Current Reality: A Look at Cloud Opportunities Beyond the Hype

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Presented by:

Jeremiah Caron, Vice President - Analysis
Amy DeCarlo, Principal Analyst – Security and Data Center Services
John Simcox, Custom Research Director
Agenda

❖ **Demand and Supply**
  - Supply drivers
  - Services in demand

❖ **Today’s Real Service Opportunities**
  - Working models
  - Go-to-market strategies

❖ **Today’s Real Technology Opportunities**
  - Architecture and design

❖ **Cloud Challenges**
  - Trust and insecurity
  - Go-to-market

❖ **Future Proof**
  - Conclusions
Cloud Truth No. 1:

Cloud is important – sometimes hype happens for a reason
Cloud Truth No. 2:

Cloud is a shift, not a net-new opportunity
Cloud Truth No. 3:

Cloud is hard – hard to build, and hard to sell
Demand and Supply
A Working Definition

- According to the U.S.-based National Institutes of Standards and Technology (NIST):
  - On-demand self-service
  - Online accessibility
  - Resource pooling
  - Rapid elasticity
  - Usage or subscription-based pricing
  - Flexible contract terms
Cloud Layers

❖ **Software as a Service (SaaS)**
  - Clients access applications running on a provider’s cloud infrastructure via an interface such as a Web browser
  - The client does not manage the underlying infrastructure

❖ **Infrastructure as a Service (IaaS)**
  - Customers can provision and decommission compute, storage, network, and other IT resources running in the cloud
  - The client can’t control the underlying cloud infrastructure but they can manage applications, databases, storage, and some network devices (e.g. firewalls)

❖ **Platform as a Service (PaaS)**
  - Users can tap into a provider’s cloud infrastructure to create or acquire applications developed using programming languages and tools supported by the provider
  - The client doesn’t manage the underlying infrastructure but has control over the applications
Cloud Service are (Gradually) Gaining Traction

- Of 454 European enterprises surveyed by Current Analysis, who already have or plan in the next two years to adopt cloud services, 44% are already using cloud services.

- 76% of those using cloud call SaaS their primary cloud service.

- And 22% say IaaS is their main cloud solution.

- Enterprise applications and storage are the most common.
The Supplier Landscape: Hot and Crowded

- **Pure-play SaaS**
  - E.g.: Salesforce.com, Google

- **Transitioning software vendors**
  - E.g.: Microsoft, IBM, Oracle

- **Specialized solution providers and vendors**
  - E.g.: managed storage providers including EMC, hosted and managed security services such as McAfee, Cisco

- **Telecom service providers**
  - E.g.: AT&T, BT Global Services, Verizon

- **Hosting and utility computing providers**
  - E.g. Amazon Web Services, Rackspace, Savvis

- **System integrators and global consultancies**
  - E.g.: Accenture, CSC, HP, IBM Global Services
IT Solution and Telecom Providers See Clear Opportunity

- A way to gain new incremental revenue, not just a replacement for declining revenues in other service areas
- High profit margin potential
- Can leverage existing data center and network infrastructure to deliver cloud services
Customers: Catching the Cloud Wave?

It is still early days for adoption with 63% saying cloud services support less than 5% of their IT needs.

Proportion of IT needs met through cloud services in 24 months
Great Expectations

Businesses are looking for some very tangible benefits from the cloud that include:

- Cost Savings
- Flexibility
- Access to the latest applications
- Ability to be more strategic with IT
- And, surprisingly, better security
Differentiating Factors

- Selection Criteria for Cloud Services Echo Expected Benefits
  - Security
  - Flexibility
  - Availability
  - Price

- Flexibility is more important to smaller companies than larger businesses
- Security is a crucial differentiator to big enterprises
Businesses Have a Clear Idea of Supplier Preference

- OTT Web providers (e.g. Amazon and Google)
- Storage vendors and hardware suppliers
- IT services suppliers
Only **6%** of Businesses Surveyed Named Telecom Operators as Their Go-to-Source for Cloud Services – Why?

- Perception that carriers still possess more voice than data expertise
- Telecoms are often a secondary or tertiary choice for hosting services
- Carriers typically have fewer consultative resources than IT solution providers
Today’s Real Service Opportunities
The IT services that businesses are currently or planning to consume through the cloud run the gamut from virtual desktop services to unified communications.
Cloud Delivery Models

- Private Cloud
- Community Cloud
- Public Cloud
- Hybrid Cloud
The Virtual Trade Off

❖ **The private cloud:**
  - maximum security and stability
  - lack of resource pooling limits cost and flexibility benefits

❖ **A hybrid cloud:**
  - supplies the security of a private cloud with bursting capabilities
  - support rapid provisioning of additional resources

❖ **The public cloud:**
  - maximum cost savings and vast compute, storage, and other resources
  - without the security, stability, and privacy supported in a private cloud
Teaming for Success

❖ Cloud Partner Models

- White label
- Vertically-specific clouds
- Vendor collaboration model
Joining Forces

Telecom Providers

Pure-Play SaaS/ Transitioning ISVs

Hosting/Utility Computing Providers

System Integrators/ Global Consultancies

Specialists
Today’s Real Technology Opportunities
Data Centers: Foundation for Agility

- **Server Virtualization Not the Only Crucial Enabler**
  - SAN/LAN fabric convergence and economics
  - Modular design
  - Fabric architecture: east-to-west traffic optimization
  - Geo-locational site diversity
  - High-efficiency power/cooling systems
  - High capacity storage
  - Secure virtualization, and sufficient site security
Data Centers are Nothing Without Networks

- IP network with sufficient geographical scope
- Scale to meet rapid changes in capacity requirements
- 802.11n and the “consumerized” edge
- High performance routing/switching
- Built in resilience/failover
- Integrated protections against threats (e.g. DDoS attacks, APTs, etc.)
Security Concerns are Major Obstacle to Adoption

- Security services vs. securing services
- Confidentiality, integrity, availability in virtualized environment
- Usual set of threat management tools, plus visibility into inter-VM traffic a requirement
- Governance, Risk and Compliance (GRC) controls – data location key
- Privacy measures
- Data loss prevention/content security
Truly Elastic Clouds Demand Powerful Tools

- Online user/administrator interface into the cloud environment
- Rapid provisioning/de-commissioning
- Orchestration between multiple sites/clouds
- Automated server load balancing
- Effective incident management
- Compliance Reporting
- Billing
Cloud Challenges
Security Tempers Enthusiasm

- Exposure/Data loss
- Transparency/Privacy Questions
- Auditing Concerns
- Governance
- Compliance
- Inventory management
Not Quite Ready for Prime Time

- **Technology Immaturity Spooks Buyers**
  - Stability/consistency
  - Data breach/loss
  - Disaster recovery
  - Performance
  - Functionality
  - Provisioning speed
  - Billing accuracy
Cloudy Conditions

- Uncertain Models = Skittish Suppliers
  - Cloud business models
  - Consultative capabilities
  - Sales force education
  - Channel/distribution strategies
  - Scalability/elasticity
  - Automation effectiveness
  - Post-deployment support
Trust Must be Earned

- Provide sufficient pre-deployment guidance
- Supply an easy-to-use, and effective, portal
- Rapid resource provisioning/decommissioning
- Support adequate security/compliance/privacy controls
- Meet and exceed TCO/ROI promises
The Pay-Off

- **Effective Cloud Services Today Will Deliver More Benefits Later**
  - Seamless bursting across separate clouds to support almost limitless bandwidth
  - Optimal flexibility/efficiency
  - Increased business and technical innovation
  - New business models for end customers
  - Improved IT security
  - Higher margin returns for providers
Thank you

Name: Jeremiah Caron
Title: Vice President - Analysis
Email: jcaron@currentanalysis.com
Phone: +44 (0)20 8673 0662
Twitter: @j_caron
Website: www.currentanalysis.com