

Berkeley Center For Law & Technology  
Cloud Computing: Consumer Protection,  
Data Portability and Competition



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# Cloud Computing – Attractive Technology

- **Broad marketing labels have led to confusion and uncertainty**
  - Everything is in the “cloud”
- **Increasing universal access to technology by lowering entry costs**
  - Rapid adoption
- **Increased productivity**
  - Ease of use
    - No need for significant technical know-how
  - Provides universal availability and easy access
    - Internet connections
    - Mobile devices
- **Easy collaboration**
  - Different people at different sites globally
  - Travelling employees connect remotely through thin client interface

# Cloud Computing – Attractive Technology

- **Cost savings**
  - Often free
  - Utility computing model - Pay only for resources used
  - No major infrastructure investments or technology refresh required
  - Reduces IT overhead
- **Scalability**
  - Availability of additional resources in the cloud
  - Expansion or contraction easy since covered by cloud service provider
- **Efficient technology management**
  - Reduction of infrastructure risk
  - No need to load updates and patches . . . therefore reduced maintenance

# Cloud Computing – Attractive Technology

- Who does not want to be in the cloud?
- Paradigm shift
  - Software Consumption Model vs. Service Consumption Model
- Everyone wants to adopt on the consumer level
  - Consumers are not doing due diligence
  - Consumers are not reading EULAs and terms of use
- Business and enterprise type users are still cautious, but interested
  - Business can't ignore the economic benefits
  - Security still a concern for corporate users

# Panel

- Daren Orzechowski (Moderator)
  - White & Case LLP
- Randal Picker
  - University of Chicago Law School
- Carl Settlemyer
  - Federal Trade Commission
- Lydia Parnes
  - Wilson, Sonsini, Goodrich & Rosati PC
- Jason Schultz
  - Samuelson Law, Technology & Public Policy Clinic

## Issue 1: User Freedom and User Rights

- User privacy
- Consumer desire to freely use material in the cloud
- Restrictions on use
  - Technology limitations
  - Copying/Uploading/Downloading
  - Fair use
- Tweaks, changes and derivative works
- Ownership of assets
- Access restrictions

## Issue 2: What are the Existing Protections for Consumers?

- **Federal Trade Commission Act**
  - Prohibition against deceptive acts or practices
  - Prohibition against unfair acts or practices
- **State law protections**
- **Pre-cloud versus post-cloud**
  - Is enforcement really different?
  - What are the challenges presented by the cloud for investigation and enforcement?

## Issue 3: What is the Cloud Computing Service I Signed Up for?

- Understanding the nature of the service
  - Platform as a Service
  - Software as a Service
- What does the fee I paid entitled me to?
  - False sense of security
  - Expectations of privacy
  - Is my data secure and what does that mean?
- Nothing is free
  - If I am not paying a fee for the services, what is the “cost”?
  - Being subjected to advertising
  - Repackaging and use of your data in various ways
  - Tracking your activity

## Issue 4: Standards – Can I Take My Data Elsewhere?

- **Captive audience**
  - Standards can increase competition, promote consumer mobility
  - Standards are often favored by smaller market participants
  - Larger vendors prefer that customers are locked into their proprietary offering and platforms
- **Various groups have sought standards for cloud computing**
  - Open Cloud Manifesto
  - Open Cloud Standards Incubator
- **Understand how you can move or retrieve your data**
- **Education on technology issues associated with removing data**
- **Market for data transfer providers**

## Issue 5: Competition and Antitrust Issues are Beginning to Arise

- Software is increasingly being offered online, in the cloud
  - Less software being installed on PCs
- Focus in software and software based services is on interfacing among various cloud based offerings
  - Functionality is focused on being able to migrate and process data among various applications hosted in the cloud
- Do market participants offering leading platforms have the ability to exclude or selectively block certain competitors or software developers who want to interface their offerings to the platform?
- Will companies be forced to provide services using open platforms?
- Concerns surrounding claims of compatibility or interoperability

## Issue 6: Who Reads End User Licenses? Fair or Not?

- Larger enterprise cloud offerings are outsourcings involving detailed contract negotiations
- Smaller, consumer based offerings are often accepted by means of a click-wrap agreement, EULA or some other form of consent to terms of use
- EULAs and terms of use can raise consumer protection concerns
  - Disclosures, false advertising
  - Clarity around amendments to the terms
  - Enforceability
  - Guidelines and considerations
- Changes to policies concerning access and use rights

## Issue 7: Is My Data Safe? What Safeguards are Required?

- Logical and physical security
- Older ASP (Application Service Provider) or co-location offerings would store the user's data in a single identifiable location
- Modern cloud computing platforms increasingly rely on technology called virtualization
  - Virtualization allows vendors to optimize the use of their system and storage resources
  - Virtualization is a driver of the economic benefits of the cloud
  - Data could be located in several different locations on a vendor's system
- Consumers typically do not conduct due diligence on a vendor or ask how their data is protected
- Who at the company can see or access my data?

## Issue 8: When Things Go Wrong, What Do We Do?

- **Outsourcing valuable data or information to a third party**
  - Many things can go wrong
- **Bankruptcy**
  - Recovery of data
  - Access to data
- **Cloud based class action lawsuits arising**
  - T-Mobile/Danger/Microsoft lawsuit involving the Sidekick mobile phone
  - Sprint Nextel/Palm lawsuit involving the Pre and Pixi mobile phones
- **Are consumers informed about these risks or do they simply choose to ignore them and the potential consequences?**

## Issue 9: What is the Government doing about the Cloud?

- The Federal government has openly declared a desire to move its computing to cloud based offerings
  - [Apps.gov](#)
- There is little legislation or regulation specific to cloud computing
  - [Electronic Communications Privacy Act](#)
  - [Computer Fraud and Abuse Act](#)
  - [Intellectual Property laws](#)
- Potential Legislation or Regulation
  - [Microsoft's recent proposals](#)
  - [Increase privacy protections specific to cloud computing](#)
  - [Create a sort of truth-in-lending disclosure that cloud computing vendors are required to give](#)

# Questions?

