



# Moving applications to the cloud: incremental change or big bang?

## CORE ISSUES

- What to consider when moving applications to the cloud
- Why an incremental approach works
- The case for a big bang move
- The option of "no-cloud"

## WHAT TO CONSIDER WHEN MOVING APPLICATIONS TO THE CLOUD

Businesses understand that moving applications to the cloud is a complex decision and many considerations decide what the approach to the move will be – a big bang or a phased one.

Examining the business reasons is a key part of any migration. "We see enterprises who move to the cloud because they want to add new functionality, or new ways to access core assets and core capabilities from a different working profile. It's not about, "I want to move the applications to the cloud because that's a cool thing to do," a roundtable member observed.

In some cases, cloud migration might mean moving to a new application, such as Salesforce CRM, Microsoft Office 365, or SAP S/4 HANA, a cloud-deployable version of the SAP business suite. This means that the application is already cloud-based, but the business processes have to change.

One consideration is that cloud platforms are virtualized environments, and the trend now is for applications themselves to be virtualized in containers, bundling all their dependencies into a single package and isolating them from the operating system. "Is your application virtualizable? Does it run in the cloud?" asked one participant. "How about performance? Is it disk intensive? Does it have enough bandwidth? Some applications may need re-engineering. And don't forget security."

Cloud migration is not just a matter of where applications reside, but how they are engineered. Organizations can prepare by making changes while still running on-premises. "We see customers moving into virtualization and/or containerization of what they've got now, and then running it in the cloud. There will be a migration process over a number of months set up in parallel to the existing estate, then there will be a switchover", said a roundtable member.

## WHY AN INCREMENTAL APPROACH WORKS

"Despite the increasing speed of cloud adoption I don't see evidence of organizations scrapping all their legacy deployments all in one go," said one ICT decision maker during discussion with other industry leaders. This caution is justified. "In a previous job, we decided to go all of a sudden. It was a huge failure," said another.

## KEY TAKE-AWAYS



- Understanding the business reasons to move to cloud is key
- An incremental move to cloud works in most cases as data and security are best managed in a phased approach
- The "black box" idea cloud makes a big bang approach to cloud feasible
- Not moving to the cloud is the biggest risk of all.

"The problem with big bang is the amount of data that has to be moved around and the amount of people that need to be told what needs to be done. It is just not feasible. You have to have a phased programme," the room heard.

Besides, many applications are not cloud ready. "There are not yet enough true web-scale based applications that are at a business-critical level. I think we will see an accelerated shift over the next three-to-five years of more readily available applications, without a dependency on any particular network provider," said a participant.

Consideration of security and compliance is essential. "You flip your entire security policy around, and move to dynamic policies around data and not so much the application," said a participant. "It changes your siloed infrastructures to be very much more open and policy-driven."

### THE CASE FOR A BIG BANG MOVE:

Despite general agreement that cloud migration should be gradual, there is a case for a certain kind of big bang approach, argued one member of the roundtable. "Instead of migrating applications at a granular level you can move them as a black box into the cloud, and once they are in the cloud begin transforming them into cloud-native applications," the room heard.

The idea of the "black box" is that you shift your servers and network infrastructure as-is, so that instead of running on-premises they run in the virtualized cloud environment. "This makes sense in cases where there are a lot of dependencies between applications. It can be very difficult to isolate some applications to move them one by one to the cloud. After a black box move to the cloud we have a single perimeter security environment in which we have full control, then step by step we begin transforming them into cloud native applications."

### THE OPTION OF "NO CLOUD":

Others at the event challenged the idea that businesses will ever move entirely to the cloud. New applications may live in the cloud, while existing ones may remain on-premises. A recent NTT Com survey, Cloud Reality Check, found that 10 % of applications will never move to the cloud.

"Gartner says that by 2017 the CMO will have more IT spend than the CIO. The data center is probably not moving to the cloud but it is all this new stuff, social media, social sentiment analysis, all these tertiary pieces.

The core applications may or may not go to the cloud," said a participant.

"It is important to assess the risk. For example, a company with a custom application that is central to their business, they don't want to touch that," said another attendee. On the other hand, some level of cloud migration may be essential to the future of a business. "Moving to cloud gives better flexibility. Businesses have to transform otherwise new players will come who have access to those capabilities. The cloud is the only way you can get the agility to compete with new players," the room heard.

There are many reasons for caution and many reasons to migrate to the cloud at a careful pace, but the risk of not migrating may be the highest of all.

### CONCLUSIONS



- Cloud is not another cool tool but a considered tactic
- Cloud migration is not about location of apps but about how they are engineered
- Some apps may never move to the cloud
- A shift towards greater availability of applications that are cloud-ready is imminent.

“ There are many reasons for caution and many reasons to migrate to the cloud at a careful pace, but the risk of not migrating may be the highest of all. ”

