardized message format such as XML. This simple, non-proprietary mode of communication means that business processes can be assembled from a set of service components developed either in-house or externally.

This makes business processes easier to maintain and modify. In many cases, modifications can be made with little or no disruption at the business level. IT departments, therefore, can shift their focus from maintaining monolithic applications and their fragile integrations and spend more time on assembling composite applications.

For example, if a bank's core process for commercial lending requires a customer credit check, it can simply invoke the

**D**oing more with less: that's the challenge facing a wide range of enterprises from financial service firms to healthcare providers to government agencies.

Their customers' expectations for service and speed are rising at a pace that leaves many organizations lagging behind. In addition, organizations are focusing on increasing productivity, decreasing costs and attempting to build business models that allow them to adjust swiftly to the regularly shifting business landscape in days and weeks instead of months and years.

Addressing and resolving these business challenges calls for streamlined, repeatable business processes - architected value chains, automated services - to achieve real "enterprise process agility." Private and

## BPM ENABLES ORGANIZATIONS TO DESIGN, AUTOMATE, MONITOR AND ACTIVELY CONTROL THEIR PROCESS ASSETS

service representing the credit check. Any future improvements or changes to the credit-check service will be transparent to the commercial-lending process or any other application that uses this service. Compare that with rewriting a core application - a risky, costly and time-consuming endeavor.

#### Enterprise process enablement tools

Agility has been defined as the ability to deliberate and draw conclusions rapidly in order to implement nimble activities without difficulty. BPM products have critical features that enable enterprise process agility for both IT and business personnel. A key BPM offering is a workflow modeling tool such as EMC's Process Builder that allows business analysts to transfer process control to process designers. It is up to process designers - technical people but not necessarily programmers - to make the process executable.

## Using a process-modeling tool, the designer adds integration with external systems and services

This activity used to be a complex, highly technical and time-consuming task. SOA is changing all that by presenting the process designer with a menu of reusable services that snap into place like Lego blocks. This approach lowers the cost and complexity of integration across entire enterprises, and decreases time-to-market or value.

Services can also invoke complete business processes or particular process segments based on specific business events such as a loan exception process based on a particular credit score or a service level agreement requirement to process an insurance claim.

Using a process-modeling tool, the designer adds integration with external systems and services. With a simple drag and drop, the

designer selects services from the SOA service catalog. The designer also defines the performer - which could be a person, group queue, or system - for each activity in the process and creates the user interface for the task performers. A flexible forms tool makes this a simple matter of configuration rather than programming and further supports ease of development, faster time to value and operational agility.

#### Process runtime and monitoring

At runtime, the process engine performs the orchestration functions. It implements the flow logic and manages queues and timers. Interfacing with external systems and middleware, BPM executes the web services invocations automatically.

To determine if processes are meeting their goals, a Business Activity Monitor (BAM) is used as a real-time, intervention-focused dashboard tool for measuring and managing business processes. A BAM tool allows organizations to identify business process failures or exceptions and ensures that organizations are adhering to service level agreements and/or strategic Key Performance Indicators (KPIs).

The addition of BPM and BAM within an SOA environment creates a vital "game changer" by enabling organizations to transform their rigid IT infrastructures into real-time enterprise platforms. Together they deliver the accelerated sensory and event response mechanisms essential to support the organizations ever-changing business needs and requirements.

#### Innovative and inexpensive process improvement

The net benefit of SOA is that it gives designers and business analysts the ability to quickly replace one service in a process with a better one without having to know or write/rewrite expensive code. And each process itself becomes a service that can then be automatically invoked by other processes, applications or services related to business or customer events.

The process-driven BPM and SOA approach provides a powerful new paradigm for building

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adaptable, model-driven Dynamic Business Applications and establishing an enterprise process agility model across the organization.

Most importantly, this fosters a new proactive management culture, which ultimately leads to real business innovation and transformation.

This is good news for enterprises that face the challenge of competing cost effectively in an intensely competitive global environment where delivering heightened levels of customer service and market responsiveness is paramount.



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