



People, Process, And Technology:

The Who, What, and How of Getting Your Customers to the Cloud

Naveen backed his car out of his parking space at his office and headed out to a customer meeting. As the freshly minted VP of cloud services for a managed hosting provider, he was designing a new cloud services strategy. He pondered how they would manage this new business direction from a people, process, and technology point of view, both internally and with their customers. He asked himself who should be involved? What would change and what would stay the same? How would he make it all work?

He knew the cloud opportunity was out there, and contemplated how he could leverage it without numerous false starts or failures... and without alienating their existing customer base.

PEOPLE, PROCESS, AND TECHNOLOGY: THE WHO, WHAT, AND HOW OF GETTING YOUR CUSTOMERS TO THE CLOUD

Service providers need to consider the people, process, and technology impacts of cloud computing on both their own organizations and their customers' organizations. The switch to cloud involves new, or reasonably new, hardware, storage resources, and network, as well as new stack elements such as virtualization. There are also often new components, such as customer self-service and the service catalog. Who is affected by the move to the cloud? What changes? And how can these changes be managed for maximum impact and minimum risk?

THE WHO: UNDERSTANDING YOUR USERS

Cloud provides the power to automate a tremendous amount of the process of provisioning IT services, but that automation should always be done in the context of the customers and their needs.

For the customer's IT department, cloud is an opportunity for them but also a change. A number of their traditional IT functions will be fully automated, which provides the IT department with an opportunity to focus on more strategic IT initiatives. However, IT will need to be reassured that issues such as security, configuration, compliance, and service governance will be addressed.

Service providers also need to consider their customers' day-to-day users. Cloud is a new way of consuming IT for the user; they need to be confident that it can deliver what they need when they need it. Service providers need to make sure they are meeting the needs of diverse users across their customers' organizations.

For example, developers would most likely want a whole copy of the multitier application on which they are working. They probably would need a few copies at different times for testing purposes. They could easily use, and would prefer, a self-service portal to request such an instance.

Development managers would most likely wish to ensure that each developer is working with the latest, properly configured version of the environment. Variability leads to bugs and, therefore, configuration management would be even more critical in this environment.

The applications teams tend to have a different set of goals. They need an underlying operating system with a solid service level associated with it. They might also want to use middleware, monitoring, security software, and other components in a multitier, often multi-VM, environment. Since most application stacks, or even the underlying components, are not identical, a flexible provisioning solution is needed to serve these disparate teams.

Business users usually need access to a wide variety of services, such as SharePoint and Microsoft Office. However, it is rare to find a user that requires access to the entire range of services. Therefore, it usually makes sense to limit the configuration options by user role in order to lessen confusion and prevent underutilization.

The key is to know the needs of the customer's users first, and then design the cloud services. Otherwise, the result could be a magical cloud with no customers.

THE WHAT: DESIGNING STRATEGIC SERVICES

Once the users and their needs have been identified, it's time to design the services that will meet those requirements. This is where service providers have the opportunity to truly add value and develop a close relationship with their cloud customers: by designing and offering customized cloud services that meet different compliance, performance, and business needs, now and in the future. They must balance the need for control and IT process governance with the speed and responsiveness required by their customers and be able to support fast on-boarding of new services, customers, and users.

The service provider needs to explore the following questions with their customers:

- » What different services will be offered – infrastructure, platform, and applications?
- » Who will have access to and be able to request services from the self service portal?
- » What options such as service levels, security features (firewalls, load balancers), compliance parameters, and storage and memory settings need to be included on different services?
- » How much flexibility can a user have in requesting resources along each dimension?
- » Will all users have the same options, or will some be limited in their choices?
- » How will service levels be tiered to address different performance requirements in the cloud

The provider's cloud services are a key part of the customer's IT and business strategy. Customers need to have the confidence that the clouds service providers deliver are monitored, secure, and will continue to perform at the level needed regardless of changes in demand. Service providers need to integrate their customers' existing IT infrastructure into the cloud platform, and consider how the infrastructure may change in the future. They should offer their customers a seamless IT experience between on-premise IT and the cloud offerings.

THE HOW: DELIVERING VALUABLE CLOUD SERVICES

The cloud services that need to be delivered to an evolving cloud market and the technology required to support that delivery is expanding. To successfully deliver full stack cloud services across infrastructure, platforms, and applications with value added offerings included requires careful consideration and intelligent management of service design, service provisioning, and cloud resources.

Service Design

To satisfy customer needs and drive increased revenue, service providers need to offer a service catalog that supports a huge range of service options encompassing different:

- » Infrastructure options and models
- » Deployment options - private or public cloud?
- » Monitoring and compliance requirements

How can service providers offer these different permutations of services without driving up the admin task and cost of management and deployment? Many service providers have struggled in the past with hundreds of service templates; Every time a user wants something slightly different from the standard template design, a new template has had to be created. This not only substantially increases costs but also decreases agility in cloud service provisioning.

The Power of Service Blueprints

The answer that many service providers have found to this challenge is to use model-driven service design with service blueprints to limit the number of services that need to be managed while maintaining choice for the customer. Service blueprints enable a standard application model to be designed for a service and then a whole range of options to be layered

on top, including infrastructure deployment sizes, additional memory and storage, monitoring and compliance requirements, and applications. One service blueprint can support hundreds or thousands of different service permutations. This enables the service provider to provide their customers with a rich, configurable, option-based service catalog while minimizing the ongoing administration and maintenance costs associated with updating, patching, and maintaining many different services.

Service Provisioning

To efficiently meet diverse customer needs and control service delivery costs, service providers need a cloud management platform that automates end-to-end service delivery from customer request via a self-service portal through deployment to invoicing, and automates the provisioning of all layers of the stack. Automation should not only drive out the labor costs involved in the day to day management and deployment of cloud services, but also maintain ongoing configuration and compliance of services and automate change management. Automation presents huge benefits to service providers as they strive to offer value added services to the market.

Managing Resources

Optimizing resource usage is essential to helping service providers efficiently manage the delivery of a broad range of cloud services, primarily through capacity management and intelligent placement of cloud services.

» Intelligent Placement

Workloads have different characteristics such as required service levels, infrastructure requirements, monitoring, and compliance requirements. All of this can determine where it best makes sense for that cloud service to be placed:

- On premise?
- In a private cloud – whether that is managed or hosted or virtual?
- Or in the public cloud?

The placement of a particular workload can have a big impact on cost as well as compliance. Service providers need a cloud platform that provides a view out into the different deployment options available and can place services intelligently depending on the requirements defined for that particular service in the service blueprint.

» Capacity Management

Proactive capacity management is critical to service providers. It provides visibility into resource usage in the cloud and early notification of capacity constraints, ensuring they can avoid the overcapacity issues that lead to higher costs and the under capacity issues that lead to missed SLAs and lost revenue. There may be resources that have been allocated to a customer that are not being used, which can then be repurposed for other customers.

Maximizing usage of resources also refers to leveraging existing IT investments and maintaining infrastructure neutrality and choice for the future. This allows service providers to offer these benefits to customers as well.

Using these guidelines on the who, what, and how of cloud, service providers can deliver solutions that benefit both their customers and their bottom line. Just remember: The delivery mechanism of cloud may be new, but the need to address people, process, and technology remains the same.

THE BMC SOLUTION

BMC merges the benefits of traditional IT management — operational excellence, automation, and service delivery models — with the dynamic potential of cloud architectures. BMC cloud solutions provide the foundation for a strong, flexible, and valuable cloud infrastructure that empowers IT operations and delivers exceptional service quality to the business.

BMC's service-centric, full-lifecycle approach delivers support for configurable multi-tier cloud services, as well as intelligent policy-based management for operational efficiency and control. The flexibility built into the solution — from open, heterogeneous platform support to secure multi-tenancy to integration with IT operations — enables tight alignment with business needs and IT requirements, as well as control of costs. This approach dovetails with service providers' requirements for their own cloud platforms, enabling them to support their customers and become an increasingly strategic component of those customers' businesses.

More than simply automating the provisioning of virtual machines, BMC's cloud management solutions deliver a cloud that works for your business. Learn more at www.bmc.com/cloud/serviceproviders.

BUSINESS RUNS ON IT. IT RUNS ON BMC SOFTWARE.

Business runs better when IT runs at its best. Tens of thousands of IT organizations around the world -- from small and mid-market businesses to the Global 100 -- rely on BMC Software (NASDAQ: BMC) to manage their business services and applications across distributed, mainframe, virtual and cloud environments. BMC helps customers cut costs, reduce risk and achieve business objectives with the broadest choice of IT management solutions, including industry-leading Business Service Management and Cloud Management offerings. For the four fiscal quarters ended March 31, 2013, BMC revenue was approximately \$2.2 billion.

