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## **Information Technology Outsourcing (ITO) Market Update: March 2010 – Preview Deck**

**Topic: Hype and Reality of Cloud Computing –  
“Mind the Gap!”**

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## Background of the research

- Although Cloud Computing bears similarities to the time-sharing model of legacy mainframe systems and ill-fated utility computing concept, it has prompted significant revival of interest and industry hype in the last few years
- Certain inherent advantages, e.g., utilization, scale, standards, and labor flexibility suggest that suppliers are well positioned to deliver on the promise of Cloud Computing
- However, buyers face multiple challenges to adoption of Cloud Computing, including significant operational and compliance risks

## The scope of analysis includes

- Definition of the Cloud Computing IT stack and services landscape
- Assessment of the buyer challenges to Cloud Computing adoption and Cloud Computing business case
- Analysis of the suppliers' cloud strategies and service offerings
- Alternate scenarios for evolution of Cloud Computing in ITO

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# Overview and abbreviated summary of key messages

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This report evaluates cloud computing with respect to traditional and virtualized enterprise setup and analyzes the risks and challenges associated with the cloud. It evaluates the often neglected “Operations as a service” stack in cloud computing and elaborates on various strategies the suppliers are leveraging to woo the enterprise buyer. The report analyzes various scenarios which are possible in cloud computing evolution as well as key challenges that needs to be overcome for these scenarios to materialize.

**Some of the findings in this report, among others, are:**

### Cloud Computing overview

- Though Cloud Computing traces its origins from time-sharing and utility computing models, it has rapidly become one of the most hyped technology trends today
  - There is a cloud offering for every layer of a company's IT stack
  - Cloud Computing promises game-changing benefits in helping IT deliver value to the business
- Outsourcing suppliers are well positioned to deliver on most of the touted benefits because of multiple value levers: utilization, scale, standardization, and labor flexibility

### Cloud Computing business case

- The Cloud Computing business case is based on the expected savings derived from each of four value levers: utilization, scale, standardization, and labor flexibility
- Cloud service has a strong case over a traditional enterprise set-up, however its utility is not apparent when compared to a virtualized enterprise set-up
- The cloud business case should not be based merely on cost savings but should also take into account risks like system downtime/availability, business disruption, and non-compliance issues
- Mid-sized buyers stand to gain much more than large buyers from letting suppliers manage their cloud environment. This is because large buyers derive comparable savings and productivity benefits to suppliers for each of the key value levers

# Overview and abbreviated summary of key messages

## (page 2 of 2)



### Cloud strategy feasibility for buyers/challenges

- The IT industry is making efforts to woo enterprise buyers to the cloud. However, the cloud conundrum lies in the fact that the IT demand that the cloud best serves is also the most challenging to serve from the cloud
- Enterprises face multiple challenges in adopting cloud computing, e.g., fragmented application portfolio, lack of standards, security, system performance, and management control
- The common view of the cloud misses a very important layer of the IT stack where cloud solutions make the most sense: Operations as a Service (OaaS)

### Scenarios for Cloud Computing adoption

- Everest sees three scenarios for industry evolution, each with different end-games and likely winners. These are “niche adoption”, “industry consensus”, and “hype and decline”
- Industry evolution will be driven by the extent of the progress along key dimensions of buyer perception: cloud inter-operability, security, migration services, and cloud management and monitoring
- Both buyers and suppliers need to understand the risks in the early stages while evaluating their own long-term strategy and approach to Cloud Computing

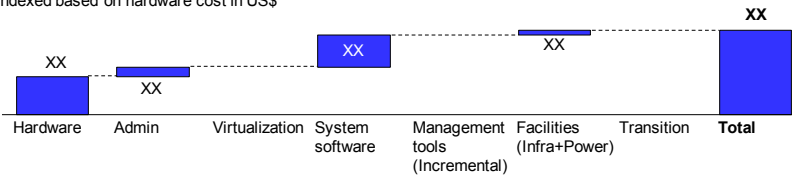
# This study analyzes value proposition of cloud computing, associated challenges and likely evolution scenarios

ILLUSTRATIVE

## Utilization due to virtualization – key value lever

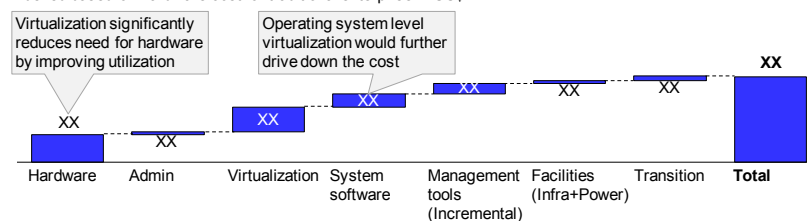
### Traditional enterprise setup

Indexed based on hardware cost in US\$



### Virtualized enterprise setup

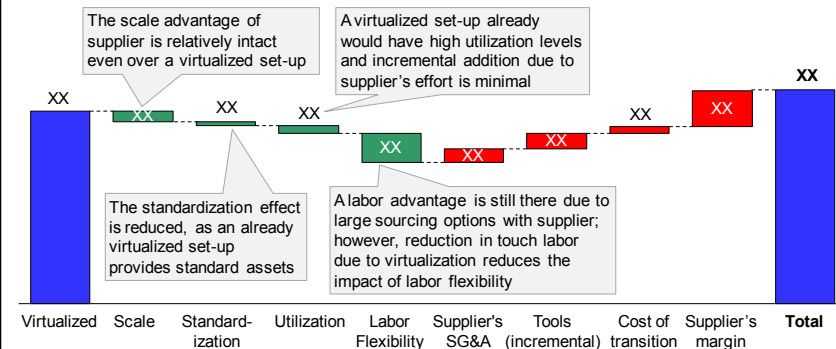
Indexed based on hardware cost for traditional enterprise in US\$



## Cloud computing vs. virtualized enterprise setup

### Hardware unit cost for the buyer

Indexed to traditional set-up hardware cost in US\$



## Cloud performance issues

### EC2 Small Instance

- XX GB memory
- XX EC2 Compute Unit (XX virtual core with XX EC2 Compute Unit)
- XX GB instance storage (XX GB plus XX GB root partition)
- XX-bit platform
- I/O Performance: XXXX
- API name: XXXX

US\$XX per hour

### EC2 Large Instance

- XX GB memory
- XX EC2 Compute Units (XX virtual cores with XX EC2 Compute Units each)
- XX GB instance storage (2×XX GB plus XX GB root partition)
- XX-bit platform
- I/O Performance: XXXX
- API name: XXXX

US\$XX per hour

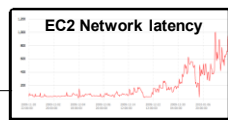
### XXXX launches EC2

- Customers start provisioning EC2 server instances

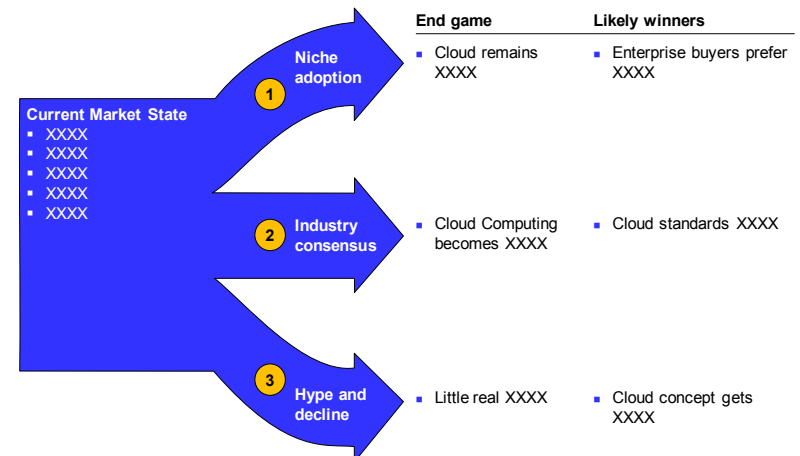
As customer adoption increases, capacity limits are hit sporadically

- EC2 network begins exhibiting latency issues

Customers migrate to larger instances to maintain the same performance levels



## Cloud evolution scenarios



Source: Everest Research Institute (2010)

# Appendix: Additional ITO research recommendations



The following documents are recommended for additional insight on the topic covered in this Research Report. The recommended documents either provide additional details on the topic or complementary content which may be of interest

1. **IT Consulting as a Catalyst of ITO – The Pursuit of a Vague Synergy:** (ERI-2009-4-R-0387); 2010: Historically, buyers and suppliers viewed the role of consulting in driving outsourcing contract very differently. Buyers realize that the outcomes or by-products of consulting may lead to a need for an outsourcing service, whereas suppliers maintained a premise that consulting engagements with buyers can lead to their subsequent winning of an outsourcing contract
2. **Remote Infrastructure Management – Impending Crisis of Genre** (ERI-2009-4-R-0360); 2009: The Infrastructure Outsourcing market continues to evolve with offshore suppliers maturing as infrastructure service providers, enabled by remote infrastructure management technology. As offshore suppliers mature and reach critical size, they see the need to target larger buyers to keep growing their RIMO practice at a healthy pace. However, it meant they had to start playing by rules long established by the traditional players. Offshore suppliers may now be facing a “crisis of genre” that could restrict their growth unless they strike a balance between targeting large buyers and staying away from playing according to traditional rules

For more information on this and other research published by the Everest Research Institute, please contact us:

**Ross Tisnovsky**, Vice President:

[rtisnovsky@everestgrp.com](mailto:rtisnovsky@everestgrp.com)

**Shiraz Ritwik**, Research Director:

[sritwik@everestgrp.com](mailto:sritwik@everestgrp.com)

**Soumit Banerjee**, Senior Research Analyst:

[sbanerjee@everestgrp.com](mailto:sbanerjee@everestgrp.com)

**Yugal Joshi**, Senior Research Analyst:

[yugal.joshi@everestgrp.com](mailto:yugal.joshi@everestgrp.com)

## **Everest Research Institute**

Two Galleria Tower

13455 Noel Road, Suite 2100

Dallas, TX 75240

Phone: +1-214-451-3000

Email: [info@everestresearchinstitute.com](mailto:info@everestresearchinstitute.com)



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## **Everest Research Institute**

Two Galleria Tower  
13455 Noel Road, Suite 2100  
Dallas, TX 75240  
U.S.A.  
+1-214-451-3110  
[www.everestresearchinstitute.com](http://www.everestresearchinstitute.com)  
[info@everestresearchinstitute.com](mailto:info@everestresearchinstitute.com)

## **Everest Group**

150 E., 52<sup>nd</sup> Street, 16<sup>th</sup> Floor  
New York, NY 10022  
U.S.A.  
+1-646-805-4000



## **Everest India**

Ground Floor, Tower A  
Unitech Business Park  
South City - I, Gurgaon  
National Capital Region  
India 122001  
+91-124-304-1000

## **Everest Australasia**

409a Wattletree Road  
East Malvern  
VIC 3145  
Australia  
+61-3-9509-3933

## **Everest Canada**

The Exchange Tower  
130 King Street West,  
Suite 1800  
Toronto, ON  
Canada M5X 1E3  
+1-416-865-2033

## **Everest UK**

1<sup>st</sup> Floor, Accurist House  
44 Baker Street  
London, W1U 7AL  
United Kingdom  
+44-870-770-0270

## **Everest Netherlands & Continental Europe**

Atrium Building 3<sup>rd</sup> Floor  
Strawinskylaan 3051  
1007 ZX Amsterdam  
Netherlands  
+31-20-301-2138

## **Everest Australia**

Level 6, 90 Mount Street  
North Sydney  
NSW 2060  
Australia  
+61-3-9509-3933