Cloud Computing

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Cloud is a shift in the consumption and delivery of IT with the goal of simplifying to manage complexity more effectively.

- **Cloud is:**
  - An evolving consumption and delivery model

- **Cloud addresses:**
  - Cost reduction
  - Scale
  - Utilization
  - Self-service
  - IT agility, flexibility and delivery of value

- **Cloud represents:**
  - The standardization of delivery for IT supported services

- **Cloud includes:**
  - Deployment models: public, private, hybrid
  - Delivery models: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) and Business Process as a Service
There are three ways to acquire IT capabilities

- Software, hardware and services
- Pre-integrated systems and appliances
- Provided as services

Cloud can span all 3 ways.
What is different about cloud computing?

**Without cloud computing**
- Workload A
  - Software
  - Hardware
  - Storage
  - Networking

**With cloud computing**
- Virtualized resources
- Automated service management
- Standardized services
- Location independent
- Rapid scalability
- Self-service

With cloud computing, IT is delivered as a service
There is a spectrum of deployment options for cloud computing

**Private**
- IT capabilities are provided “as a service,” over an intranet, within the enterprise and behind the firewall

**Public**
- IT activities / functions are provided “as a service,” over the Internet

**Hybrid**
- Internal and external service delivery methods are integrated
Cloud computing delivers IT and business benefits

**Virtualized**
- Higher utilization
- Economies of scale
- Lower capital expense

**Standardized**
- Easier access
- Flexible pricing
- Reuse and share
- Easier to integrate

**Automated**
- Faster cycle times
- Lower operating expenses
- Optimized utilization
- Improved compliance
- Optimized security
- End user experience

**Maximizing resources**
- Higher quality services

**Increasing agility and managing risk**
What is different about acquiring cloud computing?

With cloud computing, IT is delivered as a service

**Without cloud computing**
- Purchase capital items
- Requires installation and integration services
- Isolated systems
- Long term investment
- Requirements at the component level (What?)

**With cloud computing**
- Acquiring a service
- Can be IT or business related
- Purchase is for time period of use
- Requirements at the service level (How? e.g. availability, initiation/determination of service, security policy, portability of data)
Important implications for cloud policy:

- Cloud is still evolving.
- Cloud is differentiated.
- Cloud presents privacy and security issues that are familiar.
- Cloud policy solutions are not one-size fits all.
THANK YOU!
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