Cloud Computing… are you ready?

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Agenda

Introduction
Presentation Topics
• The "traditional" Data Center: How it compares to "The Cloud"
• Cloud Computing and IT Service Management: How do they fit?
• IT Service Management: Examples of process integration
• Organizational Change: How to preserve your core operational tenets
**Synopsis**

- Primary objective of Cloud Computing: reduce costs, increase availability, and eliminate the need for the end user to have expertise and knowledge of supporting their IT infrastructure.
- Things often referred to related to the concept of “Cloud Computing”:
  - SaaS: Software as a Service
  - PaaS: Platform as a Service
  - Utility Computing
  - Managed Service Providers

Cloud computing is a style of computing where elastically scalable IT-enabled capabilities are delivered “as a service” to external customers using Internet technologies.

- Gartner

**Simple Cloud Taxonomy**

Entire finished application available on-demand

Infrastructure as a service plus a runtime environment for compiled application code.

Compute power, storage, and networking infrastructure (such as firewalls and load balancers) as a service
Cloud Deployment Options

Cloud Computing Types

- Hybrid
- Private/Internal
- Public/External
- On Premises/Internal
- Off Premises/Third Party

The Fundamental Paradigm Shift:
The Internet is Mission Critical to the Enterprise.

- Customers, Employees, Partners: Globally Distributed
- New Devices: Proliferating
- Application Environments: Collaborative
- Virtualization/Cloud Technologies: Exploding
The Reach of an Enterprise Application has Changed

FROM THE ENTERPRISE… …TO THE INTERNET

Data Center
- Mainframe
- App Servers
- Middleware Servers
- Storage
- DB Servers

Internal users
- Mobile Components
- Web Servers
- Network
- Load Balancers

Internet
- Content Delivery Networks
- Major ISPs
- Local ISPs
- Cloud Services

Customers
- Mobile Carriers
- 3rd Party

Challenges
cloud computing “pain points”

- Some claim concerns with security, data encryption, and other data privacy requirements, but technology “has a response” to this
- Reliability of Service Providers, with Service Level Agreements (SLAs) being written to primarily reflect the best interests of the service providers.
- Application development languages and platforms are still not mature and consistent.
- Without a “local” data center, companies feel like they are lacking familiar, reliable, secure, convenient, and manageable technology.
Challenges

Without a solid “plan” or understanding of current environmental dependencies, Cloud related initiatives can present unique types of uncertainty…

Examples:
- The “surgical procedure”…
- The traditional “building of a house” …

NHL.com

- 3rd Party CDN Content
- Awesome performance
- Outsourced Streaming Media
- Internally and Externally Served Premium Services
- Internally Served Web/Java Content
- Outsourced Online Shopping

*Average website serves content from more than 8 hosts
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how does ITSM fit?

Integrated approach to process architecture, including but not really limited to:

- Service Level Agreements
- Configuration Management
- Change Management
- Event Management (Incident, Problem, and Release Management)
- Key Performance Indicators and Metrics
- Overall End-User Experience

Data Center Based APM Tools:
Blind to the Web End User Experience
• Operating Level Agreements
• Underpinning / Vendor Contracts
• End-User Experience Measures / Metrics
• Reporting and Communication
• Financial management of services
• Understand where your applications rank in comparison to similar applications

You Are Not Alone But
The Situation is Worse than You Suspect

1. We don’t know about performance issues until end users tell us.

73%

of IT service issues are discovered by end users

Source: Forrester study commissioned by Compuware

2. End users don’t tell us!

440,000 customers

Source: Gartner, "How to Approach Customer Experience Management"

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Change and Configuration Management

- Evolution of applications and supporting infrastructures
- Requirements traceability
- End-User communication
- Business Risk mitigation
- Component (Configured Item) based service delivery map
- Efficient Root Cause analysis / problem resolution
- Identification of “cinch” points
  - Organic growth
  - Acquisition-based growth

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Event Management

- Proactive identification of business impacting events, through active monitoring and performance indicators
  - Instituted Change v. Non-instituted Change
  - Strategic business initiatives
- Significant contingencies within the environment, potentially identified as problem trends
Strive for end-to-end performance

Optimizing Application Performance Across the Enterprise and Internet

Unified Dashboard

Deep-dive Troubleshooting and Resolution
The “shift”

how to preserve core operational tenets

- Implementation of fully integrated processes, to include the understanding of service impact to core revenue streams. SLA Management is the first step, with key performance indicators (KPIs) identified up front.
- Leveraging a scalable architecture without compromising the core features and functions of business services, consider designating a “chief performance architect.”
- Adopt a systematic approach, and define, document, and communicate your delivery strategy to the organization.
- Focus on architectural as well as operational issues.
- Strive for governance through service monitoring.

The “shift”

how to preserve core operational tenets

End User
- Customer Delight
  - Real-time data center visibility
  - Insight into individual’s experience
  - Identify user problems and connection issues

Operations
- Cost & Service Mgmt
  - Real-time service quality
  - Data for network optimization
  - Identify and resolve problems proactively
  - SLAs for network and security

Business Unit
- Customer Intelligence
  - Real-time service usage
  - User behavior & trends
  - Discover emerging services
  - Identify new revenue opportunities

Executive Management
- Business Optimization
  - Real-time KPIs
  - For operational health
  - Proactive data for trend usage and retention

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Conclusion

• Understand the differences of cloud computing types
• Recognizing the importance of an integrated process architecture by identifying the primary characteristics of support and delivery processes that are required to support your business services.
• Ensuring to preserve your operational core tenets when selecting the appropriate IT infrastructure

Questions…
Thank you!