

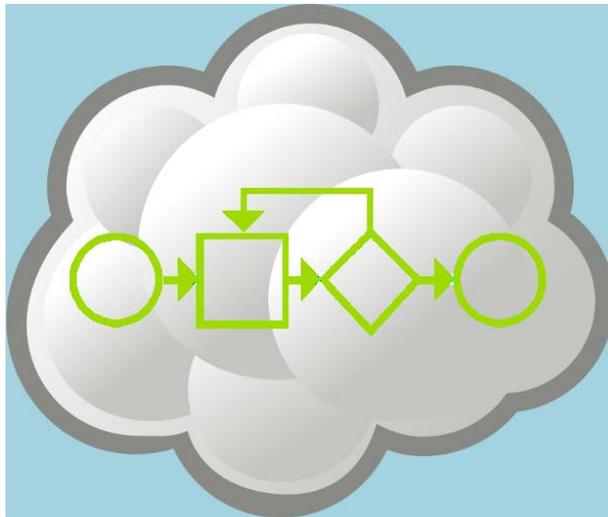
Cloud BPM Software Requirements

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As more and more BPM Software (BPMS) vendors offer cloud based solutions, the idea of a Cloud BPMS has started to look like a viable option. In this Article we will not be talking about what a Cloud BPMS is or what the advantages are, as there is a lot of information available about that on the internet. We will focus on requirements of a Cloud BPMS that organizations should look for when they decide to migrate to a cloud and for evaluating different Cloud BPMS.

This is not an exhaustive list in any way and focuses solely on requirements of a Cloud BPMS. These requirements should be considered in addition to the BPMS evaluation criteria. Migrating to cloud does not change the project lifecycle, however, there are some additional requirements that need to be considered in each phase. So in this Article, we list and categorize the requirements by each project phase, i.e. what to look for in each phase.



Platform

A Cloud BPMS should provide all the tools necessary for implementing a BPM solution in the cloud. In order to avoid any additional complexity, it should not be a mixture of on-premise and cloud based tools.

Plan

During planning, the most important activity is cost. Cloud based services follow the 'Pay As You Go' model which is very different from the existing models used to calculate cost of a project. Different Cloud BPMS vendors might calculate cost based on different factors such as:

- Number of users who will be performing the process
- Number of CPUs that will be utilized to run the process

- Number of business processes that will be built and deployed
- Number of products/features that will be used

These factors can be used individually or in a combination by vendors to calculate the cost. Platform usage data must be calculated on a longer term basis, only then can a good cost estimate be attained.

Analysis/Design

Cloud BPMS should provide process analysts and business users with tools that allow them to easily model abstract to detailed level processes (a.k.a. Level 1, Level 2 and Level 3). Users should be able to collaborate with others while doing process analysis.

Build

Process developers need extensive set of tools for implementation, so their representatives must be involved while evaluating a Cloud BPMS.

- An important requirement in order to reduce implementation time is the ability to build on to process models created by the process analysts and business users rather than starting from scratch. This, of course, requires that Cloud BPMS provide links between tools used by process analysts and process developers.
- Basic customizations like branding should not require any code changes and should be a simple setup option. As the processes get complex, zero code starts turning into a myth and customizations are required. So, look for a Cloud BPMS that provides maximum out of the box functionality, keeping in mind that in a cloud scenario there might not be many options to customize, and whatever customizations are done will directly impact the ability to upgrade.
- BPM solutions do not exist in silos; even simple processes integrate with other systems. So another important aspect to look for in a Cloud BPMS is the capability to integrate with other systems. Integrations can be of many different types, so based on an organization's business and future strategy, look for adapters of following types:
 - **Internal Integrations:** Does the Cloud BPMS provide ways to connect with organization's existing systems?
 - **B2B (Business to Business) integrations:** If organization works with other organizations then how would the Cloud BPMS be able to integrate with their systems?
 - **Cloud Integrations:** As most services move to cloud, the requirement to integrate with cloud based services will increase as well. Does the Cloud BPMS provide options to integration with other cloud based services?
 - **Internet of Things (IoT) Integrations:** If an organization receives data from IoT devices in the processes, does the Cloud BPMS provide capability to communicate with them?
 - **Reuse/Invoke:** Processes that have been created for an organization should also be reusable i.e. they should also act as services so that any of organization's other processes can invoke them, or if an organization operates in a niche area and provides industry specific processes then others should be able to invoke their processes.

Deploy

As execution servers move to the cloud, the process of deployment and maintenance will change as well. Support teams responsible will lose some control. So Cloud BPMS must provide debugging mechanism and access to logs for support teams so that they can resolve issues.

Monitor

Once deployed, monitoring the performance of a process is an important step in the continuous improvement cycle. So a Cloud BPMS should provide key performance indicators and reports to users. These should be available as an out of the box function as well as custom dashboards that users can create and personalize.

Miscellaneous

In addition to requirements for each phase, there are some generic requirements that need to be considered throughout the lifecycle. Listed below are a few:

- Majority of the organizations use VPN to securely access their IT systems. Since cloud based solutions are accessible over the internet, Cloud BPMS should provide similar level of security.
- Another important point to consider is that the Cloud BPMS should be accessible on all the major browsers, tablets and mobiles.
- Cloud BPMS should maintain all artifacts (process models, process data, reports etc.) in a central repository which needs to be controlled by a security policy i.e. user access restrictions based on job responsibility.
- Since the platform is going to be accessible over the internet, the performance needs to be a major consideration. Not all users will be in high bandwidth geographies, but the Cloud BPMS should still be accessible without any performance degradations.
- Scalability should be taken into account both from feature set and computing power perspectives i.e. if the organization needs to use more features of the Cloud BPMS or more users need to be added, would that be a straightforward activity that does not impact the existing infrastructure.

Conclusion

Migration to a cloud is a question of when, not if. So, whenever the organization decides to migrate to a Cloud BPMS, consider these requirements for evaluating different vendors.

Author

Adeel Javed is a consultant with 10 years of software development, design and architecture experience of enterprise-wide BPM, BAM and SOA applications. He facilitates organizations with their process improvements and implementation initiatives. His clients include multiple Fortune 500 organizations from diverse global industry domains of manufacturing, telecommunications, banking, technology and retail. He regularly writes about BPM on his blog www.processramblings.com. Connect with Adeel at www.linkedin.com/in/adeelj.