

WORKLOADS IN THE CLOUD

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HP'S VIEW OF THE CLOUD

Everything As A Service:

HP sees “cloud”, fundamentally, as the next generation of the continually evolving internet.

At its core, “cloud” is driven by new technologies and new architectures which helped today’s leading internet companies survive the “.com” implosion.

These technologies and techniques, while still maturing, are advancing the state of the art for delivering robust solutions cost effectively at scale.

HP's Approach:

Enable cloud service providers

HP in it's traditional role...

Selling hardware, software and professional services

Help customers secure, source, and govern cloud services

...

both the Enterprises building on-premise/ private clouds and to cloud services providers

Provide cloud services

HP in a non-traditional role...

increasingly as a provider of cloud services directly



A CONCEPTUAL FRAMEWORK

Matching Workloads with Operational Models

Workload Type

Traditional Workloads

Collaboration
Business Processing ...
Typically viewed as SG&A expense

Emerging Workloads

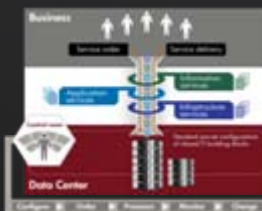
Web-centric Businesses
Enriched Customer Experience
New Delivery Models
New Services Types
Often viewed as COGS expense

Workload Lifecycle

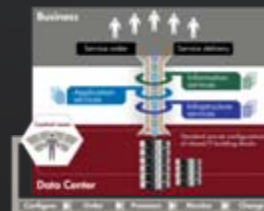
Development
Test
Staging
Production (standard)
Production (mission critical)

Significant amounts of infrastructure are committed to pre-production

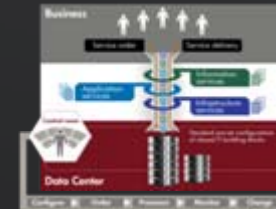
Operational Model / Sourcing Options



Bespoke
a/k/a “Ugly Babies”
Non-standard



Standardized/Automated
Exploits synergies within Enterprise
Focused on traditional workloads
Evolving to self-service, chargeback



Pure Cloud
Massive Scale
Focused on Economies of Scale
Rigidly Standardized
Multi-Enterprise Scope

TRADITIONAL WORKLOADS

Workload Categories	Creation Barriers	Adoption Barriers	Timeframe	
			IaaS	SaaS
Collaboration	Low; services exist today	Low; being adopted now	Low affinity	High affinity; Now/Significant adoption soon
Application Development	Low; possible	Low: being adopted now	Now/Significant adoption soon	Now/Significant adoption soon
IT Infrastructure	Low-medium; some services today	Medium to low	Early adopters	N/A
Web Infrastructure	Low to high Web-tier (low) App server-tier (med) DB-tier (high)	Medium to high	Now	N/A
Technical Computing	Low-Medium	Medium to High	Now (Specialized providers)	ISV-dependent (Now for selective ISVs)
Decision Support	Medium-High	High: Security, Integration and SLAs	3-5 years	SMB-centric offerings
Business Processing	High	High: Security, Integration and SLAs	Last to move; 5+ years	SMB-centric offerings today

EMERGING WORKLOADS

Some Examples within HP

Web-centric Businesses:

- HP Snapfish
- MagCloud

Starts typically as consumer-centric offering

As-a-Service Product Variants:

- IT Management as a Service
- HP SaaS for Application Management

Alternative delivery models for current products

Enhanced User Experience:

- HP Web-enabled printers
- Evolution of HP.com
- Gabble

Changing the ways customers interact with product or enterprise

New Service Types:

- HP/GS1 Product Recall Service
- JetStream (Reservations)
- Sensing Services

Often industry vertical solutions

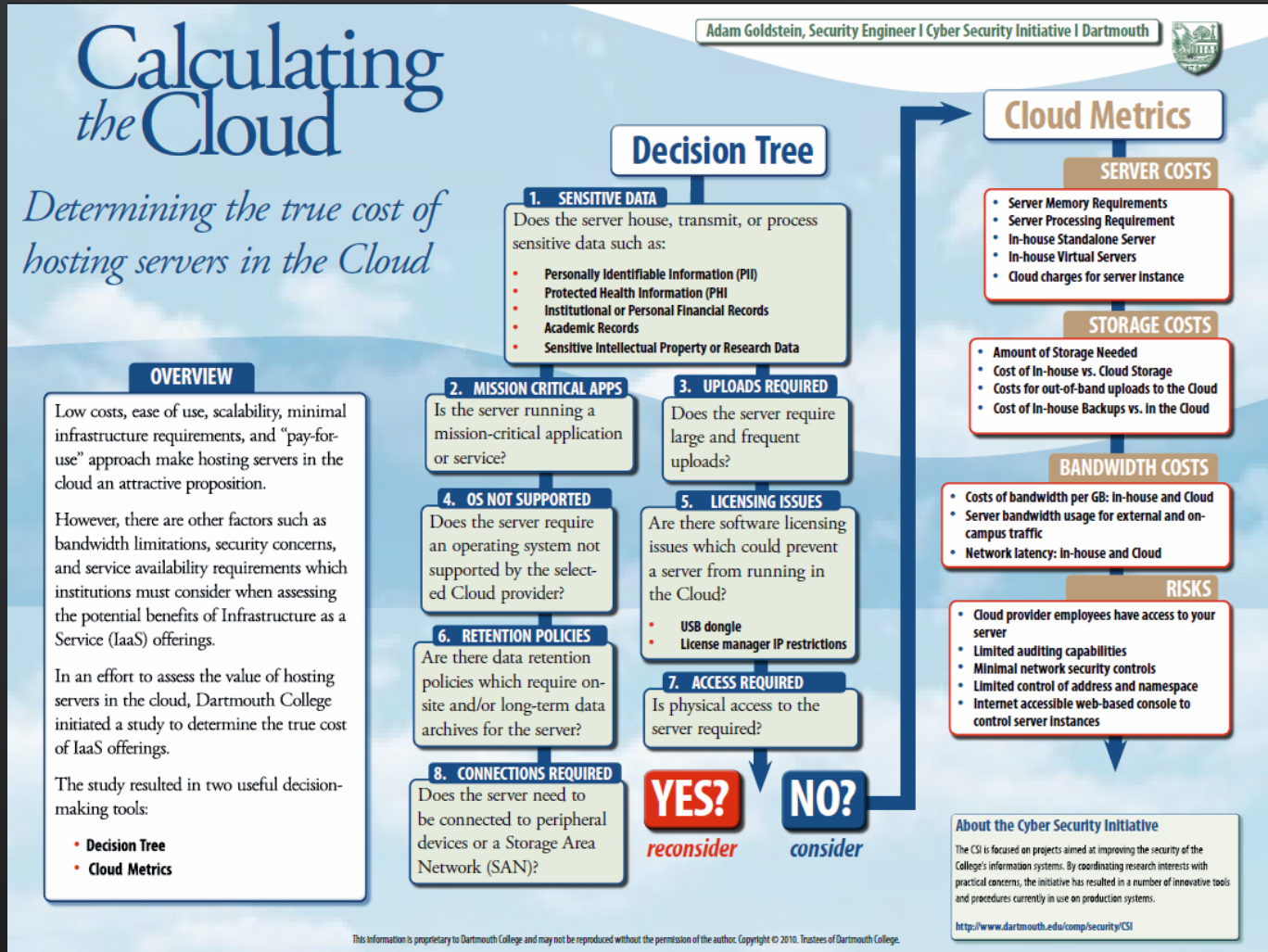
Typical Attributes of 'Emerging Workloads'

- Application managed scalability and availability
- Strong separation between service (or experience) with back-end/transactional elements



A USEFUL ASSESSMENT TOOL

Dartmouth Assessment Model



Source: <http://www.educause.edu/sites/default/files/library/presentations/NC10/PS17/Dartmouth-Calc-the-Cloud-NERCOMP-poster-small.pdf>



WHAT CAN YOU DO TO GET READY?

- Adapt *your* IT Governance to comprehend as-a-Service (SaaS, IaaS)
 - As viable sourcing options in addition to traditional in-source/out-source
- Adapt *your* Enterprise Architecture to start shaping funnel of new applications and new workloads in a cloud-friendly manner
 - Today's production workloads are based on yesterday's decisions
 - Start thinking about tomorrow's legacy
- Understand *your* ISV's directions and opportunities for cloud exploitation
 - Availability of Software-as-a-Service as a viable deployment alternative
 - Architectural changes that enable use of cloud-like infrastructure (IaaS enablement)
- Focus first on *your* low hanging fruit
 - Such as test/dev, new workloads, shadow IT, content centric workloads

... and engage HP



THANK YOU

