newt|global
Aiming At Customer Delight

Madhavan Srinivasan
madhavans@newtglobalcorp.com

ARE YOU GETTING YOUR MONEY'S WORTH FROM CLOUD MIGRATION?

Hybrid Cloud

Private Cloud

Public Cloud

Madhavan Srinivasan
madhavans@newtglobalcorp.com
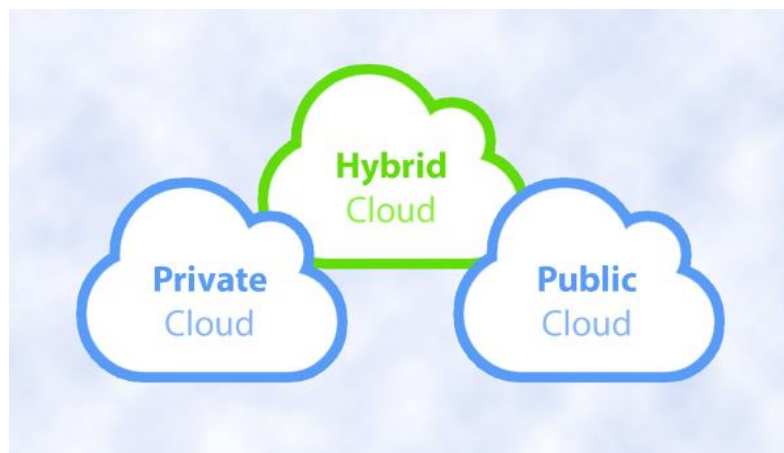
The aura around Cloud migration has settled down and the converts have become experts now. The business case for migrating applications to the Cloud has become a necessity with more enterprises embarked on this journey. There are a few technical challenges that still exist especially around data security and privacy but they are not show stoppers for the most part.

Organizations have gotten used to a more flexible budgeting approach when it comes to IT systems, just like the build Vs buy arguments around outsourcing. The CFOs are moving from depreciation accounting for Capex for IT to a more pragmatic amortization costs and employee costs to provide IT services to the business.

Key question is whether all this worth the effort and time? Had business or IT benefited from such a transformation? Have you ever wondered if business and technology decisions are in synch to maximize value creation? Let us discover the truth as it unfolds.

Madhavan Srinivasan
madhavans@newtglobalcorp.com

Irrevocably, the new master platform is the Cloud with 60% of the enterprise compute workloads will be split between on premise and public cloud by the year 2018. The economic value of this migration is seen from heightened awareness and increasing adoption. Our objective is to throw some light on the process, metrics and the outcomes that serve as guidelines – they are experiential feedback and not prescriptions. A good starting point is to present the stakeholder expectations upfront and engage to discover possible approaches to meet them.

BUSINESS VIEW OF CLOUD ADOPTION

From a survey finding of World Executive Council, business leaders look at Cloud adoption as a transformation of business process and not as a technology initiative. They look for:

- Scale as you grow and pay as you go, fits with resource allocation angle

- Multiple options to choose from – flexibility and best of breed solutions

- Distributed workforce to have consistent user experience

- Release and reallocation of capital for business expansion

On financial terms, the CFO looks for:

- Lower cost of IT operations through federation of IT workloads

- Cost of capital considerations to assess strategic portfolio

- Charge-back mechanism for shared IT services between Business Units.

- ROCE/ROA models to compare On-premise vs Public cloud IT systems

Other key stakeholders like have other expectations from adoption of cloud computing. Operations are concerned about "lights on" infra-structure and swift recovery from failures.

Madhavan Srinivasan
madhavans@newtglobalcorp.com

CIOs are worried about governance, security and regulatory compliance of IT systems on the Cloud. HR leadership is weary of change management and skills development of internal people.

Given the diverse expectations from multiple stakeholders, it is important to take stock of the readiness of an enterprise to migrate applications to the public cloud infra-structure.

Generally, enterprises that have taken the initiative to move IT workloads to the Cloud can be classified into: Cloud enabled, Cloud ready or Cloud native. They need to assess readiness from the following angles: Technology and Performance, Compliance and Environment, Organization and Strategy and finally Economics and Valuation. The state of the existing IT systems architecture and applications has a bearing on the model to be used.

1. Application workloads are forklifted and moved to VMs operating in the cloud – works for legacy applications that are mission critical

2. Refactor applications to tweak the tech stack in a PaaS environment that can be created on a cloud set-up – works well for homogeneous tech stack for all application workloads

3. Revise and Rebuild applications with modernization or rationalization of tech stack – to be hosted on Private or Public cloud environments with containerization and micro-services – works for legacy modernization to become Cloud ready

4. Redesign applications to adopt best practices to become cloud native – works well for ecommerce type of applications

5. Replace applications with SaaS equivalents from existing vendors or alternate solution providers – works for end of life/support applications

Madhavan Srinivasan
madhavans@newtglobalcorp.com

STATUS CHECK ON BUSINESS VALUE FROM CLOUD ADOPTION

Industry analysts like Forrester have collected data from enterprises to enumerate the current state of cloud adoption and its impact on business value. Few years back, nearly 65% of the adopters had taken safety first approach by simple re-hosting or staying on-premise with applications. In two years' time, more than 55% of the enterprises who initiated Cloud migration have chosen SaaS, Private or Public Cloud platform (PaaS and IaaS combined).

Progressively, IT leaders are shifting the spend on IT to cloud computing initiatives with nearly 28% of the enterprises are migrating existing applications, while 36% are adopting new cloud applications. One of the significant challenges in the adoption of cloud computing is related to the economic justification and accurate measurement of ROI. Choice of adoption approaches determine the criteria for calculating the business impact of cloud initiatives and to deconstruct the cost elements, an empirical method can be applied. But the true value goes beyond the numbers as this change is transformational in the IT landscape.

Madhavan Srinivasan
madhavans@newtglobalcorp.com
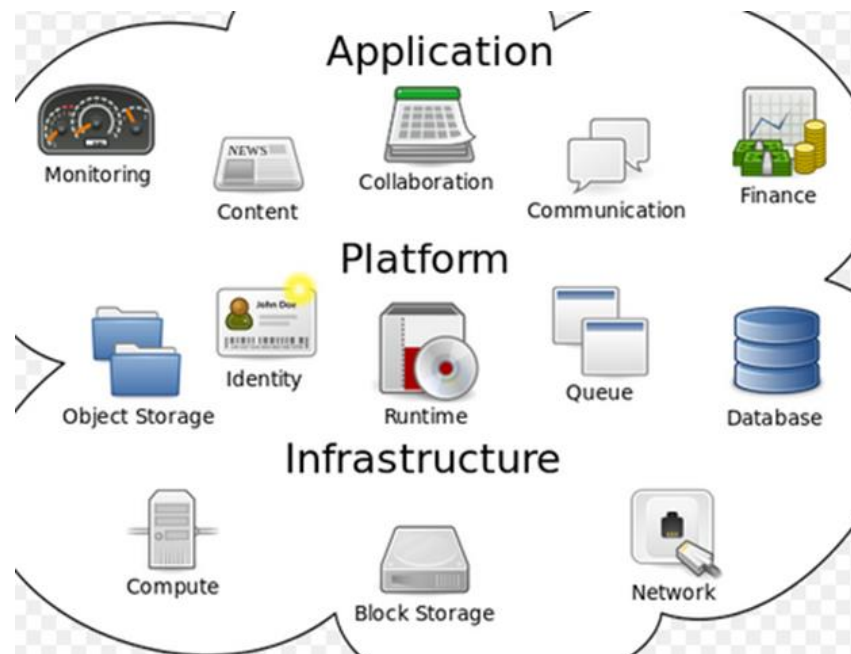
The upfront costs are "displacement" of data centers and locked in costs of software licenses and maintenance costs of hardware. The re-purposing (migration) costs are integration, one-time design and planning costs and capital costs. The recurring expenses vary for IaaS, PaaS or SaaS adoption approaches consisting of infra-structure provisioning, network bandwidth, software and administration costs.

IS IT ALL WORTH THE EFFORT?

The traditional evaluation based on costs like Return on Assets should be relooked as Return on Innovation. The ability of business to grow without having to reinvest capital for purchase of IT assets but reallocate the same more effectively. Agility is channelized towards accelerating release cycles of applications to support the changing needs of customers. CIOs can adopt a more flexible approach to application lifecycle management with best of breeds solutions available through cloud initiatives.

newt global
Aiming At Customer Delight

Madhavan Srinivasan
madhavans@newtglobalcorp.com

To illustrate this point here are two examples:

Company A wanted to do simple "Lift and Shift," from premise infra-structure (DC) to public cloud. Their 3 years cost assessment was compared as under:

Area of cost /investments	Premise solution ($)	Public cloud solution ($)	Remarks
Hardware	30,000	0	Upfront
Software Licenses	30,000	0	Upfront
Labor / Infra	10,000	8,000	Upfront
Application Server		2,600	Monthly Recurring
Database		350	Monthly
Network BW	50	50	Monthly
Dev Environment	750		Monthly
Software Support	500		Monthly
AMC for HW	300		Monthly
Admin costs	2500	800	Monthly
Total	223,800	144,800	

It was no brainer that they decided to go for Cloud migration.

Madhavan Srinivasan
madhavans@newtglobalcorp.com

Company B was looking at refactoring their application to standardize on a tech stack and migrate to public cloud. The applications were running on Java and .NET technologies and used different server infra-structure in the DC. Even the VMs were getting provisioned from VMWare farm with different database and middleware set-ups.

They had fluctuating demand patterns on the applications and were considering the use of storage with different IOPs and reserved instances for the most part and on demand CPU resources to meet the demand peaks.

The cost economics were captured in a table that gave initial estimate of cloud vs on premise approaches:

Area of cost /investments	Premise solution ($)	Public cloud solution ($)	Remarks
Hardware	30,000	0	Upfront
Software Licenses	30,000	0	Upfront
Labor / Infra	6,000	40,000	Upfront – Migration
Application Server		3,500	Monthly Recurring
Database		1,650	Monthly
Network BW	50	80	Monthly
Dev Environment	1050		Monthly
Software Support	300		Monthly
AMC for HW	300		Monthly
Admin costs	3500	1200	Monthly
Total	253,200	271,480	

Madhavan Srinivasan
madhavans@newtglobalcorp.com

First cut analysis would be against migration based on financial data as presented here. If a deeper analysis is made on other aspects like flexibility, scalability and cost of capital, the justification would go beyond these numbers.

It is therefore, prudent to evaluate the migration of applications to the cloud by applying 3 years TCO using standard project appraisal methods like: payback, NPV or IRR. To arrive at the long-term impact of cloud adoption using EVA (Economic Value Addition) method is advisable.