

## Cloud Computing in the IT Service Value Chain

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## The old ways don't cut it anymore

- Simplify and consolidate
- Cost optimization must produce results
- New business and IT models (open source, SaaS, Cloud)
- Greater transparency in business and IT









# By 2012, 20 percent of businesses will own no IT assets.

Key predictions for IT organizations and user in 2010 and beyond Gartner



#### **Indicators lead to Cloud as future**



Business expectations for IT call for greater productivity and continued cost-efficiencies				
Ranking	2010			
Improving business processes	1			
Reducing enterprise costs	2			
Increasing the use of information/analytics	3			

CIO strategic technologies reflect increased interest in "lighter-weight" solutions					
Ranking	2010	2009			
Virtualization	1 1	3			
Cloud computing	2	16			
Web 2.0	3	15			







#### The next 40 minutes

The market loves Cloud. What is it?

Managing Cloud as an embedded service offering

Concepts for building an effective cloud computing strategy



#### NIST definition of the Cloud





A model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model promotes availability and is composed of five essential **characteristics**, three **service models**, and four **deployment models**.



#### **Characteristics**

On-demand self-service

Broad network access

Resource pooling

Rapid elasticity

Measured service

#### Service model

Cloud SaaS

Cloud PaaS

Cloud laaS

#### **Deployment model**

Private cloud

Community cloud

Public cloud

Hybrid cloud



The NIST Definition of Cloud Computing, Version 15, 10-7-09
Authors: Peter Mell and Tim Grance



## SaaS driving forces

#### **Business drivers**

Reduced TCO



Core competencies

Demand fulfillment; elasticity

Demonstrate value, faster

#### Acceptance drivers

Supplierization of IT



Virtualization

Commercialization

Frustration with legacy systems



## SaaS represents a movement





Browser-based apps increase user uptake



Adoption of standards



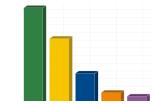
Primary source for communication and research



Upgrades perfected



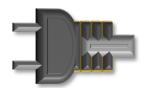
Once in production, customers refine business processes



Reporting drives business decisions



Service management meant understanding offered services



Integration to multiple systems is the norm

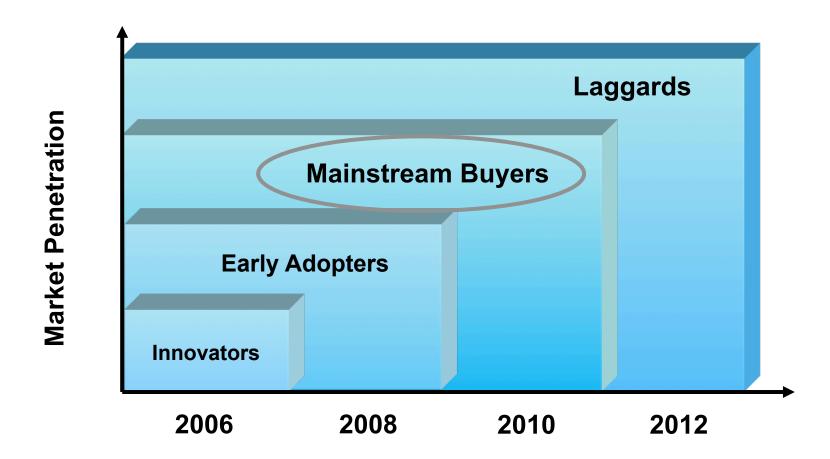


People live in their inboxes





## **Market adoption forecast**





**Source**: THINK strategies, Inc.



## **Shift in adoption**

#### **Business unit adoption**

Buyer: business unit

Support: business unit

**Usage:** departmental



#### **Enterprise-wide adoption**

**Buyer:** IT & the business, app dev

Support: IT

Usage: enterprise-wide, app dev

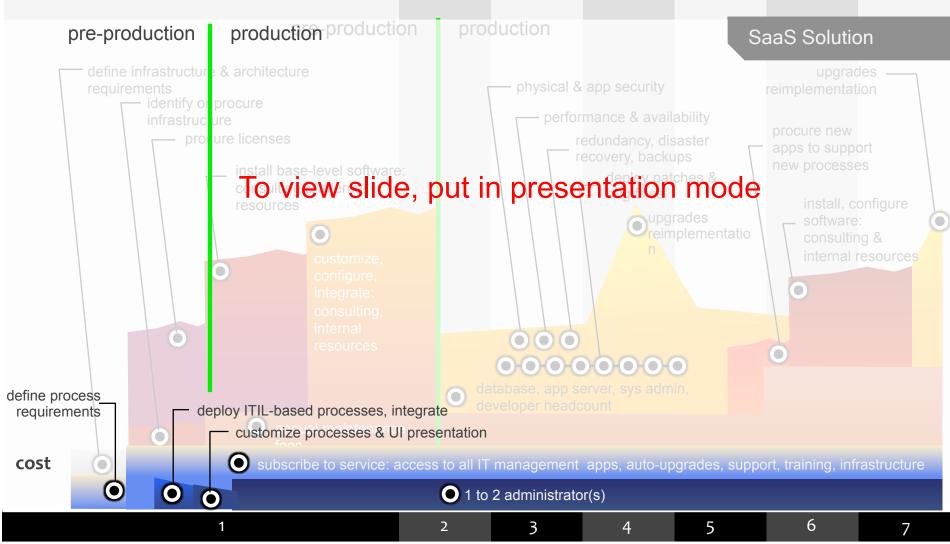




IT & governance now own selection criteria



## SaaS vs. legacy TCO







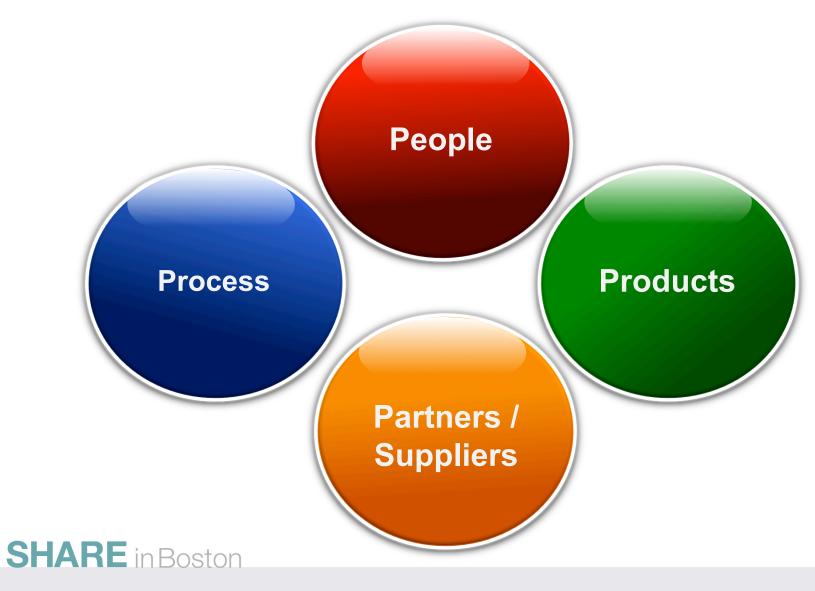
## The complete IT lifecycle





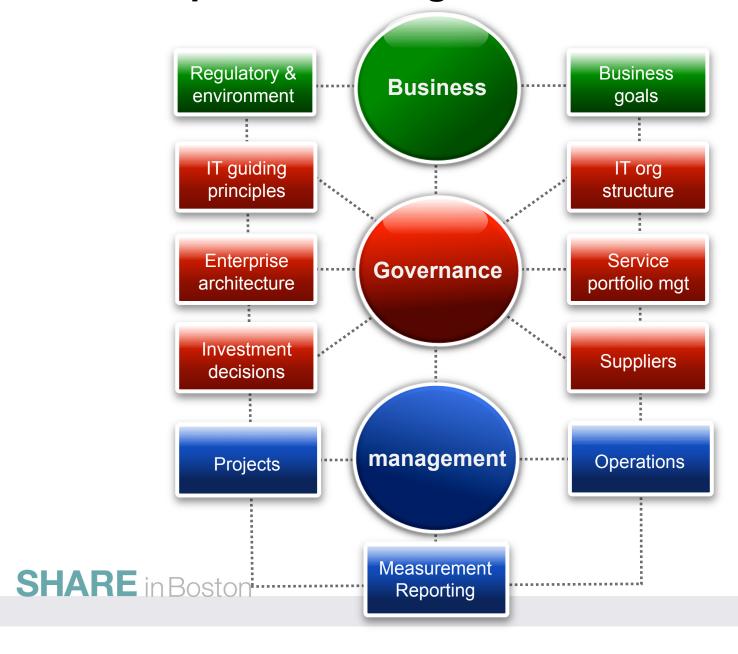
## The new environment requires a 4th "P"





## IT service portfolio and governance



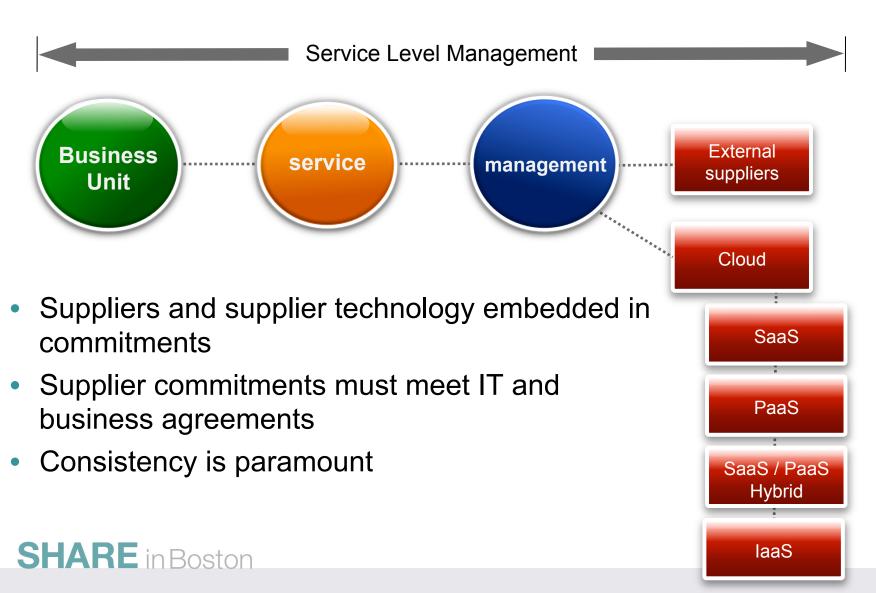


#### Service ecosystem **Business Business Business Business** Unit Unit Unit Unit Service Catalog and Service Portfolio **Dedicated Shared IT** Outsourced Service IT service service service Service unit Service unit Service unit Service unit Primary **Shared IT** Embedded IT Embedded IT supplier service External **SHARE** in Boston

suppliers

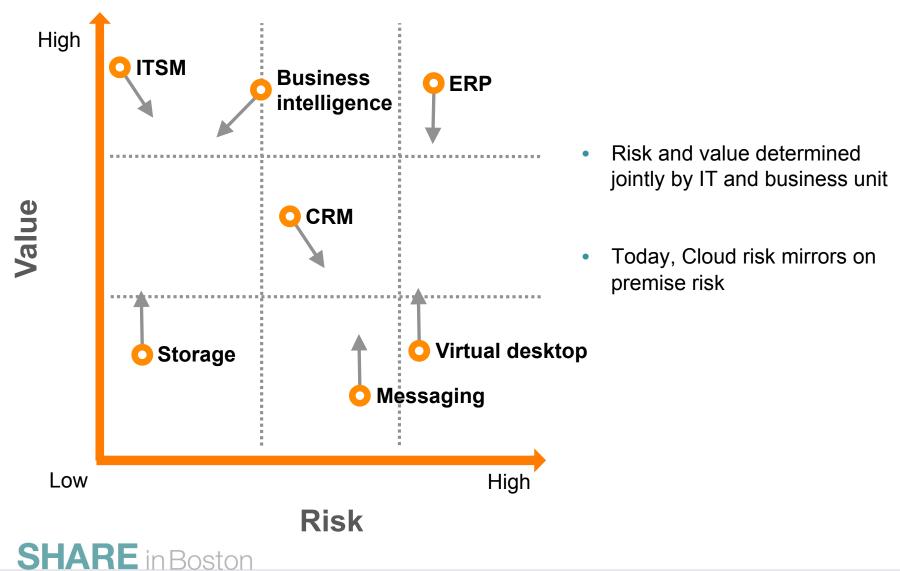
## Major component of service offerings





#### **Cloud categorization**





## **Cloud adoption scorecard**



	Critical			Commoditized
Highly regulated		1		
Mission critical to revenue		S		Ф
Fundamental (requires control	)			
Employee productivity			/ 5	
Operations				
Secondary IT infrastructure (redundancy)	labs,			3
Business infrastructure			1	
Customer facing				



#### **Perceived risks**



Stated Risk	Cloud Response
Data privacy	SAS 70 Type II, operational procedures, communication and application security
Data ownership	It's the customer's data; replicate to customer data center
Data integrity	Multi-tenancy, data and code isolation, disaster recovery
Privileged user access	Operational procedures, encryption, role-based security
Backup and recovery	Geographically separated data centers; replication to customer data center
Integration	SOA, Web services, XML, HTTPS, VPN tunneling, SSL/TSL
System performance and availability	Proven scalability and performance; 99.97% availability SLA; monitoring tools
Transparency and visibility	Should be Cloud supplier's DNA
Governance	Activity and user access audit log, SAS 70 Type II, regulatory confirmation



## Preparing for the cloud



- Expect resource changes
- Executive sponsorship includes IT, security, compliance and the business
- Build a business case
- Negotiate as a business partner
- "Set and forget" is not an option





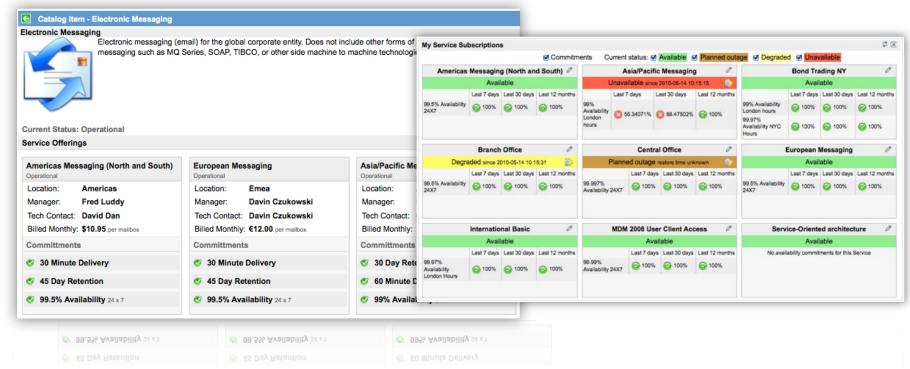
#### **Good partner traits**

- Transparency and continuous communication
- SLA accountability
- Available tools to monitor and manage Cloud resource
- Community enablement tools
- Seemingly endless references
- Know what the supplier is offering managed service or modern Cloud?









- Runbook automation and service catalog to provision cloud resources
- Service level management to track SLAs, operational and underpinning agreements
- Integration to provider monitoring tools





#### **Beware of "Cloud Wash"**

- Scrambling to catch the cloud wave
  - Every vendor offers some form of "SaaS"
  - "On premise or SaaS it's your choice"
  - "Move from SaaS to on premise then back to SaaS"
- "SaaS" architectures in the market
  - Multi-tenant Java and HTML
  - Single-tenant Java and HTML
  - Hosted client / server software





## SaaS not created equally



Item	SaaS	ASP
Available today	✓	✓
Customers in production	450+	< 10
Reference customers	450+	0
Subscription licenses	✓	✓
Modern Internet technology	✓	×
Customization by customers	✓	×
Automated upgrades	<b>√</b>	×
Flat-fee deployments	✓	×
Integration included in subscription	<b>√</b>	×
Availability SLA	99.97%	99.5%
Global data centers	✓	×
SaaS strategy failed attempts	0	several





## **Parting thoughts**

- Focus on business requirements, not the Cloud initiative
- Cloud is not a trend, it is in mainstream adoption
- Consider suppliers as embedded partners
- Supplier management will become a core competency
- Build a business case, prove the technology
- Work with security early and often

