



**PAYMENTS  
CANADA**

# THE DARK CLOUD: DATA PROTECTION IN THE ERA OF CLOUD COMPUTING

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# AGENDA

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2. Challenges of Cloud Computing
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# What is Cloud Computing?

- Delivery of on-demand computing services or resources over a network on a pay-per-use basis
- Cloud-based applications run on distant computers (i.e. “cloud” platforms) that are owned and operated by others and that connect to users’ computers via the Internet



# Cloud Models

## SERVICE MODELS

- Software as a Service (SaaS)
  - end-user applications
- Platform as a Service (PaaS)
  - cloud platform service and management
- Infrastructure as a Services (IaaS)
  - databases
  - storage or backup
  - disaster recovery

## DELIVERY MODELS

- Private
  - exclusive use, dedicated environment, customized for specific business requirements, most secure
- Public
  - multi-user platform, infrastructure available to the public
- Hybrid
  - use of private cloud foundation combined with public cloud services
  - preferred model



## Benefits of the Cloud Model

- Cost effective and metered service - pay-per-use model; zero infrastructure or hardware costs for computing resources e.g. servers, networks, storage, data centres
- Access to innovative technologies - access to cutting edge business applications; develop applications for faster market availability
- Operational flexibility - innovative services available on demand; immunity from data loss
- Elastic resources and scalability - can scale to usage needs; infrastructure can support dynamic workloads



# Challenges of Cloud Computing

- Data Governance
  - Ownership
  - Collection, storage, retention, transfer
  - Privacy and Security
- Third party vendors
- Statutory and regulatory requirements (PIPEDA; OSFI Guidelines)
  - Cross-border legislation (e.g. GDPR; US Cloud Act)



# Cloud Computing Due Diligence

- Architecture – underlying technologies, type of cloud, meta data
- Ownership – who owns the data, where are data centres
- Retention – effectiveness, impact of multiple locations for storage
- Breach response and coordination – include in contracts



# Cross-Border Data Protection Laws

- CLOUD Act
- GDPR
- California Consumer Privacy Act



# Personal Information Protection and Electronic Documents Act (PIPEDA)

- Canadian legislation that came into force April 13, 2000
- Applies primarily to the collection, use, disclosure, and retention of personal information in the course of commercial activity



# Clarifying Lawful Overseas Use of Data (CLOUD) Act

- US legislation that came into force March 23, 2018
- application to US-based electronic communication and remote-computing service providers
- US government can compel service providers to disclose data stored on servers outside the US
- empowers foreign governments through executive agreements



# Microsoft Ireland Case

- Illegal drug trafficking case
- US government sought disclosure of server in Dublin, Ireland
- Microsoft, U.S. based company, refused to disclose data stored outside US



# EU's General Data Protection Regulation (GDPR)

- EU legislation that came into force May 25, 2018
- To protect individuals in relation to processing of personal data; applies to both public and private sectors
- Most comprehensive privacy legislation to date
- Extends beyond EU borders



# When does the GDPR apply?

(1) Processing of Personal Data

AND

(2) (a) Establishment within the EU; OR

(b) Outside the EU, if

- offering goods or services to data subjects in the EU, OR
- monitoring behaviour in the EU



# Important Concepts under the GDPR

- **Personal Data:** any information related to an identified or identifiable natural person (“**data subject**”) e.g. business contact information, IP address
- **Processing:** any operation performed on personal data, whether automated or not e.g. collection, recording, storage
- **Controller:** determines the purpose and means of processing of personal data
- **Processor:** processes personal data on behalf of the controller
- **Data subject in the EU:** any human physically located in the EU



## Weltimmo case

- **Establishment:** extends to “any real and effective activity – even a minimal one – exercised through stable arrangements
  - e.g. presence of a single representative may be enough
- **Intent is key** to determine **if** offering goods and services to data subjects or monitoring behaviour in EU e.g. use of EU language, currency, domain name



# Legitimate Processing of Personal Data

Processing of Personal Data is lawful when:

- Consent obtained/given;
- Performance of a contract;
- Performance of task in the public interest;
- Compliance with legal obligations
- Protect vital interests of data subject or another individual;
- Legitimate interests pursued by controller or third party



# Takeaways for Managing Business Risk

1. Examine existing data practices – compliance programs
  - specific purposes, minimal amount, retention as long as necessary
  - security controls (pseudonymization vs. anonymization)
  - processes to enable withdrawal of consent
  - data breach response plan
  - applicability of foreign data protection laws
2. Conduct rigorous vendor due diligence
  - internal due diligence (be selective )
  - rigorous third-party assessment (collection, management, use)
  - architecture and vulnerability testing



## Takeaways (continued)

### 3. Identify key contractual issues

- contracting parties and implications (jurisdiction, dispute resolution)
- liability, indemnities
- obligations for notification if processing
- term and termination
- service levels
- regulatory requirements (OSFI Guidelines)

### 4. Inform and engage business partners/experts



QUESTIONS?



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**Thank You!**

