Who wants to be a Dinosaur when there is an Ice Age coming?

Building Cloud to the Public Sector

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Oct 2014

It's not **IF,** it's **WHEN & HOW**

Governments worldwide are under continuous pressure to do more with less. Cloud is a major enabler.

Potential Cloud Computing Benefits for Public Sector

Speed, agility and scalability

- Enable faster delivery of services
- Help improve the agility and dexterity of government services
- Masking complexity
- Scalability to meet demand peaks
- Replacement for lost skills.

Security-rich & Highly available

- Facilitate improved data security – Security as a Service
- Help better manage compliance
- Help improve disaster recovery capability
- Form part of a wider community or city resilience strategy

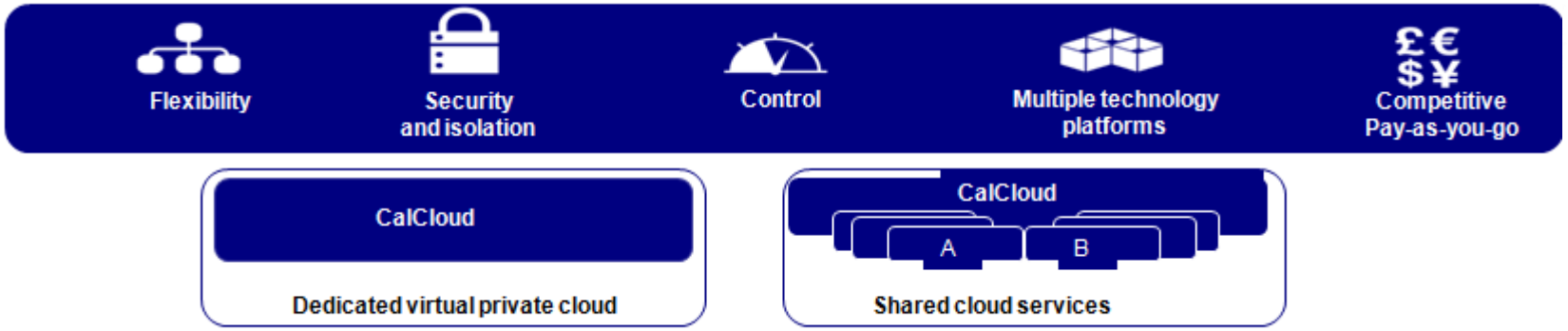
Improved efficiency

- Help more effectively manage IT resources
- Enable reduced need for human intervention with automation.
- Integrating functional "stovepipes" – enabling sharing of apps and data.

$ Cost optimized

- Enable improved IT efficiency & economies to reduce IT costs.
- Pay in line with usage, if required.
- Shifts from fixed cost to variable cost.

Overview of CalCloud



- Dedicated private cloud (IaaS) for the State.
- Service hosted on State data centers and behind State network (LAN/WAN) and security.
- Powered by IBM – A true Public/Private partnership
- CalCloud Vendor (IBM) provides hardware, software, portal and OS administration (patching).
- Usage based with no initial cost to the state.
- Self-Service business model (via web portal) and low cost service offerings.

CalCloud

Powered by IBM

Adding Sunlight to the Clouds

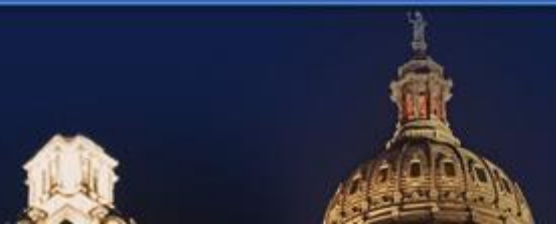
1. Legacy applications and language issues
2. I understand what's on my floor but not what's spinning on the infrastructure
3. Converting interest & promise to business value

Demystifying the Cloud

1. Language issues and legacy applications

Solution

– You need a roadmap & template on how to transform into cloud. One size **Never** Fits all



Rays of Sunlight

2. I understand what's on my floor but not what's spinning on the infrastructure

Solution

- Everything can go into the cloud but, should it?
- You will likely need a combination of public, private, on-premise and off-premise – creating a hybrid cloud

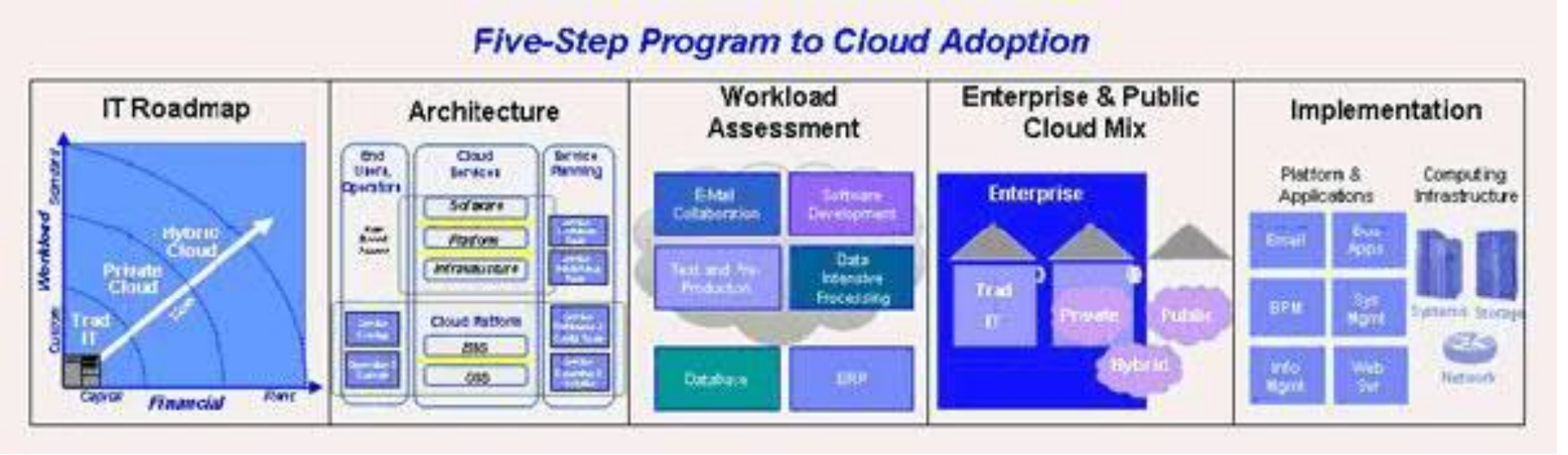
Illuminating the Bright Spots in Cloud

3. Converting interest & promise to business value

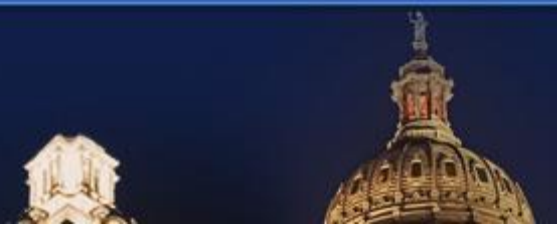
Solution

- Responsibly architect the proper cloud environments that carefully consider the suitability of each and every application that will go into the new environment and create the new ecosystem you'll be running your IT from
- We have established the challenge – There's an ice age coming. How do you avoid being a dinosaur?

?Yes or No?



Why is Cloud Adoption Still so low?



1 -Look Backward

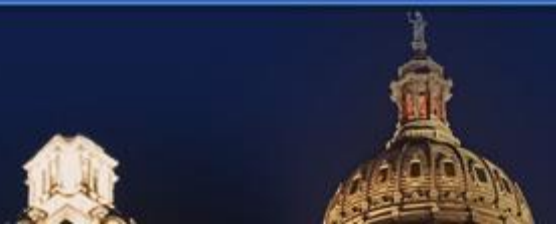
- Start here - not an after thought
- This feeds your roadmap / blueprint
- What are the connections, the interdependencies
- Priorities
- Do you have logical affinities?
- Think ... More efficient IT run... The beauty of design

2. Fast Forward – Design Revolution

- Start addressing design components, future state template by understanding your current state. Can you be your own Doctor?
- Investigate how you transform current IT environments and ecosystems to a cloud environment enabling a cloud eco system
- Neither Public or Private sector have been easily able to standardize their current state…
- Future State – build standardized, pattern based and orchestration/automation into a new template/roadmap
- Now start a Design Revolution - enable promises of cost savings, efficiency, economies of sales, standardization

3. Create

- Revolutionize what you learned about what's sitting in your environment
- Design and build a cloud environment around a revolutionary template
- Design a roadmap that transforms to a future state
- **Design your Future or get stuck iterating your way out**



Summary

- Look Backward
- Fast Forward – Design Revolution
- Create the Blueprint

Look Back, Fast Forward, Create the Blueprint

We applied this process to over 1,000 OS images for a client in the petrochemical industry and were able to uncover significant transformation opportunities that were then mapped to template that helped create the environment.

Current source operating environment	Proposed target operating environment
• 230 Physical servers	• 18 servers
• 3 Generations of OS	• 1 Generation of OS
• 9 OS Variants	• 4 OS Variants
• 4 Major version of Oracle	• 1 Major Version of Oracle
• 3 Major versions of SQL Server	• 1 Major version of SQL Server
• 2 Major versions of Web Logic	• 1 Major version of WebLogic
• 3 Major versions of IIS	• 1 Version of IIS
• Capacity lead times 10-90 days	• Capacity on Demand
• 177 Over-utilized servers	• Auto increase in compute power
• Approx. 321TB Allocated Storage	• Approx. 74TB Used +30% Storage
• Approx. 18TB Allocated RAM	• Approx. 14TB Used +30% Memory

Transformation of the source will result in hardware reductions and standardization of the OS and software stack, reducing the client's operational costs

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