3 key questions to help evaluate workload migration to the Cloud

Ricoh discusses the top questions at the heart of every workload migration to a cloud computing service.

Many businesses now know they can achieve substantial Operating Expenditure (OpEx) savings and almost eliminate upfront Capital Expenditure (CapEx) by adopting a cloud computing based IT service delivery model. However, the best path to follow is often far from obvious.

Competing technologies and Cloud Service Providers (CSPs) offer overlapping solutions that deliver a wide range of services but are often targeted to specific industries and suitable only for specific workloads. (A workload in the cloud is comparable to an application on one or a group of virtual servers to deliver a specific business function).

How do you objectively choose the most suitable cloud environment and technology for your workloads? How do you ensure your choice of workloads and target cloud environment will effectively meet your business needs and deliver the intended value for business within well-known constraints?

A Cloud Readiness Assessment (CRA) helps you understand the implications of embracing a cloud-centric transformation of your business workloads by identifying the most suitable cloud deployment models and CSP.

In this article we discuss three questions every IT decision maker should answer before embarking on an IT transformation by embracing cloud computing.

1. How do you identify business workloads to migrate to the cloud?

It is necessary to use an objective approach to identify most suitable business workloads to migrate to cloud environment.

1. **Technology needs** – compute, storage, network, uptime, performance, the type of integration, level of customisation and dependency of business application on the hosting hardware.

2. **Business needs** – hosting environment availability and uptime, data security, access control, data retention, cost of hosting, cost and ease of migration, on-going support and exit policy.

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3. **Cloud Model** – consideration for an organisation's experience and preferences of using a specific cloud deployment model (private, public or hybrid cloud), technology and vendor (CSP).

CRA is a well-defined and well-tested workload placement framework that creates a detailed multi-dimensional profile of a business workload whilst considering all the critical aspects of the business functions.

2. How do you identify the most suitable cloud service provider for workload hosting?

In Australia alone, there is a wide range of cloud technologies and platforms offered by over a dozen cloud service providers. Given the global nature of cloud services, hundreds more are available from service providers around the world.

For this very reason, it is critical to fully answer the question 1 and establish a detailed understanding of the workloads capable of being migrated to a cloud based service. Choosing a cloud infrastructure or CSP before developing a full understanding of a workload profile has caused many cloud migrations to fail.

Like the workload assessment, a CSP assessment is kept objective through the assessment of various important factors. These include technology, business, security, experience in similar industry to host similar types of workloads, engagement contracts, exit policies and cloud pricing model.

Give consideration to cloud technology best practice within your organisation's industry. Cloud service providers with experience and service tailored to a specific industry offer knowledge and insight that can save customers both time and money.

Confirm if one or more CSP can meet your organisation's cloud IT requirements. By matching business workloads to available cloud services, an organisation will have confidence in the technical solution being asked of a cloud provider.

3. What is the real cost of embracing the cloud for your business?

Having identified the most suitable cloud deployment model and a CSP to meet the business needs, the organisation can now analyse the cost of the migration and ongoing cost of cloud services to host the business workloads.

Depending on the cloud services purchased, OpEx costs will most likely change for factors such as: backup, bandwidth, storage, support and licensing. Have a clear understanding of how increases in bandwidth, compute or storage usage affect OpEx costs. Better understanding of your business cycle, data processing spikes and data transfer trend analysis for 2-3 business cycles could give you fair visibility to forecast the cloud OpEx.

Once a workload migration to the cloud has taken place, any miscalculations in running costs will not easily be resolved with a fall-back to a traditional hosting solution.

The consequence of non-cloud friendly workloads located in a cloud environment can directly impact business revenue but also the credibility of the organisation if customers experience a service outage.

The success of any business workload migration project begins with the detailed planning and selection of an appropriate cloud delivery model and a CSP. Embarking on a comprehensive Cloud Readiness Assessment will provide all the answers an organisation needs to the 3 questions discussed in this article to take a fact based decision when embracing cloud based IT service consumption.