



# **Six key considerations for a successful cloud migration business case**

# What to consider when making a cloud migration business case

*Making a compelling business case for moving IT infrastructure to the cloud is easy thanks to IBM Cloud VMware Solutions Shared, with low start-up costs and robust security among the benefits*

**A**ccording to TechTarget's annual survey of IT leaders, cloud infrastructure deployment and migration is one of the biggest tech priorities for 2020. Across Europe, over one-third of organisations rate this area as a key project for the year – and in the UK, more than 40% of IT departments will be moving more work into the cloud.

For any IT leader, one of the most important questions when moving IT infrastructure to the cloud concerns the migration of critical virtualisation capabilities, which for many organisations means VMware.

Enterprises persuaded by the benefits of being able to quickly extend on-premise VMware workloads to the cloud are exploring a new offering: IBM Cloud VMware Solutions Shared.

With advantages such as low start-up costs; rapid deployment of virtual machines; and being able to offload hypervisor management of updates, patches and monitoring to IBM Cloud, it is easy to make a compelling business case.

“Customers are looking at IBM Cloud VMware Solutions Shared because they see the tremendous value of VMware in the cloud,” says Jim Robbins, senior technical lead at IBM Cloud.

IT executives looking to tap into these benefits by investigating technical implementation and migration for their cloud transition must consider the key opportunities and practicalities of such a move.

## 1. Service management

With IBM Cloud's new offering for VMware solutions, all the infrastructure management for compute, storage and network is overseen by IBM Cloud.

“All the low-level details – to ensure the current version, patching, stable capacity management – are taken care of so the organisation can focus on apps and virtual machines and how to deploy them,” says Robbins.

The customer takes responsibility for how to connect with their environment, but everything underneath is taken care of by IBM Cloud.

Capacity planning for workload spikes is stress-free as customers can choose from different billing cycles, including hourly, monthly and yearly payments.

“They can have hourly based consumption models and use capacity only when needed and not pay for it if they do not use it. They can use capacity for two days and then afterwards get rid of it, so they can deploy effectively,” says Robbins.

During implementation and migration, IT executives can be reassured that IBM Cloud undertakes to do all updates, patches and monitoring up to the

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hypervisor. The user is only responsible for managing virtual machines end-to-end, says Rajeev Saxena, programme director at IBM Cloud.

“IBM Cloud provides services up to the hypervisor, but an organisation can hire a third-party to manage VMs or we can assist them through IBM Global Technology Services,” he says.

## 2. Clear roles and responsibilities for migration

Roles and responsibilities are clearly divided between IBM Cloud and the customer. For networking, IBM Cloud allocates public IP addresses and creates and maintains the network gateway, while the customer manages firewall rules and configures network gateways.

“Customers bring their virtual machines onto the hypervisor; it is then their responsibility to manage workloads on top of the hypervisor. We are responsible for managing the hypervisor,” says Saxena.

The management and backup of virtual machines are looked after by the customer via a self-service interface with backup using pre-installed Veeam tools available as an option. Migration, patching and upgrades of virtual machines and monitoring are also the customer’s responsibility.

The real benefit is that customers’ IT workforce can focus on innovation and core business tasks and priorities, while leaving the virtualisation infrastructure management to IBM including providing the shared hardware, hypervisor patching, hypervisor upgrade and monitoring.

This low start-up cost and the ability to use and dispose of capacity when required simplifies implementation of cloud technologies and eases the migration path to cloud and digital transformation.

## 3. Billing models to suit customer needs

Pressure on the IT budget is decreased because billing is transparent and simplified, meaning that it is easy to calculate what is being spent and money is not wasted as you only pay for what you use.

The On-Demand consumption model offers hourly billing, while the Reserve option offers monthly, yearly or multi-year charges and allows organisations to reserve capacity at a slightly lower rate compared to On-Demand. Compute capacity such as vCPU and RAM are ordered upfront, but additional resources such as storage and bandwidth are based on actual consumption. With both models, organisations can start as small as one virtual CPU and 1GB RAM.

A fundamental step on the path to migration is for organisations to identify workloads and categorise them into the most appropriate consumption model prior to deployment.

Robbins advises that workloads best suited for Reserve include those that must run continuously and are critical and predictable, or workloads that run every month where you can deploy, use and tear down.

“Reserve is suited to workloads that you must have, for example Active Directory servers to authenticate users and profiles, or SQL servers for core business missions. These are typical workloads where you can reserve buckets,” he says.

For the On-Demand model, Robbins advises identifying workloads that are more temporary in nature.

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“If you have a billing cycle with generic bills, you can run a virtual machine for a few days once a month as a batch, process and have done. On-Demand is also good for transient workloads such as applications that host a website. You can spin up capacity very quickly if you have a seasonal spike, for example, and let it go when it’s done. Development and testing are also good for On-Demand because you can always start it up and tear it down,” he says.

#### 4. A flexible roadmap to cloud

This level of flexibility means the roadmap to the cloud relevant to each organisation can be supported and becomes stress free.

“With a private cloud that is on-premise, it can take months to add capacity. If you are very efficient, you can get it down to weeks. However, with IBM Cloud VMware Solutions Shared, you can access capacity in less than 10 minutes. Implementation plans become a lot more flexible,” says Robbins.

Implementation and migration between the two consumption models are also fast and flexible, allowing organisations to try out what works for their needs.

“You can separate long-standing stable workloads. For example, if you test a new web feature and spin up On-Demand capacity, if it is successful and you want to keep it going, you can move it into Reserve. Baseline stuff comes and goes. The idea is to try it and if it sticks, move it into Reserve long term. But if you decide you don’t need it, you can stop it. There is great flexibility between buckets,” says Robbins.

#### 5. Robust security

Security is often an implementation barrier when migrating to the cloud, but opting for IBM Cloud VMware Solutions Shared guarantees robust security practices. IBM Cloud is trusted by the most security conscious enterprises.

Robbins says the migration path from on-premise to cloud for VMware is fully supported by IBM Cloud.

“We take security very seriously and are fully confident with security certifications and monitoring in place,” he says.

Opting for a shared multi-tenant model does not sacrifice security, and the best security technologies are deployed. The solution offers VMware NSX virtual



networking and security, to provide a fully virtualised software-defined network per customer.

“Storage is fully encrypted, and we are compliant with regulations for customer data and auditing,” says Robbins.

The migration of VMware from on-premise to IBM Cloud VMware Solutions Shared is managed securely and swiftly using Veeam Cloud Connect.

“It is easy to use. Veeam handles backup and restore. It is the leading backup solution and it is used for both consumption models, On-Demand and Reserved. We can also use the Cloud Connect function of Veeam to do replication,” says Robbins.

## 6. Access to IBM Cloud services

Once VMware capabilities are migrated to IBM Cloud, enterprises have access to other IBM Cloud services, such as IBM Watson machine learning, IBM Kubernetes Service and object storage.

“Organisations retain private network access to other IBM Cloud services, which is easy and secure. They have a secure, private network as opposed to the public internet,” says Robbins.

IBM Cloud VMware Solutions Shared is a huge enabler for the cloud-native environment that a digital organisation requires. Robbins says the solution is enabled for full API access ready for automation around everything in the shared environment.

“Organisations can focus on development and applications because they can tap into rapid and efficient capacity and create automation to deploy applications. Integration with other IBM Cloud services at a higher level is possible as people want to free up resources to address additional new applications, by making the ones they have more efficient,” he says.

The advantage is that the organisation has 100% control with IBM Cloud taking care of the basic infrastructure. The migration path is quick and reliable, and the quick wins include increased efficiency, rapid deployment, negligible start-up costs, proven security and an opportunity for full automation.

“The key differentiator is that prior to IBM Cloud VMware Solutions Shared, organisations would need to have the physical hardware. Now they have the flexibility of easy acquisition and can order and get rid of capacity easily, but they still have the confidence of accessing VMware in the cloud, the market leader for a long time,” says Robbins.

“We can configure and manage it and an organisation can trust in having the same reliability and confidence that VMware gives. They can have the same confidence as VMware infrastructure on-premise, but now it is in the cloud.”

IT executives can be confident that IBM Cloud VMware Solutions Shared is more than just an alternative infrastructure platform option - it is a mechanism to access new technologies such as artificial intelligence, big data and application modernisation and innovation.

The proven benefits of the solution make a powerful case for migration. ■

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