Cancer Care Ontario
Action Cancer Ontario

The Sky's the Limit

Cancer Care Ontario's Strategic Approach to Cloud

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Agenda

- Background
- Communicating your cloud strategy
- Maintaining assurance in the cloud
- Legal & Privacy Considerations
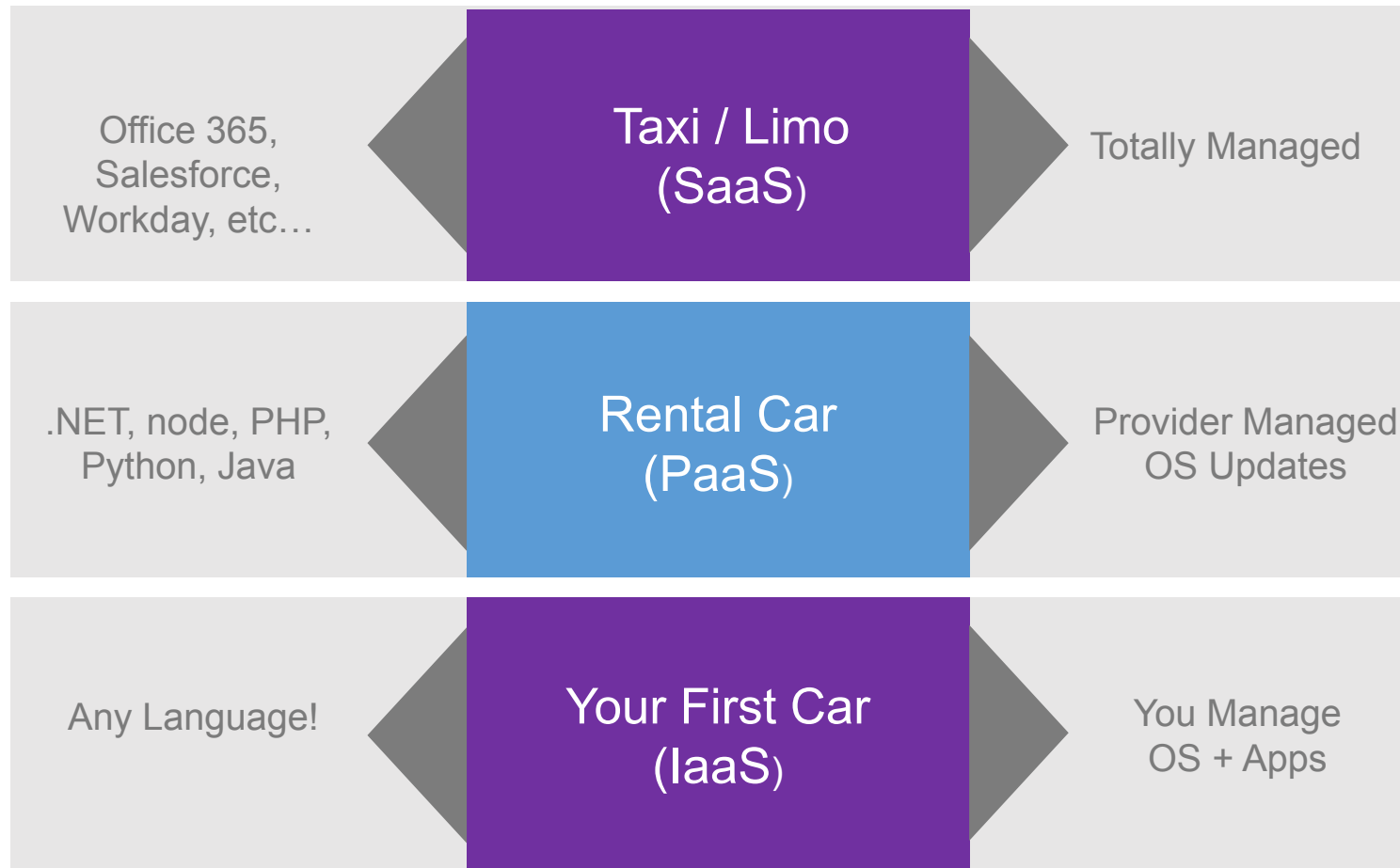- Discussion and wrap up

CCO Background

- Provincial healthcare agency
  - Provides support for cancer and other chronic disease (e.g. renal)
  - ≈1200 full time employees and contingent labour force

- Ontario eHealth agenda delivery partner
  - Data collection, analysis, and presentation
  - Moving towards real time systems

- Sensitive information types

Communicating Your Cloud Strategy

Making Cloud Terminology Concrete

Office 365, Salesforce, Workday, etc…	**Taxi / Limo (SaaS)**	Totally Managed
.NET, node, PHP, Python, Java	**Rental Car (PaaS)**	Provider Managed OS Updates
Any Language!	**Your First Car (IaaS)**	You Manage OS + Apps

source: Microsoft

Drivers for CCO Adoption of Cloud

Scalability	Increased ability to address existing capacity challenges (storage, compute, network)
Business Agility	Decreased time to procure and provision for new systems, particularly development and testing
Security	Better controls and reduced cope of security operational management
Sustainability	Better cost models (e.g. pay for use)

**Locally Hosted
Physical Systems**

**Co-Location
of Physical and
Virtual Systems**

**Cloud Hosting
of Virtual Systems**

Pre-2009

2009 to 2013

2014 onward

Assurance in the Cloud

There can be no great accomplishment without risk.

Neil Armstrong

The cloud risk management team

Privacy and Security ➡ Data Protection

Legal ➡ Legal Liabilities & Compliance

Communications ➡ Brand & Reputation
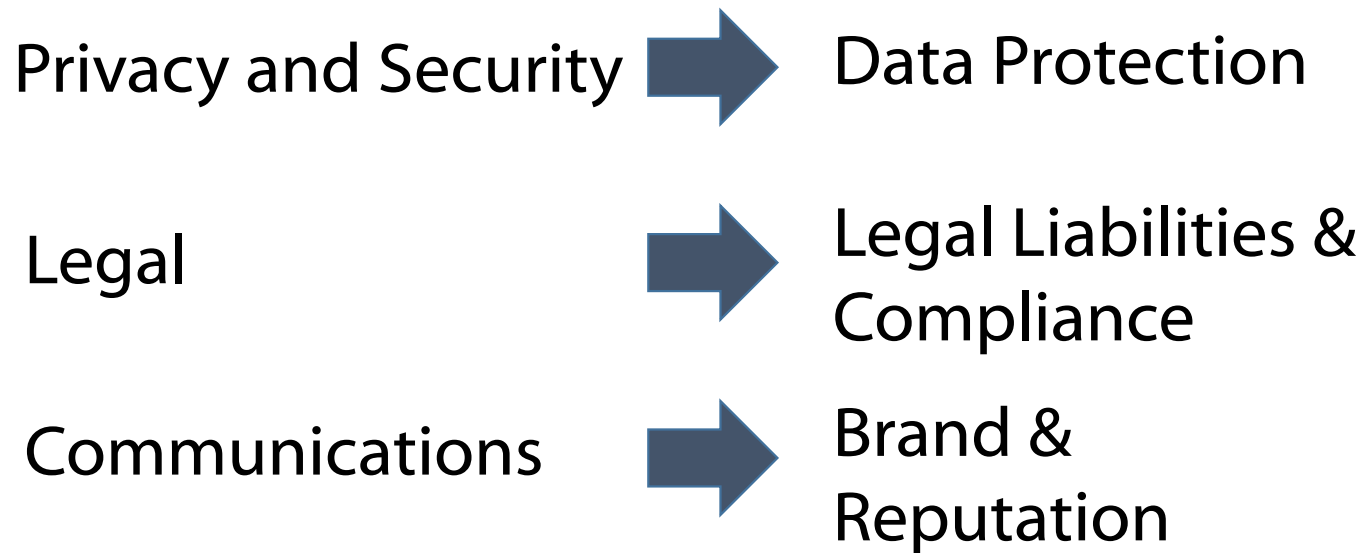
"It used to be, everyone was entitled to their own opinion, but not their own facts. But that's not the case anymore. Facts matter not at all. Perception is everything. It's certainty."

- Stephen Colbert

Busting Some Myths

BUSTED

Healthcare can't use cloud services

Both the federal and provincial privacy commissioners have communicated cloud is acceptable if privacy and security are addressed.

## Cloud computing <u>will</u> save you a lot of money

Cloud computing can save money, but it's not a guarantee. A better discussion is about changing cost models and the advantages that change can bring.

Cloud is less secure

Cloud can be <u>more</u> secure. Trust can be established, verified, and maintained.

Maintaining Assurance in the Cloud

- Service Organization Control (SOC) reports
- International Standards

  e.g. ISO 27001 + (ISO 27002, ISO 27017, ISO 27018)

- Cloud Security Alliance
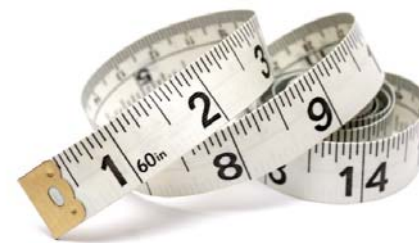
Who are you trying to protect against?

KEEP
CALM
AND
CALL
LEGAL

Legal & Privacy Considerations

- Restrictions on collecting, using and disclosing information outside of Canada

- Data ownership

- Contractual privacy provisions (e.g. authority, purpose, breach notification, compliance audit, destruction)

- Typical commercial terms (e.g. subcontracting, service levels, confidentiality)

Discussion, Questions, and Answers (possibly)

Thank you