

Arizona Digital Government Summit Evaluating BYO and the TCO

Bruce Michelson, Distinguished Technologist, CTO US Corporate Accounts May 22, 2013

Agenda- Topics to be Discussed

- Consumerization of IT
- Megatrends
- Perceptions
- What are the realities
- Where is the market today
- What are the enablers and inhibitors
- Let's talk governance
- How can my organization prepare
- -Closing thoughts and comments



After Each Megatrend, Ask These Questions

- 1. Why is this Megatrend important to my organization ?
- 2. Why do my end users care ?
- 3. What conversation should we be having ?

Executable innovation

Actionable intelligence

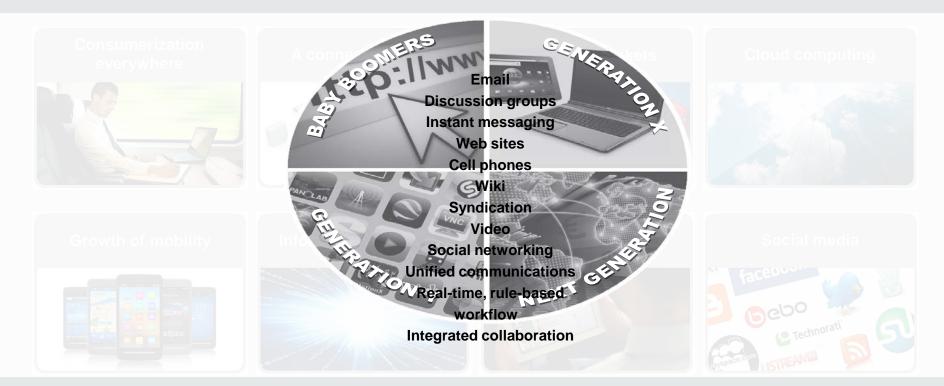
Anytime, anywhere

Strategy and leadership

- 4. What has changed and why?
- 5. Is my organization ready?



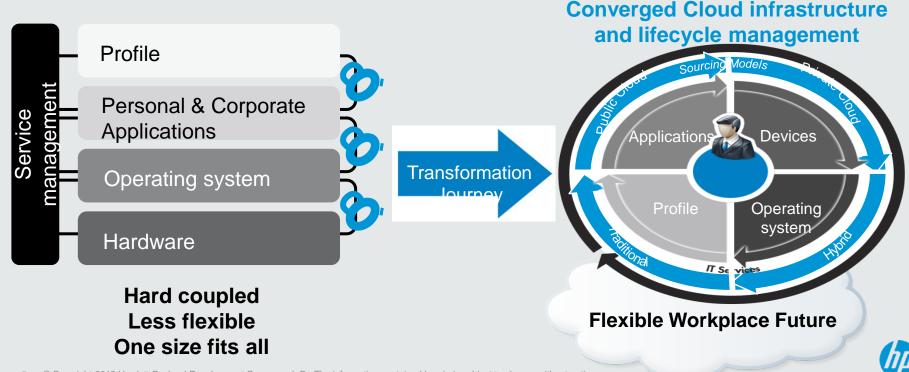
Megatrends are changing the enterprise





Transition to a user-centric model

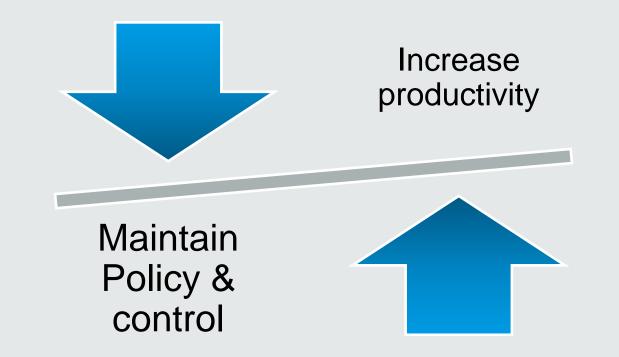
User drives the workplace experience



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Key issues for IT and the Enterprise

Balance control & enablement



Shift to Service-based Model: Cloud Proof

- Points Public and private clouds will drive 15% of the IT spending, growing at 4x to 5x the rate of the overall IT market
- 80% of new software offerings will be available as cloud services
- 1/3 of software purchases will be via the cloud
- Cloud and traditional service providers will account for 12% of IT infrastructure spending, growing to 20% by 2014



SOURCE: IDC: Predictions 2011 – Welcome to the New Mainstream (Dec 2010)



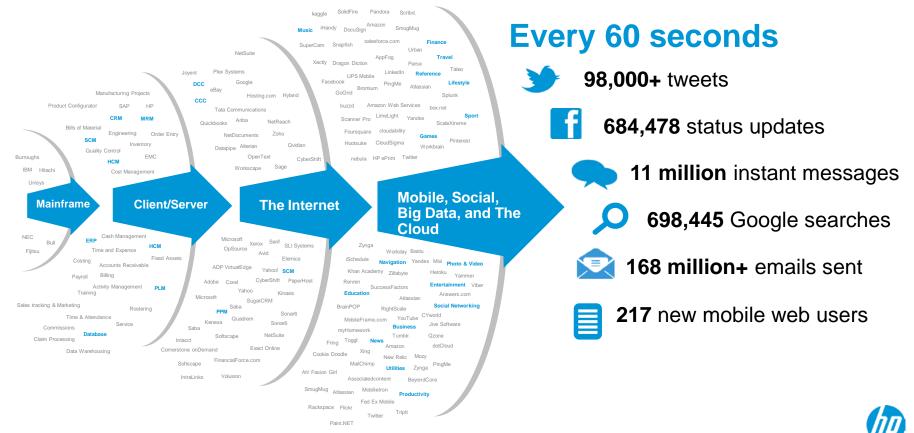
Get Ready !

Students With Mobile Devices	K-2nd Grade	3rd-5th Grade	6-8th Grade	9-12th Grade
Cell Phone (without Internet access)	18%	29%	59%	67%
Smartphone (with Internet access)	14%	17%	24%	31%
Laptop/Tablet PC	27%	32%	53%	60%
Netbook or mini-notebook computer	n/a	n/a	11%	10%
MP3 player	36%	55%	80%	85%
Hand-held game player	47%	60%	64%	48%

Source: Project Tomorrow regarding students with mobile devices, 2012



The IT Industry is changing....



Market is Shifting

Mobile Device Adoption



- Multi-device households driving industry growth
- Customers now have several device choices for mobile productivity
- Smartphones are a key mobile category and growing

Usage Model Evolving

- Everybody On usually connected to always connected
- Social Networking anonymous & private to intensely public
- Digital Content

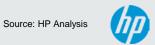
doubles every 12 – 18 months







- China No. 1 PC market
- 440M to 1.2B



Let's Look at a Few Social Media Facts

- There are over 500 million Facebook accounts worldwide, with 162 million visits in July 2011, now in 2012 there are 950 million, 2013 more than 1B+
- There are over 175 million Twitter users worldwide with 33 million visits in July 2011, now in 2012 there the number approaches 500 million
- There are 66 million accounts for LinkedIn and Myspace worldwide, now in 2012 there are 100 million for LinkedIn and 262 million for Myspace
- E-book growth exceeded 200% in 2009 to 2010, in 2012 trajectory continues at 117%
- With 87% accuracy happy Twitter users reflect stock markets
- Context: 46 million subscribe to daily newspapers, now a \$34B in 2011 vs. \$59B in 2000
- Further Context: There are 7.6 million to 12 million viewers of top 4 TV networks, now for the first time, viewership is up in 2011/2012 to date



Additional Social Media Facts

•Facebook announced that 8.7% of the accounts were fake or fraudulent 8/2012

- •LinkedIn announced that 6.5 million passwords breached
- •Yahoo Mail accounts breached 453K, with gmail, AOL, Hotmail, MSN others
- •Google Play breach reported 50K to 100K accounts
- •eHarmony reported 1.5 million passwords breached
- •Drop Box announced security breach-names, password and content



According to Ponemon Institute(LLC)

"US companies were much more likely to experience the most expensive types of cyber attacks which are malicious insiders, malicious code, and web based incidents"

Ponemon Institute (LLC) 2012 Cost of Cyber Crime Study, US, Sponsored by HP Enterprise Security, page 3, October 2012.



Did You Know....

- •56% misplace their cell phones every month
- 113 cell phones are lost every minute in the US
- •25% of Americans lose or damage their cell phones annually
- •50 million US will be victims of identity theft
- •IRS reports that \$5B in fraud paid in 2011, estimate an increase of 1.5 million returns in 2012
- •9.9 million impacted by identity theft fastest growing crime
- •72 successful cyber attacked each week in 2011; in 2012 there were 100 successful attacks each week

Sources: Includes Ponemon Institute Cyber Attack 2011/2012 Report, NY Times, AP, CNN Company, L.P. The information contained herein is subject to change without notice.

BYOD Lawsuits Loom as Work Gets Personal

"Like most tragic love stories, the "Bring Your Own Device" affair has come to an abrupt end, a bitter breakup looms, and lawyers are circling."

Source: cio.com, By Tom Kaneshige, Monday April 22, 2013 www.cio.com



Not BYOD, but

"Federal Court Chicago claims city owes some 200 police officers millions of dollars in overtime back pay because officers were pressured into answering work related calls and emails over department issued Blackberry during off hours..."

Source: cio.com



User segmentation

Definition: Aligning end user requirements to the optimal portfolio of access device(s), cost, service levels, risks, and applications.



Sample Road Warrior



Segment	
Definition	Customer Facing associate not requiring corporate office space
Technologies	Mobility, ElitePad, Home office network, carry case
Service	High, Content driven
Levels	
Risk	High Security
Cost	High
Population	Increasing at all organizations



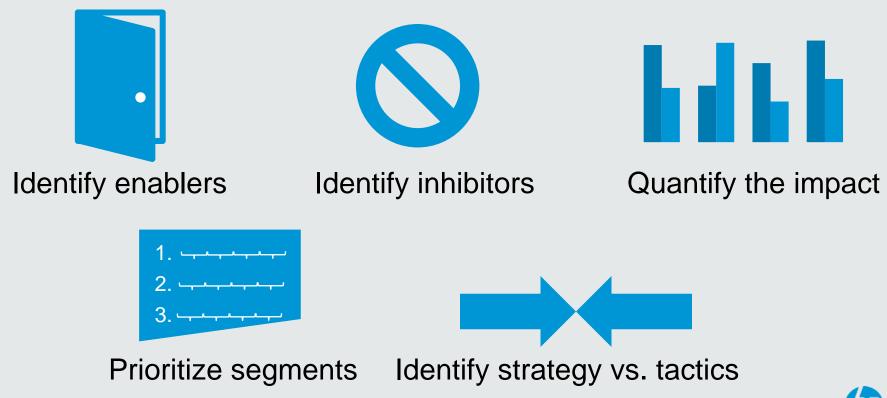
Are your practice levels ready?

- Trend for centralization of key functions:
- Hardware asset management
- Software asset management
- Help desk
- Software licensing
- Budgeting / charge backs
- Governance models





User segmentation methodology





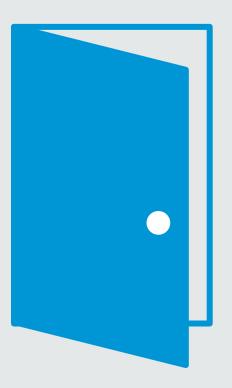
What are the enablers?



Cost containment



- Adoption of new technologies
- End user requirements
- Embracing innovation
- Continuous process improvements
- Aligning IT to the business Consumption based access





When there is a security breach....

54% Human Error and 46% Technology Error

Source: CompTIA survey of 508 executives, USA Today, Jea Yang and Karl Gelles, January 14, 2013, Section B, P ¹/₂₃ © Copyright 2012 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.

Caution Points

Areas that need to be addressed before Consumerization

Risk Management

Network
Intellectual Property
Untrusted devices
Family/Friends
Privacy
Intrusion
Business Continuity

HR / Legal

- Term of Employment
- Stipend, Credit Score
- Country / Local regulations
- Taxes
- e-Discovery impound
- Termination

Applications

- •Volume license discounts
- •Distribution
- Tracking / license
- Liability if app damages system

Service

- Lost / Stolen Unit
- Damage caused by another
- Time to recover / purchase new
- Insufficient funds to purchase
- Help desk complexity



Closed Loop Lifecycle Planning© Point

" If you ask 6 different consultants the same question, you will receive 6 distinctly different answers.

Unfortunately, they may all be right."



What is the current reality?

- SLA's
- Costs/TCO
- Entry into new business operations
- Consumer vs. business devices
- Security and Regulations
- Software
- Governance
- Windows 7/Windows 8
- Practice levels/disposition, asset management
- Vertical industries



Governance Demands Outpace IT

- Attention on Corporate Governance
- Non-compliance consequences
- Management accountability for internal controls
- Internal controls, audit trail
- Outside auditors' internal control assessment
- IT support of business ops & financial reports
- Alignment of IT Services to business needs
- Efficiency and effectiveness
- Cost reduction

IT Control / Service Quality /Agility

IT Gap

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Demands on IT

Final thoughts and conclusions...



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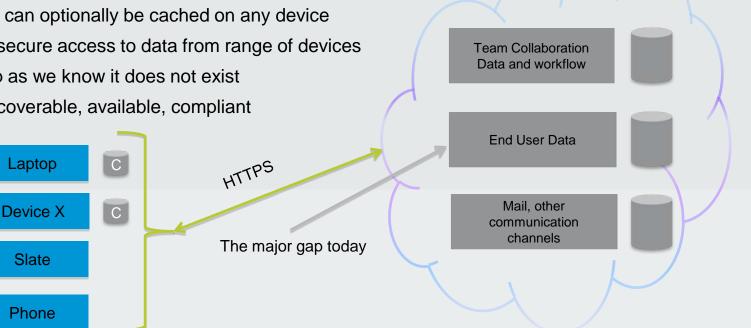
The Future

Ability to transform to user cloud storage

- Diverse devices, device chosen based on role and work mode at that moment
- Local device storage is authoritative for <u>nothing</u> over time
- Some data can optionally be cached on any device
- Seamless secure access to data from range of devices
- PC Backup as we know it does not exist
- Data is discoverable, available, compliant ٠

Slate

Phone



Thank you



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