

Jeremy M Whyte  
Chief Information Officer  
University of the West Indies, Mona Campus

## Perspectives on the Use of Cloud Services

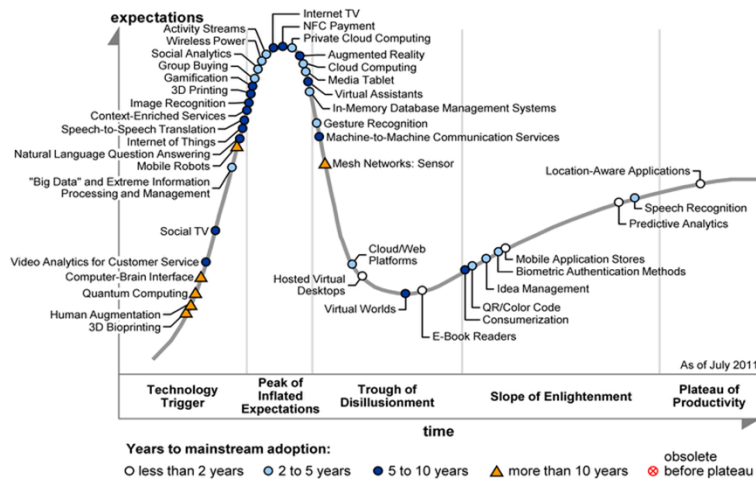
### Agenda

- Perspective and Context
- Philosophy
- Cloud Model(s)
- Use of Cloud Computing (Value Proposition)
- Managing Challenges and Risks

## Perspective

- A perspective on the use of cloud services from the vantage point of delivering ICT services to the UWI
- Context:
  - Shrinking budgets
  - Drive down the time and TCO of service delivery
  - Respond to rapidly changing service demands
  - Simplify our service management framework
  - Accountable and measurable services levels

## Gartner 2011 Hype Cycle



## Philosophy – Adoption the Cloud

- Defined Business (corporate) Objectives
- Developed a set ICT strategies
- Determine tactics to support strategy
  
- View Cloud Computing as a significant tactic for supporting University's ICT Strategy

## Cloud Characteristics – A Good Fit!

- On-demand self service: Provision compute, storage and network as required
- Resource pooling: Providers computing resources amalgamated to serve multiple consumers – multi-tenancy
- Rapid elasticity: Computing capabilities can be rapidly scaled-up and scaled-down as required
- Service metering: Clouds services facilitates resource metering for transparently measuring servicing utilisation

## Cloud Model(s)

- Cloud Characteristics + Context + Strategic ICT service objectives => Hybrid Cloud Model
- Hybrid Strategy: Consume public cloud services and create a private (internal) cloud
- A Heuristic based approach to determine services to be delivered by private cloud and services to be consumed from public clouds. Critical factors: cost and risks

## Public Cloud Application

- Microsoft Live@Edu (Office 365 for Education) – scale delivery to 15,000 students
  - Email, Calendar & Contacts: Hosted email with 25GB inbox, calendaring and contacts through Exchange Online 2010
  - Web Office Apps: View, edit, and share Microsoft Word, Excel, PowerPoint, and OneNote files online with SharePoint and Office Web Apps
  - Online Meetings: Conduct online meetings

## Data Centre to Private Cloud

- Building-out new data centre – heavily leverage compute, storage and network virtualisation build an private cloud
  - Driven initially by consolidation (virtualisation)
  - Simplifying DC operations
  - New capabilities for business continuity
  - Sized Data Centre <= Informed by forecast on Cloud utilisation

## Private Cloud Service Applications

- Infrastructure as a Service: Pre-defined compute, storage and network resources available “on order”
  - Divest provisioning infrastructure: lower tier team members, Applications Group
- Platform as a Service (Desktop as a Service): Virtual Computer Labs (and Virtual Desktop Infrastructure) – desktop image integrates operating system, software applications, and utilities. Student will reserve a “computer” and access same from anywhere on the intranet or Internet.
  - Facilitates BYOD computer strategy

## Private Cloud Service Applications

- Software as a Service: Inter-campus business continuity strategy - Delivery of ERPs as a cloud service
  - Leverage the fact that UWI campuses have standardised ERP.
  - Scenario: Data Centre services associated with the HRMIS fails at a Campus, Mona can make an instance of the HRMIS ERP available as a SaaS

## Managing Challenges and Risks

- Security and Privacy
  - Contracts and Policy
- Integration between in-house and out-sourced services
  - Integrate in-house identity management service for authentication with Live@Edu
- Developing new models for IT budgeting and appropriating costs
  - Converting cap-ex to op-ex
- Network Capacity Planning and Resilience

## Managing Challenges and Risks

- Intellectual Property Management
- Monitoring SLAs and Contracts
- New business continuity considerations
  - Data stored in cloud
- Governance
- Culture
  - Market, Sensitise: articulate the value to user constituency groups

**Thank You**