



# The Emerging Confluence of BPM and Cloud Computing

## *What does it mean for BPM adoption and success?*

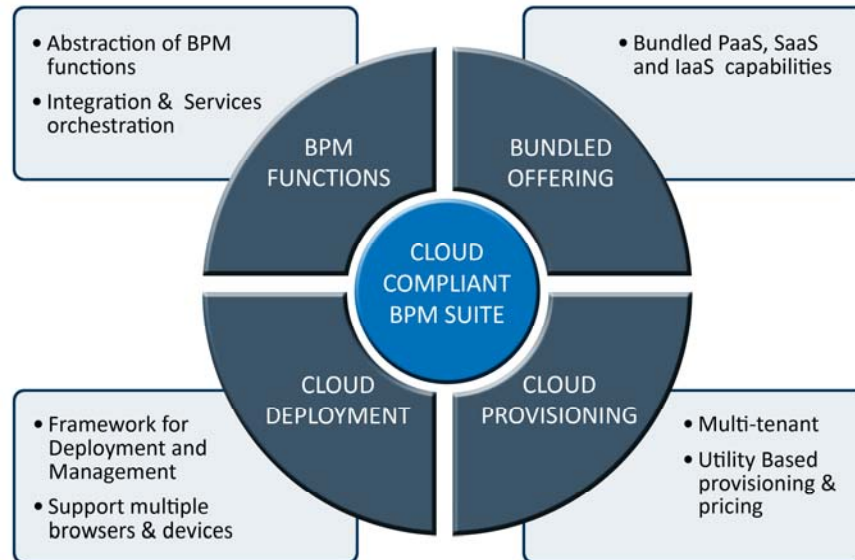
Every few years we come across a new wave in technology which either reshapes the direction of the technology landscape or enhances substantially the application of existing technologies. Cloud computing is one such wave which seems to be setting a new trend in the technology world. Cloud computing, with roots in “Grid computing”, involves provisioning of dynamically scalable and virtualized resources over the internet as a service. This could be offered as Infrastructure or Platform or Software as a service. The realization of significant business value around cloud computing has suddenly created a hype and we see a spurt of activities with technology and business stakeholders planning to adopt the platform. For lack of accepted standards, proven scale, performance and many unknowns surrounding the cloud based environment, I would still refer to this as an emerging trend. But this concept has deep rooted value and benefits, that address many challenges surrounding local server based hosting and deployment of enterprise applications. BPM (Business Process Management) is one such technology space which is embraced by most enterprises but facing significant challenges in terms of hosting and implementation. Let us explore how cloud computing can compliment BPM in addressing enterprise adoption challenges.

BPM is a relatively well known term and has become a major transformation tool leveraged by businesses to model, automate and optimize their processes. BPM is still going through a hype cycle as many organizations have tried their hands at BPM and seen limited to medium success. Less than 25% of organizations implementing BPM have reached a high level of maturity and success. Gartner analysts have predicted that more than 50% of BPM Programs will fail by 2011. Based on a Prediction by Gartner Analyst Michele Cantara, *“The share of BPM investments targeting end-to-end business processes that incorporate external services or cloud resources will increase 500% by 2012”*.

### Definition of a Cloud Compliant BPM Suite

A cloud-based implementation would derive value from three areas: **Economic** (No capital investments, Pay by use, expand/shrink resources as needed), **Architectural** (commonly accessible environment and resources for development and self-service provisioning), **Strategic** (outsourced ownership of infrastructure and operations enabling focus on core activities). A BPM suite must address these value elements for being classified as cloud compliant.

The below diagram summarizes the capabilities and design elements that address this compliance.



**Fig 1: Basic elements of cloud compliant BPM suite**

A comprehensive ability to offer the following services is a must for BPM suites:

- a. **PaaS** : Platform as a service capabilities such as Multi tenancy services - metering and billing, authentication, user management and asset management, application engines – Data, Process, Rules, Content, BAM, UI, Portal etc
- b. **SaaS** : Software as a Service - packaged applications, on-demand provisioning and pricing by use
- c. **IaaS**: Infrastructure as a Service - Cloud infrastructure and management (Operating system, Failover, backup and disaster recovery and virtualization capabilities) is key to evaluate any BPM suite for cloud.

### **BPM on the cloud - Addressing key challenges in BPM Adoption**

BPM offers a very compelling set of business transformation capabilities and demonstrable Return on Investment (ROI). But why do more than 50% projects still fail to meet the expectations and desired adoption level? Some of the inherent challenges and issues and how BPM on cloud can help in solving these problems are listed below:

- **Technology Constraints:** No single BPM tool that can meet all the requirements for an enterprise. BPM technology decisions made in one business context cannot be applied to all problem areas. Technology itself can be a major inhibitor to successful adoption of BPM.



***Cloud Benefit: Access to BPM on cloud makes a big difference in trying out different technologies with no big bang investments. Ease of provisioning and utility based pricing is a great boon when business needs to be convinced of any technology.***

- ***Time to market*** : When the time taken to provision the hardware and software with all other operational elements is more than a few months, the time to market and the agility offered by BPM loses its meaning and eventual loss of faith from business users.

***Cloud Benefit: BPM on cloud brings down the infrastructure readiness time from a few months to minutes or days. This is a dramatic change in the way Business will embrace BPM without the hurdles thrown by IT and Infrastructure.***

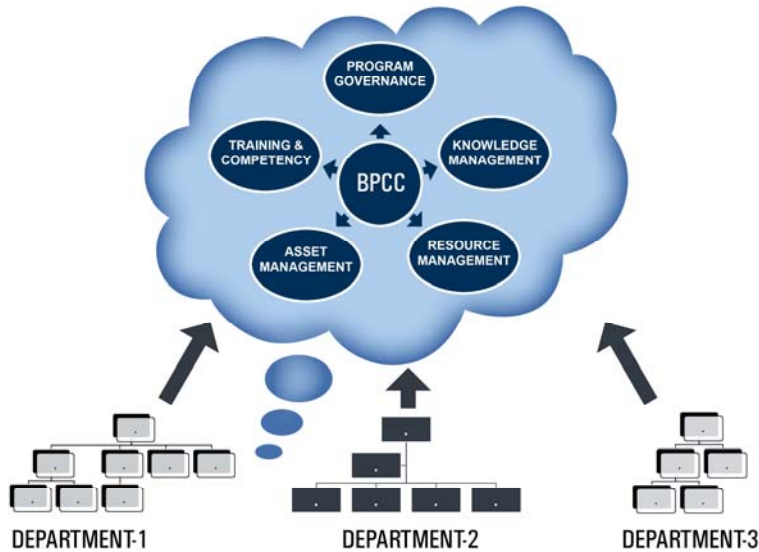
- ***Collaboration across and within enterprises:*** BPM enables an enterprise to collaborate in terms of intra and inter organizational processes. Localized BPM implementations do not support external supply chain and value chain processes. Departmental BPM implementations on local environments defeat the larger objective of orchestrating end-to-end business processes which reflect in the strategic KPI's and operational excellence.

***Cloud Benefit: BPM on cloud offers borderless environment when geographically dispersed teams need to be supported for complex processes. Cloud based BPM facilitates collaboration with partners across supply chains in managing processes that cut across environments.***

- ***Business Process Competency Center (BPCC) and Enterprise Rollout:*** As organizations start rolling out BPM at enterprise level, the focus shifts to Governance, Standardization, Optimization and Scalability for successful adoption and realization of BPM benefits. Most organizations are structured as silos and their BPM investments are departmental. The need for standards, open architecture, reusable components with interoperability and knowledge management emerge as strategic needs. In a traditional organization there is no motivation for anyone to have a shared infrastructure and assets that can be leveraged across teams.

***Cloud Benefit: Cloud environment provides a centralized and commonly accessible BPM medium for achieving enterprise level process excellence. The ability to collaborate and share will be easily facilitated due to the very nature of shared infrastructure and commonly accessible environment. Hosting a Business process competency center on cloud will provide an institutionalized medium to enable above functions.***

BPCC on cloud will help organizations take a leap forward in achieving success from their BPM initiatives and also establish governance, collaboration and reuse of assets.

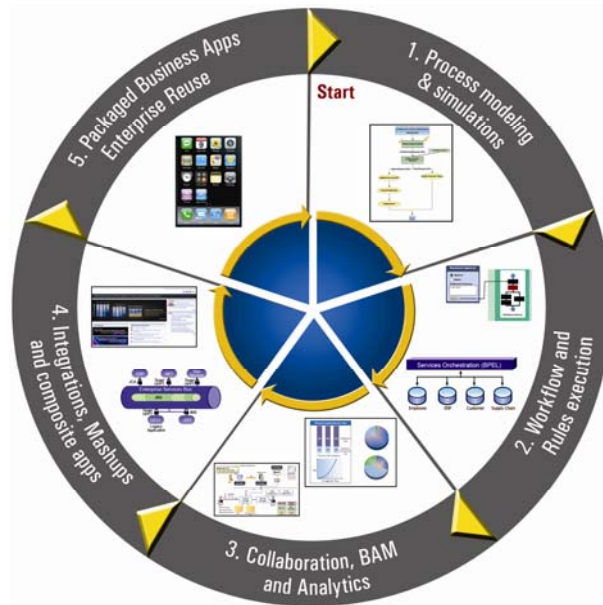


**Fig 2: Business Process Competency Center (BPCC) on Cloud**

### **BPM on cloud: Five-Step Approach for Effective Introduction**

If there are so many benefits around BPM on cloud, then why are enterprises still sitting on the fence to adopt? Is this due to lack of knowledge on how to approach BPM on cloud or the uncertainty and fear of the unknown? Or is it because of the unproven ROI? Definitely there is a better support needed in terms of the decision tree around when to implement an application on cloud versus local hardware. These questions could span security, performance, governance, shared usage, time to market, user access control and the product capabilities to run in a cloud environment. What is the role of IT versus business in this decision? There is a need for step-by-step approach which will help the incremental exposure to hosting BPM on cloud and realizing the benefits.

A progressive approach described below will be helpful for effective introduction of BPM on cloud within an enterprise and ensure better success.



**Fig 3: Five Step approach to introducing BPM on cloud**

- **STEP- 1:** Start with documenting process models & simulation with cloud based modeling tools. This will be an easier start with less risk and change management involved. Create awareness about cloud and its value.
- **STEP- 2:** Implement applications requiring basic Workflow, Forms, Rules and Case management, which do not require heavy integrations and real time performance levels. Demonstrate ROI and time to market improvements.
- **STEP- 3:** Adopt collaborative processes involving geographically diversified teams and complex value chain processes to drive Key performance indicators (KPI). Implement business activity monitoring (BAM) dashboards and analytics to monitor KPI's. Establish governance models and standards for adoption.
- **STEP- 4:** Implement integrations with legacy applications, mash-ups and composite applications, complex Web services orchestration on cloud to align diverse enterprise IT investments with cloud based BPM. Create BPC on cloud and get subscription from key stakeholder for adoption across the enterprise.
- **STEP- 5:** Build and host packaged business applications, which are configurable and reusable across geographies, lines of business or product lines.



## Conclusion

Cloud computing offers many advantages for BPM adoption and would help in removing some of the key challenges that have hindered BPM success. The goal of enterprise BPM and inter-organization process automation becomes a reality with the help of BPM on cloud. How companies adopt and adapt to the huge opportunity offered by cloud will decide if this confluence will yield the desired benefits or not. The sheer ease of deployment, reuse, shared knowledge and collaboration aspects are bound to foster process innovation to a greater degree.

(The online version of this article is available at <http://www.thesmarttechie.com/magazine/fullstory.php/KFKK94326458>)