



Cloud Computing and Records Management – How proper planning can ensure you don't miss the next wave in IT Services and Platform Delivery:

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Definitions

* Cloud Computing

- is a style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet
- Users need not have knowledge of, expertise in, or control over the technology infrastructure in the "cloud" that supports them

Source: wikipedia

Definitions

- * Grid Computing - Defined:
 - Technical approach spanning an application across multiple computers
 - A compute grid is a collection of computers within one administrative domain capable of hosting a distributed application
 - Grid is about **infrastructure**

Definitions

* Utility Computing:

- A sales approach, treating computing resources as a utility in the way we treat the familiar utilities (water, gas, electricity etc.). A utility computing provider would sell resources on their own grid(s)
- Utility is about **business relationships**

Definitions

* SAAS



Definitions

* Social Network :

- A social structure made of individuals (or organizations) called "nodes," which are tied (connected) by one or more specific types of interdependency, such as friendship, kinship, financial exchange, dislike, sexual relationships, or relationships of beliefs, knowledge or prestige.

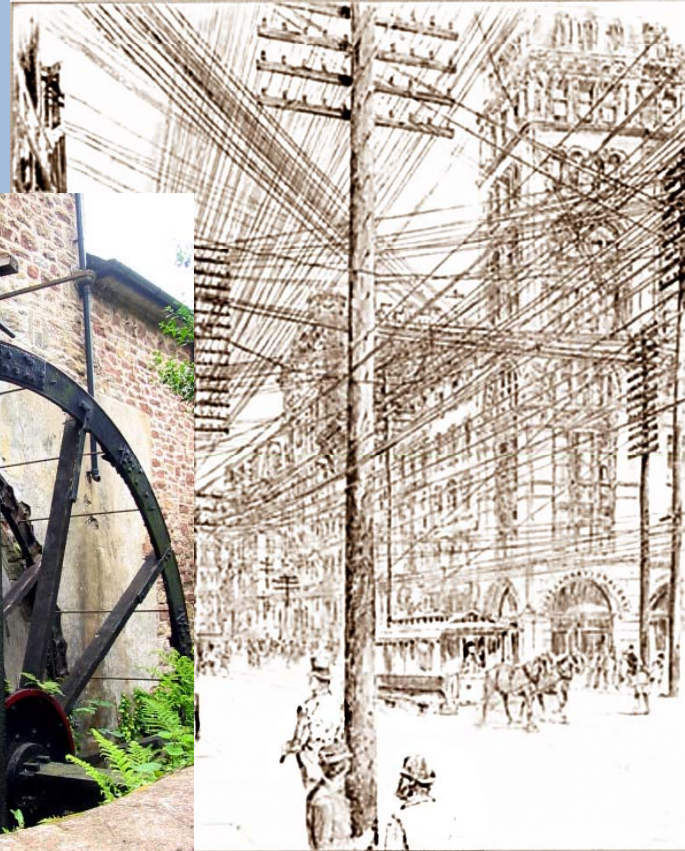
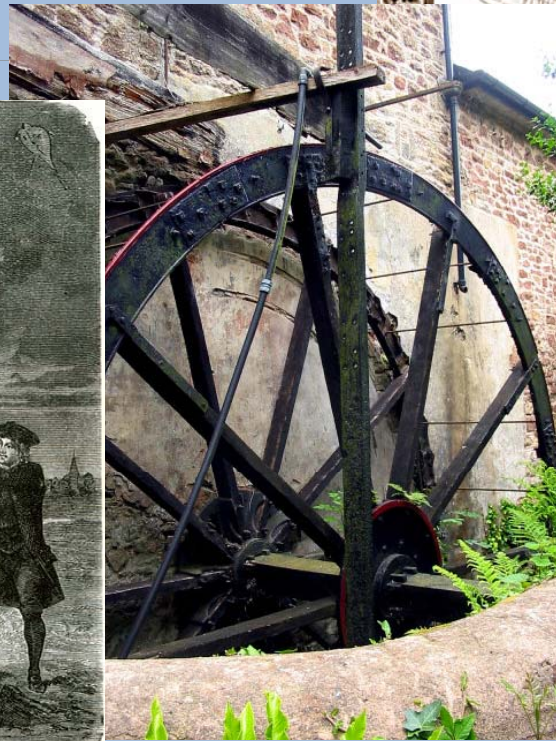
Next Generation

- * Intersection of Business and Social Networks
 - Social-Media Sites
 - SlideShare
 - Professional-Networking Sites
 - LinkedIn
 - Short Messaging Sites
 - Twitter
 - Yammer

Rapid Pace of Change

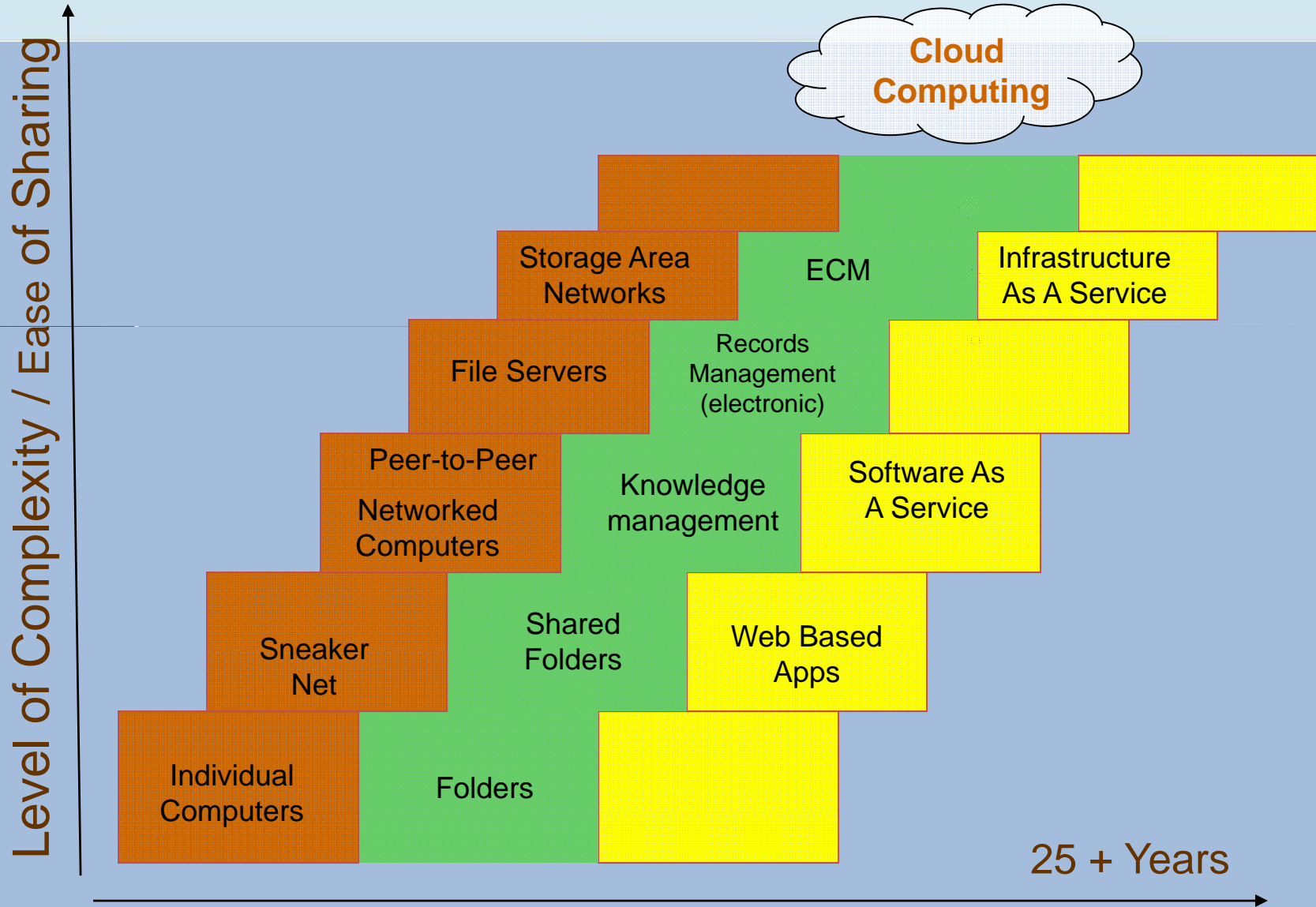
- * Networking and Applications become more abstract.
 - When do things change in the cloud?
 - How are those changes communicated?
 - What about the pace of change?

History of Electricity



200 + Years

History of Computing



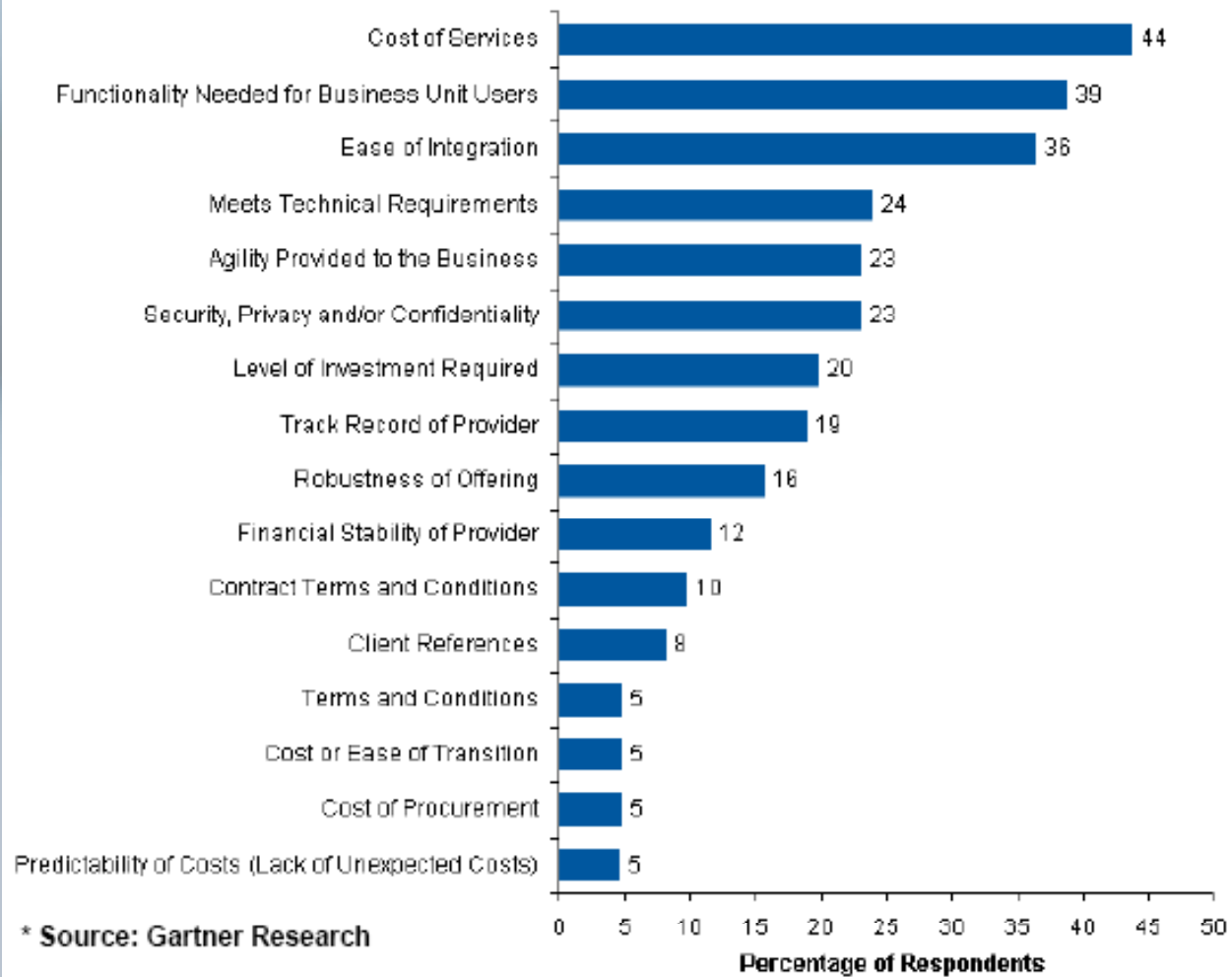
Rate of Change

- * Electricity evolved over time and regulations were able to keep up.
- * Laws and Regulations are slow to keep up with the rate of change for electronic communications

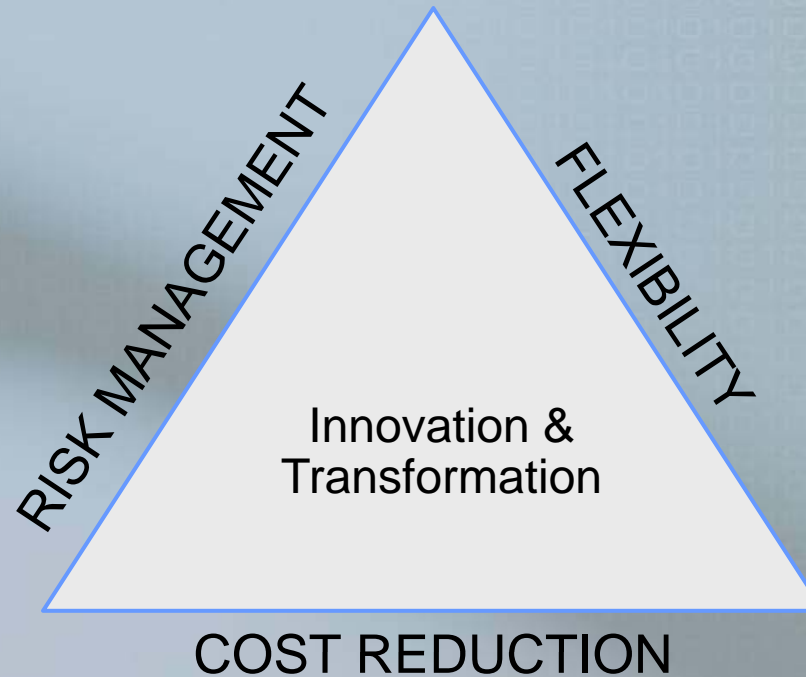
Why Cloud Computing?

Consumer Perspective	Definition Component	Provider Perspective
A new model for obtaining access to IT facilities	Style of computing	A new model for providing IT value
Unlimited resources available when needed	Massively scalable	Elastic / dynamic allocation of resources to workload
Content, software, platforms, infrastructure, ...	IT-related capabilities	Multiple opportunities for value & differentiation
Pay for usage, not for IT assets	As a service	Asset & operations costs factored into rates
"Martini IT": no vendor lock-in	Using internet technologies	"Thin-client" model, device agnostic
A "shared service"	Multiple external customers	Multi-tenant architecture required

Factors for Cloud Computing



Customer Business Issues

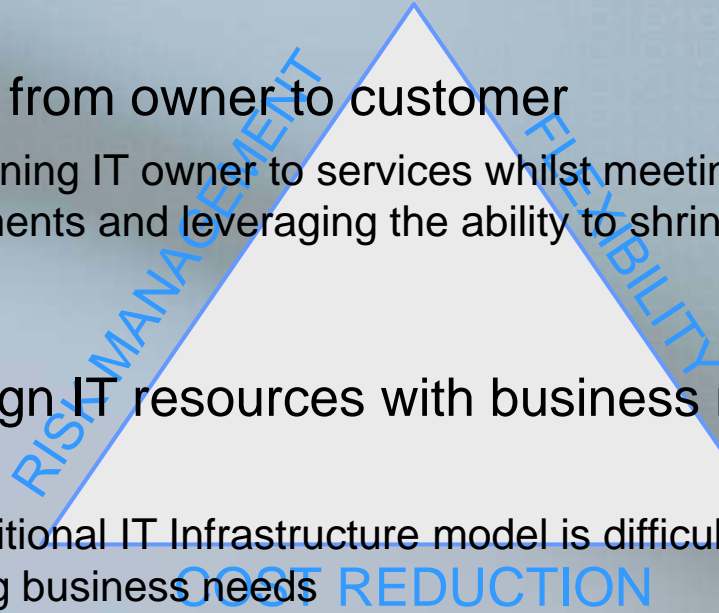


Risk Management

- Remove single site failure issue
 - Customer may reducing IT risk by having their It Fabric off-site in resilient COLT Cloud Infrastructure solution
- Off-load improvement and upgrade tasks
 - The ongoing burden of improving or upgrading IT infrastructure is off-loaded to COLT thereby releasing the customer to focus on their core business
- Reduce the burden of compliance
 - The rising interest in IT governance is due the different compliance initiatives (e.g. Basel II, SAS 70 and Sarbanes-Oxley)
- Mitigate IT project cost control risk
 - IT projects can easily get out of control and affect the performance of an organisation.

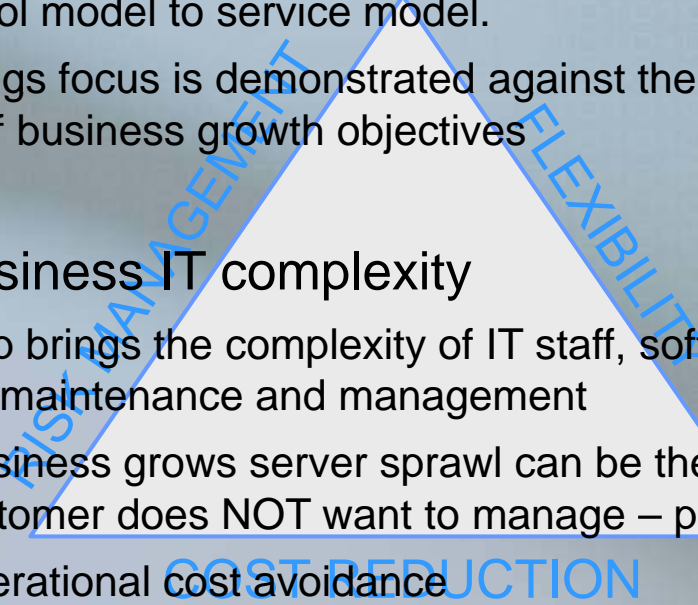
Flexibility

- Gain improve cash flow
 - Do the same or more with less infrastructure whilst becoming more cash flow positive
- Transition from owner to customer
 - Transitioning IT owner to services whilst meeting service levels requirements and leveraging the ability to shrink and save if required
- Able to align IT resources with business need, cost-effectively
 - The traditional IT Infrastructure model is difficult to align with changing business needs
 - The new model begin to enable the agility of the IT Infrastructure



Cost Reduction

- By enabling OPEX investment whilst reducing CAPEX spend
 - Transition IT skills and resource away from an asset and people cost control model to service model.
 - This savings focus is demonstrated against the enablement of the delivery of business growth objectives
- Reduce business IT complexity
 - Ownership brings the complexity of IT staff, software and hardware maintenance and management
 - As the business grows server sprawl can be the very environment that a customer does NOT want to manage – physical and virtual
 - Rising operational cost avoidance



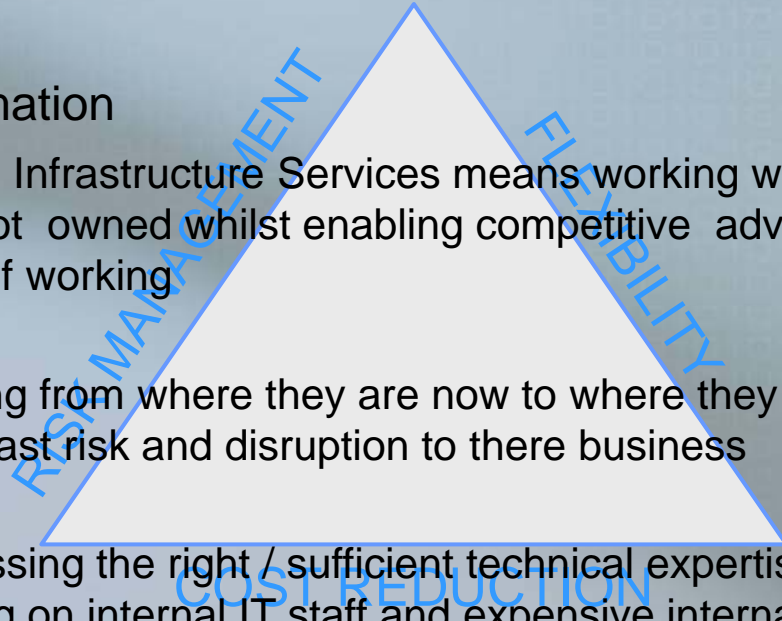
Innovation & Transformation

- Innovation

- Customers can leverage new technology that the service offers and the assurance that as technology evolves...

- Transformation

- Cloud Infrastructure Services means working with assets that are not owned whilst enabling competitive advantage... a new way of working
- Moving from where they are now to where they want to be with the least risk and disruption to their business
- Accessing the right / sufficient technical expertise without relying on internal IT staff and expensive internal IT training programmes



Issues

- * The Next Generation of Computing Faces Issues with:
 - Ownership
 - Access / Retrieval
 - Privacy
 - Risk

Issues - Ownership

- * If you use Google for your corporate information and they mine that information is that ok?
 - <http://www.informationweek.com/news/government/cloud-saas/showArticle.jhtml?articleID=218501443>
 - Outsourcing your email to Google saves the organization a lot of money
 - Someone has to pay for this service

Issues – Access/Retrieval

* Recent Examples

- Kindle (sp) – Amazon.Com recently deleted e-books from customers kindle devices without their consent
- who owns your data?
- Who has access to change your data?

Issues – Privacy

* Recent Examples

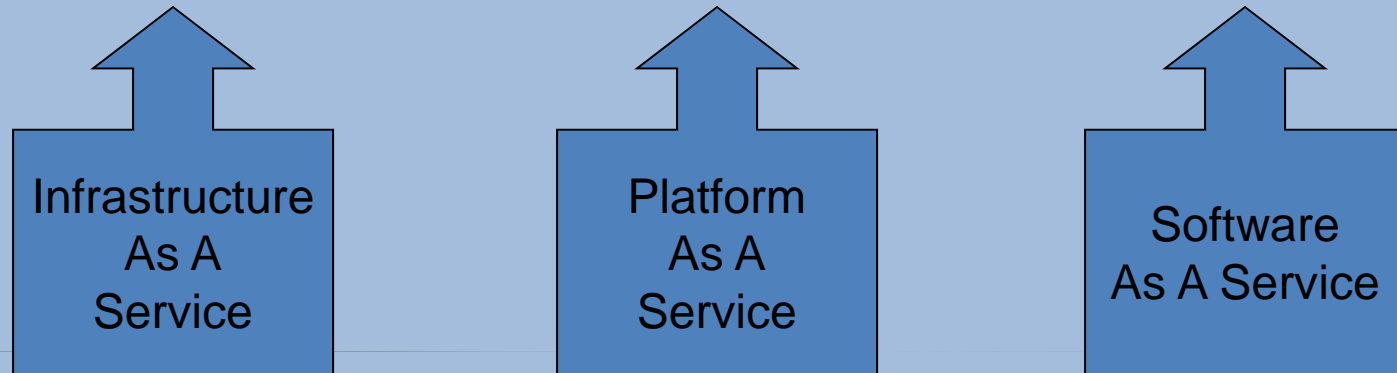
- Facebook violates Canadian Privacy Laws
- <http://mashable.com/2009/07/17/canada-facebook-privacy/>
 - Meanwhile, Facebook's retention of data from deactivated accounts **violates** the Personal Information Protection and Electronic Documents Act, the commission claims.

Issues - Risk

* If The Cloud Moves

- Citing an unfavorable change in tax laws, Microsoft is moving its Windows Azure cloud from a data center in Washington state to one in Texas.
- http://www.informationweek.com/cloud-computing/blog/archives/2009/08/microsofts_drag.html

Cloud Computing Architecture



Features

Customer can:

- Provision processing, storage, networks, and other fundamental computing resources
- Deploy and run application software including operating systems and applications.

Customer can:

- Deploy in-house created applications onto the cloud infrastructure using programming languages and tools supported by the provider

Customer can:

- Use the provider's applications running on a cloud infrastructure
- Access application's client devices through a thin client

Span of Control

Customer can control:

- Select networking components (e.g. firewalls, load balancers)

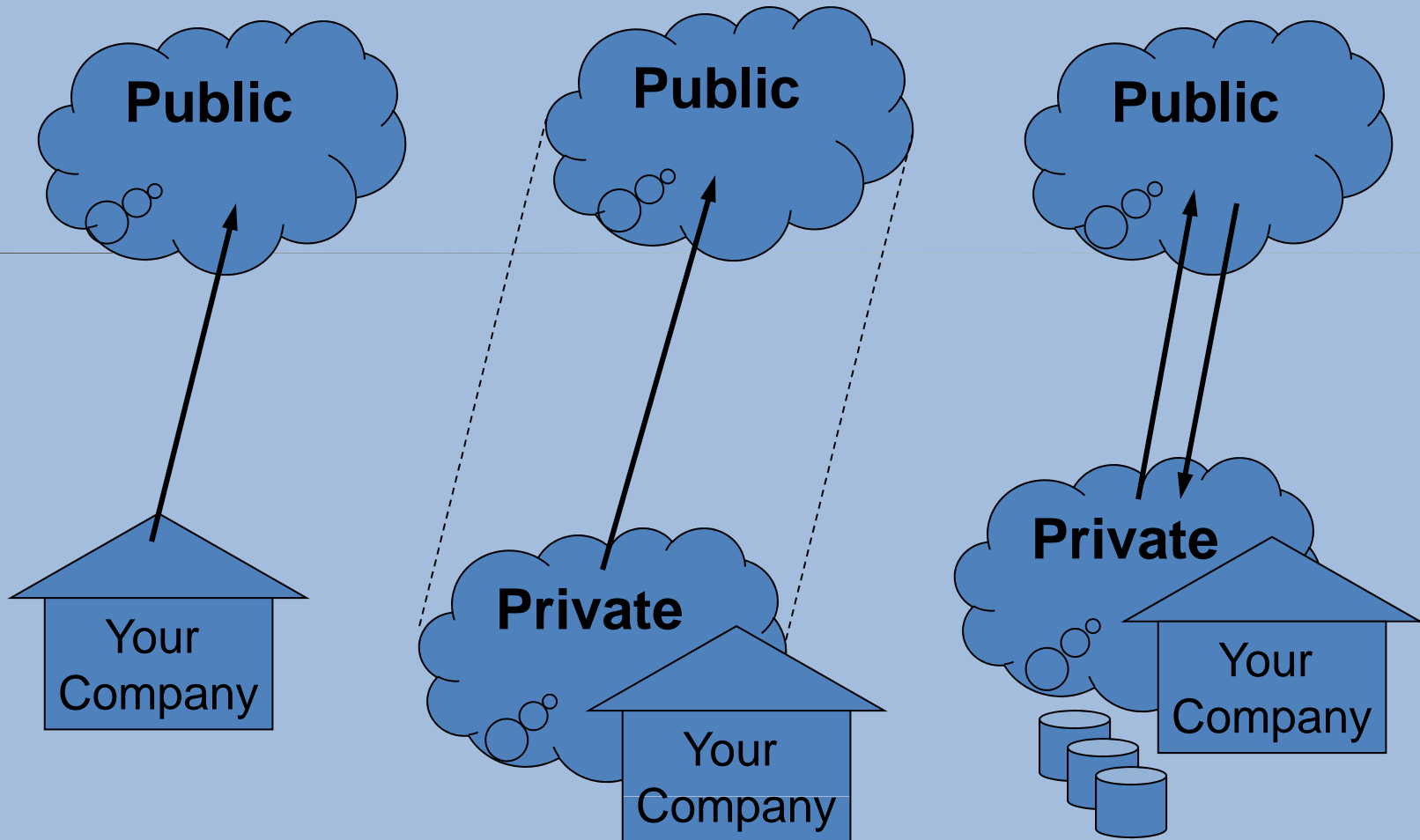
Customer can control:

- The deployed applications
- Application hosting environment configurations

Customer can control:

- User-specific application configuration settings

Types of Clouds



Safe Harbor Agreements

- * The safe harbor –
 - Approved by the EU in 2000
 - U.S. companies can avoid facing prosecution by European authorities under European privacy laws.
- * The Agreement Consists of:
 - Notice, Choice, Onward Transfer, Security, Data Integrity, Access, Enforcement

Service Level Agreements

- * Data Ownership
- * Notification
 - If the cloud moves (document storage)
 - If the vendor expands into another vendor's cloud
- * Catastrophic Failure of Vendor
 - Steps for retrieving of data
- * Disaster Recovery Plan
 - What happens when the cloud fails

Why the Cloud?

- * Saves You Money – Pay only for what you need
- * Allows you to be agile and respond to customer demands
- * Allows your organization to scale up or scale down computing resources on demand

Communication Tiers



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Desktop:
E-mail,
Office Suite

ECM:
Livelink,
FileNet,
Sharepoint,
etc

**Social
Networks:**
Facebook,
Twitter

Impact Summary

- * Procedures for capturing / closing out of Cloud Data
- * Review of Data Breach Laws for Storage of Information
- * Review of Privacy Laws for Storage of Information
- * Procedures for Capturing Short Messages
- * Social Networking – Control of the Message

Value Proposition Summary

- * Reducing IT risk
 - continuity, security, etc
- * Reduced IT Infrastructure
 - capex burden
- * Migration of IT Infrastructure assets out of the business

Value Proposition Summary

- * Secure Ubiquitous network access
- * Gain location independent resource pooling efficiency
- * Leverage rapid resource alignment to business needs
- * Deliver a Measured service – SLAs and reporting

Thank you

