Enterprise Cloud Computing: Opportunities & Challenges

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Cloud Computing and Enterprise

Shared

On-demand Allocated

Pay-per-use

Computing Environment

With whom?

Agile & Adaptive

Efficient

Across Enterprises

Private Cloud

Within Enterprise

Public Cloud

What?

Infrastructure Resources

IaaS

Usage Platform

PaaS

Applications

AaaS

How can an enterprise benefit from such cloud offerings?
Enterprise Cloud Computing: Challenges

The problem: Too-many choices and constrains

- Lots of different platforms
  - Many providers - different levels of service
  - Several different financial models
- Many enterprise constraints
  - Business: Security/Privacy; Reliability/Availability; Auditability; ...
  - Technology: Specialized platforms; software licenses; ...
  - Application and usage:
    - Vertically vs. horizontally scalable applications
    - Predictable vs. highly fluctuating workloads

The challenge: Deciding on what, when and why

- "One-size-does-not-fit-all"
- Custom strategy depends on:
  - As-is state: Scale and complexity
  - Characteristics of solution platforms: Costs, benefits, risks and side-effects
Enterprise Cloud Computing @ TCS

Two-pronged Approach

**Analytics-led transformation planning and execution**

- Monitor → Analyze → Plan → Execute
- *iTransform*: Fact-based, systematized and automated strategy derivation
  - Address the what, when and why questions
  - Automation ➔ Evolve strategy to accommodate change
- Cloud migration strategy execution
  - Leverage TCS Co-Innovation Network (CoIN)

**Create specialized cloud-based solution platforms**

- Domain-agnostic platforms: DR-as-a-Service and Assurance-as-a-Service
- Domain-specific platforms for SMB
  - Education, Manufacturing, Wellness, Retail, ...
Questions ???

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iTransform in Action
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