



# Optimizing IT with Business Process Management (BPM)

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### Executive Summary

*"It is not the strongest species that survives nor the most intelligent, but the one most responsive to change."* - Charles Darwin

The economic conditions of 2008 and undoubtedly 2009 will go down in history as the worst economic slump since the Great Depression. And since Information Technology wasn't around in 1929, this is arguably the worst economic downturn for IT in history.

Like others my age, many in IT will recall the economic downturns over the past 20 years (or more, but I am not going to date myself), where the IT organization was considered a safe haven for employment, and viewed by the company as the life boat, providing innovation to help the business position itself properly for the next business upswing.

Now that organizations have options and alternatives such as IT outsourcing, off-shoring, new business models and IT service delivery mechanisms, it is incumbent on any vestiges of remaining IT to optimize its own processes and itself in order to validate and confirm its contribution to the value chain of the business it serves. As many in the industry painfully understand now, the IT organization is no longer immune from this or future recessions and/or business cycle downturns.

A wise man once told me; "It takes ignorance to take something simple and make it complex, but it takes a genius to take something complex and make it simple". ITIL isn't necessarily a complex subject, but it has been made overly complex leading to misapplication and misguidance resulting in a number of failures. The current "back to basics" trend suggests people and organizations want real lasting strategies, approaches, methodologies and technologies that make sense.

This whitepaper is intended to provide insights and ideas into how Business Process Management, or BPM, an already established process enabling technology, can be applied to IT processes as a means of simplifying, driving costs from, and optimizing your IT organization.

## BPM Explained

Most people guess the “BP” correctly but opinions vary on the “M”. Some say “Modeling”, “Monitoring”, and others “Measurement”. Actually - Business Process Management encompasses all these things and typically at the root of it all is the concept of models.

Business Process Management (BPM) is a set of methodologies and technologies designed to support explicit business processes, right from analysis and definition to orchestration/execution, monitoring and optimization of business processes. The BPM market was formed from the opinion that business must be managed from a process point of view. The rest of the business world actually drove the creation and demand for BPM. BPM vendors provide technology that deliver “Model driven process execution” as opposed to code-based execution. Gartner Group advises that this is the best way to enable business and IT professionals to manage and change processes collaboratively, especially in a volatile business environment<sup>1</sup>.

ITIL® is about formalizing and optimizing the way in which we (in IT) behave and work. Process execution and improvement requirements are often unique to each organization, even when adopting ITIL® best practices. This obviously favors a “Build” vs. “Buy” approach to supporting technology. Unfortunately, time frames and costs are not compatible with this level of process improvement. BPM is the alternative approach to “Build” and “Buy” that delivers flexibility and uniqueness of “Build”, while at the same time providing the time value, standardization and reduced cost of “Buy”.

The basic value proposition of BPM is the ability to enable processes with less effort and cost, with higher quality than traditional means. In fact, BPM is intended to respond to the following set of business values:

- **Agility:** The ability to bring new products and services to market more quickly and adapt processes more effectively to changing market demands
- **Efficiencies:** Most processes are inefficient due to manual effort, poor hand-offs between departments and a general inability to monitor overall progress. The deployment of BPM solutions helps to eliminate these problems. The efficiency benefits are typically expressed in the reduced number of Full Time Employee’s (FTE’s) required to perform particular tasks
- **Visibility:** Providing management insight into process-based performance indicators. This enables an organization to make better business decisions and handle exceptions better.

Gartner research indicates that even without process redesign, a basic investment in a BPM suite yields significant returns. By simply “making the current-state handoffs, timing and responsibilities explicit, productivity improvements of more than 12 percent are normally realized<sup>2</sup>”. In another report, Gartner indicates that 78% of projects see an internal rate of return (IRR) of greater than 15%. The same report indicates that these projects were deployed in very quick order (67% in less than six months, 50% in less than four months).

BPM has proven in almost every case to increase efficiency, effectiveness and agility.

As a management discipline, BPM emphasizes modeling the business from a cross-functional process perspective and establishing performance goals from that perspective as well. Years ago Dr. Geary Rummler called this “managing the white space in the organization chart,” and it remains central to the process perspective today.

<sup>1</sup> Source: Gartner Research: Magic Quadrant for Business Process Management Suites, ID:G00164485 Date:18 Feb 2009

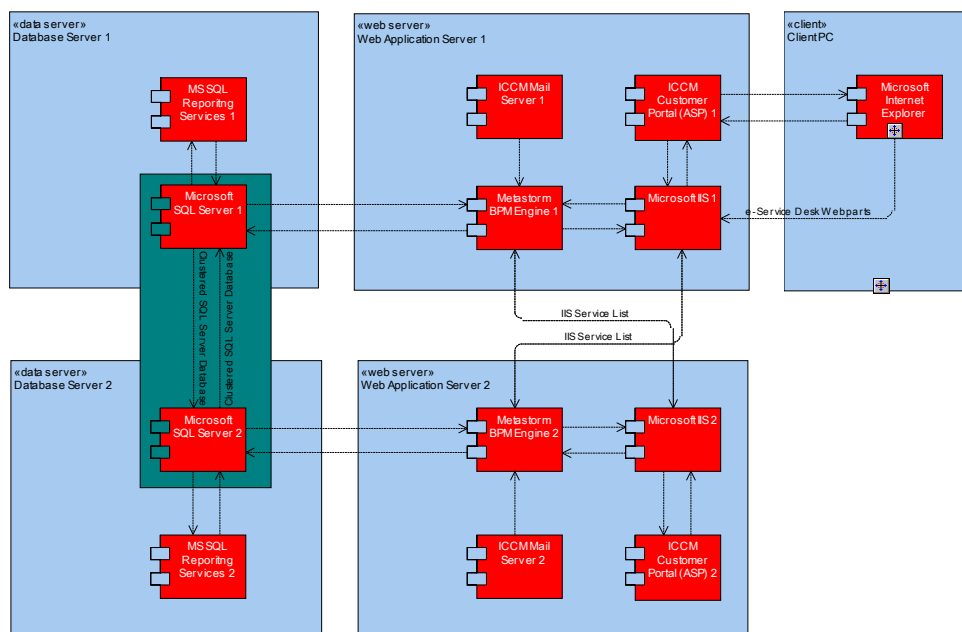
<sup>2</sup> Source: Justifying BPM Projects, Gartner Group 2004

To some management consultants, BPM begins and ends with process modeling, but there's much more. Business Process Management Suite (BPMS) solutions provide the technology platform that takes models and metrics, defined by the business, turning them into an orchestrated and executable implementation. This platform actually automates the human workflow, integrates data between disparate backend systems, and executes the business rules, defined and controlled by the process model. And while it's executing the business process, the system continuously records snapshots of data that allow the process to be measured end-to-end, as well as in real time, and corrected easily when the need arises.

### Modeling as a Science (and art)

Modeling is a formal means of documenting the artifacts, relationships, goals, steps and states of the end-to-end process. Documenting processes in a way that can be understood across functional units, geographic units and divisions of the enterprise. Processes can easily be analyzed for cost, quality and efficiency improvements which is a key feature of BPM as a new management discipline.

Process modeling is inherently a business function, and modeling technologies empower the business to define the steps, and the performance metrics. While there is an art to model layout and construction, methods and standards are employed and followed for consistency and structure. The most important thing to understand is that a model is not just an illustration or graphic. The objects and links in a model represent objects and relationships that are re-usable, can be abstracted, related, measured, etc. In other words, a model is a window of something larger that cannot be viewed in two dimensions in its entirety. The following are just three examples of various types of models.



**Figure 1 - Example Deployment Model - A Deployment model shows the configuration of run-time processing nodes and the components, processes, and objects that live on them.**

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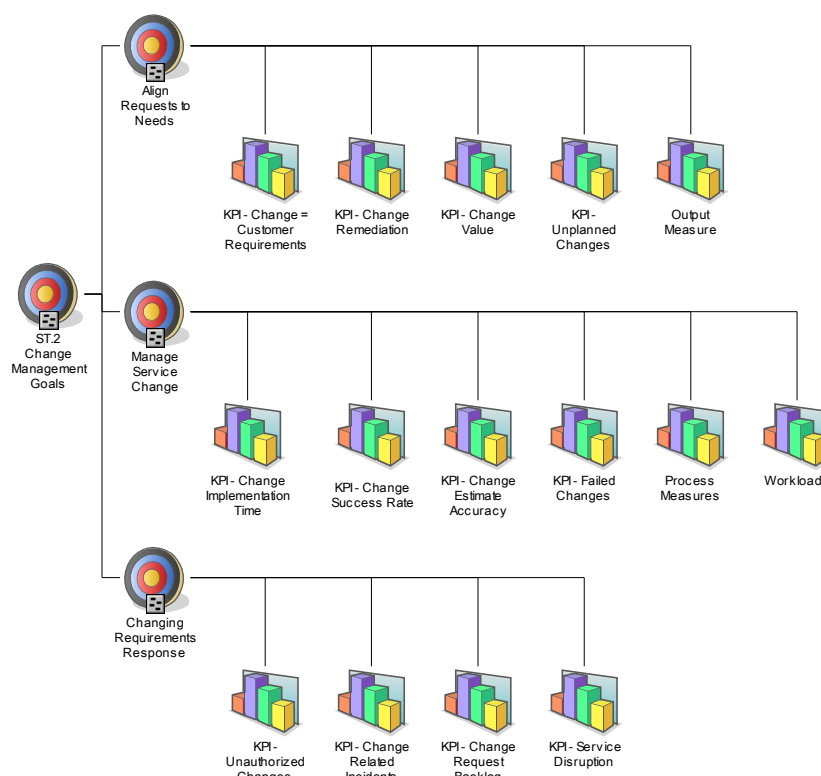


Figure 2 Example Goal Model for Change Management - A Goal model organizes the Goals and their Metrics of an enterprise into a hierarchy. Goals and Metrics may be organized in a variety of ways depending on the categorization scheme used.

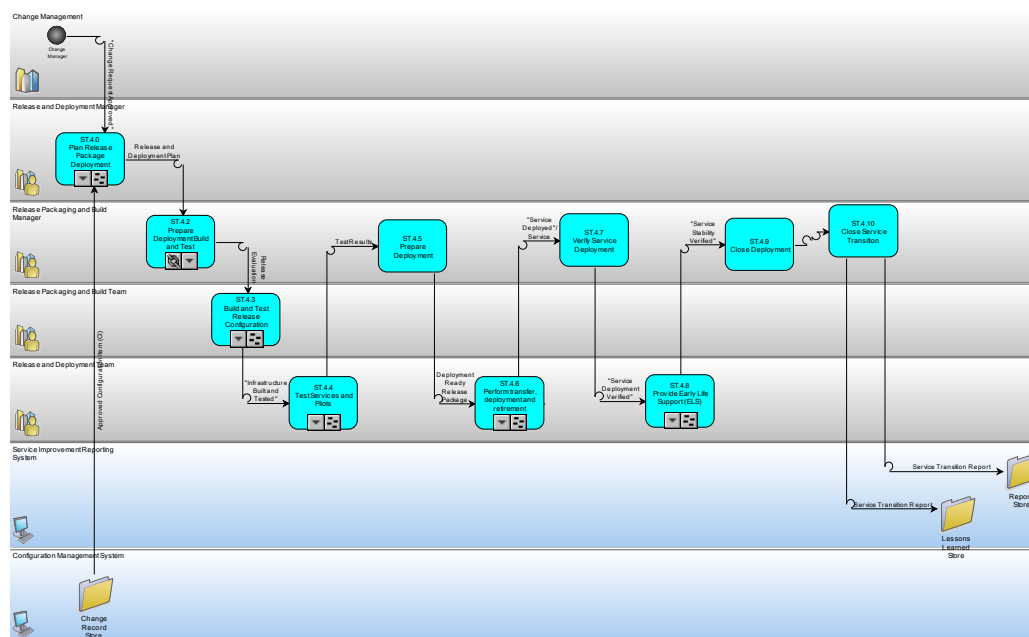


Figure 3 Example Top Level Workflow Model for Release and Deployment Management - A Workflow model is a representation of a Business Process in terms of its component Activities, and the flow of work among these Activities.

Most modern modeling tools support not only publishing complete and consistent process documentation in various formats, but also provide a means of process analysis through various tools such as simulation. This allows “what if” analysis and process improvement initiatives that yield real business analysis metrics – resources, cost, units, etc.

### **Inefficiencies in IT (why IT needs “Optimized” in the first place)**

Business Process Management technologies obviously cannot solve all issues that result in IT “sub-optimization”. Some are rooted in poor management practice, organizational challenges, and barriers that completely derail optimization efforts. Obviously management support and involvement is necessary for optimization to take place. Other “usual suspects” of IT sub-optimization include:

#### **Lack of adoption and understanding of a process culture**

Obviously the “people” component of processes and IT optimization require that where there are human “actors” or customers of the process, they must understand their part in the processes and workflows, the metrics, control objectives, goals, owners and most importantly, their role within the process. Process defects are usually a result of people incorrectly executing a process, or supporting technology that does not enforce or detect process controls.

#### **Processes operating in isolation**

As Dr. Geary Rummler stated in his book “Improving Performance – How to manage the white space on the organization chart”, it’s the organizational white space often missed as technology and process are implemented in vertical, stove pipe fashion. Process integrations and opportunities to integrate are often missed, and there is little to no process improvement possibilities where processes have been organizationally “stove piped” or implemented within vertical technologies.

#### **Atrophied process initiatives that have failed to demonstrate value**

Many ITSM programs start with Incident, Problem, or Change and Configuration Management and then stop. Why this happens is subject for debate. One reason might be that technology solutions are selected based on the requirements of the upfront processes that are known at the beginning of the project. Since processes to be implemented later aren’t included in the requirements, tool selection results in an optimized tool for the initial processes – but a technology that sub-optimizes or completely omits support for future processes.

#### **Managing artifacts but not processes**

The problem with implementing many different solutions to address process execution is that integrations typically transfer artifacts such as incidents, changes, and configuration items, but miss process metrics and information - metrics that are typically used to measure and manage the process itself. As a result, process metrics and measurements are not typically incorporated into the integration design.

## **BPM for Service Strategy and Design**

### **Modeling Strategy through Principles.**

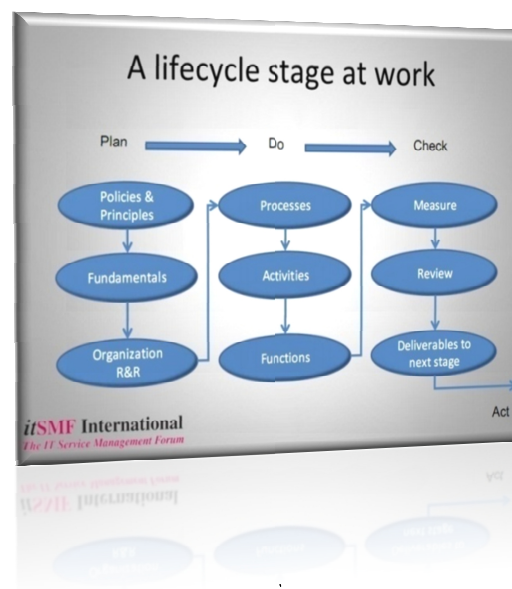
When ITIL® Version 3 was kicked off, the road show actually included a model that decomposed the Deming Circle (Plan-Do-Check-Act) into sub-domains. One could argue this is a “meta-model” (model of a model) describing the “supporting” artifacts within the scope of each step of the Deming circle.

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From a Strategy perspective, these items can be captured in model and object form, reused in other models, and related in different ways to other models for other purposes. For example: Policies and Principles can be captured, related, grouped, categorized and prioritized in strategy models. This provides the basis of future states, what is to be accomplished, and in what priority. Later, those principles and policies can be related to workflow activities that will explicitly identify where policies, goals and objectives are met by the processes being implemented.

Various types of models can be leveraged for Service Design such as goal, capability, organizational, class, and use case models – to name a few. Again, these can be related to objects of the strategy model's policies and principles, and become the basis for yet more downstream models.

One advantage to using models is that they provide a bridge to Enterprise Architecture and other areas as well. For example: Enterprise architects will often refer to “Capabilities” of an organization, depending on the EA framework they leverage. If you look at the definition of capabilities, it aligns closely to what ITIL practitioners call a service. They are similar and through modeling, it is very possible to align and integrate your Enterprise Architecture initiative with your IT Service Management initiative.



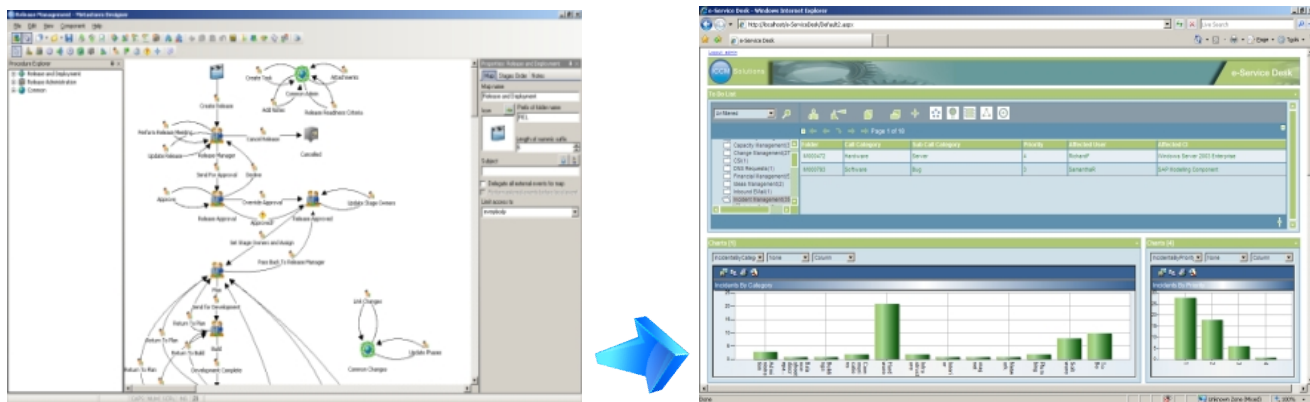
## BPM for Service Transition and Operations

### Process mapping and execution through BPM

Business process models and maps are valuable tools for understanding organizations and how they operate. Dr. Geary Rummler summarized the inherent value of developing business maps with the simple phrase, “If you can’t draw it, you don’t understand it.”

By using several types of models such as organization, workflow, state and goal models, with relationships to one another, you can capture the verbs (what gets done) AND nouns (what artifacts that work is done on). But most importantly, how all of these activities and objects will be measured and managed. And this happens at levels that are meaningful for the organization. Within the modeling environment, these models can be related back to strategy models to reference and answer the question “What are we doing, and why are we doing it?”

From an orchestration perspective, many BPMS technologies have reached the point to where graphical models actually ‘orchestrate’ the service management application. Process orchestration is a growing business technology that can be leveraged stand-alone or across disparate systems to make a process appear as one despite the many systems involved in supporting the process.



The benefits of leveraging BPM for IT Service Management include;

- Consistent and standardized process measurement across all ITSM processes (lead time, queuing time, cycle time), resulting in decreased cost and effort to produce process dashboards and reporting.
- Cost effective implementation of preventative process controls vs. detective controls resulting in reduced training requirements, and less after the fact documentation and reporting.
- Reduced reporting demands as actionable process metrics and preventative controls result in immediate actions such as escalations, messaging, and artifact modification prior to process defect or service impact. Process improvements can be identified before a poor service experience with your customer has happened and implemented in a remarkably short amount of time.

## BPM and Continual Service Improvement

By this point, Continual Service and Process Improvement is implicit as the process has been designed, modeled and linked based on strategy defined by the business customers with appropriate goals and metrics. If BPMS technology then is being leveraged for process orchestration, continual service and process improvements are easily spotted, adjusted, modified in orchestration, and monitored.

The whole point of BPM is to optimize and improve processes that quickly and easily can be change based on changes of the customer, the business, or the organization. By leveraging simulation capabilities available with process/workflow modeling tools, “what if” analysis is easily performed against proposed changes to a process based on real metrics. Once a process improvement has been identified, it can be modeled fairly quickly for orchestration among users of the process. Measurement then is immediate once the new orchestration is implemented.



### Summary

Never before has business and IT been under such tremendous pressure to transform itself and make decisions based on actual value contribution to its customers. This new reality requires a level of IT optimization that is no longer an optional decision. Business Process Management Suites (BPMS) have been providing demonstrable value to the business process and application side of the house for years. Why it hasn't made inroads into IT Service Management until now is an interesting question. The majority of BPMS vendors rarely target internal IT organizations for IT process design and orchestration, missing out on huge opportunities for them to reduce cost and increase agility.

IT process documentation is costly to create, often ineffective and inconsistent, difficult to maintain, and usually ends up on a shelf or in an electronic store never to be touched again. Technologies implemented to support these IT processes often fail to achieve alignment with the business, resulting in sub-optimization of the IT organization as a whole. By leveraging BPM within the IT organization itself, opportunities to truly reduce operational costs, improve quality and capabilities, and increase capacity, will surface. This is something organizations that have already leveraged BPM external to IT operations have already experienced. As a result, not only is operational IT process documentation maintained and kept current – but is aligned with the business and actually drives the process orchestration technology. This then results in a measureable means of optimizing IT.