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Technology Refresh with Windows® 7 – Arriving at the Perfect time

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Agenda

- Explore the features and benefits of Windows 7
- Expectations
- Convergence
- Optimization with Innovation
- Closed Loop Lifecycle Planning Model
- Key topics to consider
  - Refresh or upgrade
  - Collaboration
  - Touch
  - Green
  - Productivity
  - Configuration management
  - Staging/integration
- Potential Next Steps

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Regardless the size of the business…

Innovation = Change

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What is Innovation…..?

The *Merriam-Webster Dictionary* defines "innovation" as :

The introduction of something new; a new idea, method, or device.

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…. So what is client computing innovation?

- Windows 7
- Virtualization
- New form factors
- New, more mature management tools
- Product features
- Consumer experiences
- User segmentation
- New applications
- High definition

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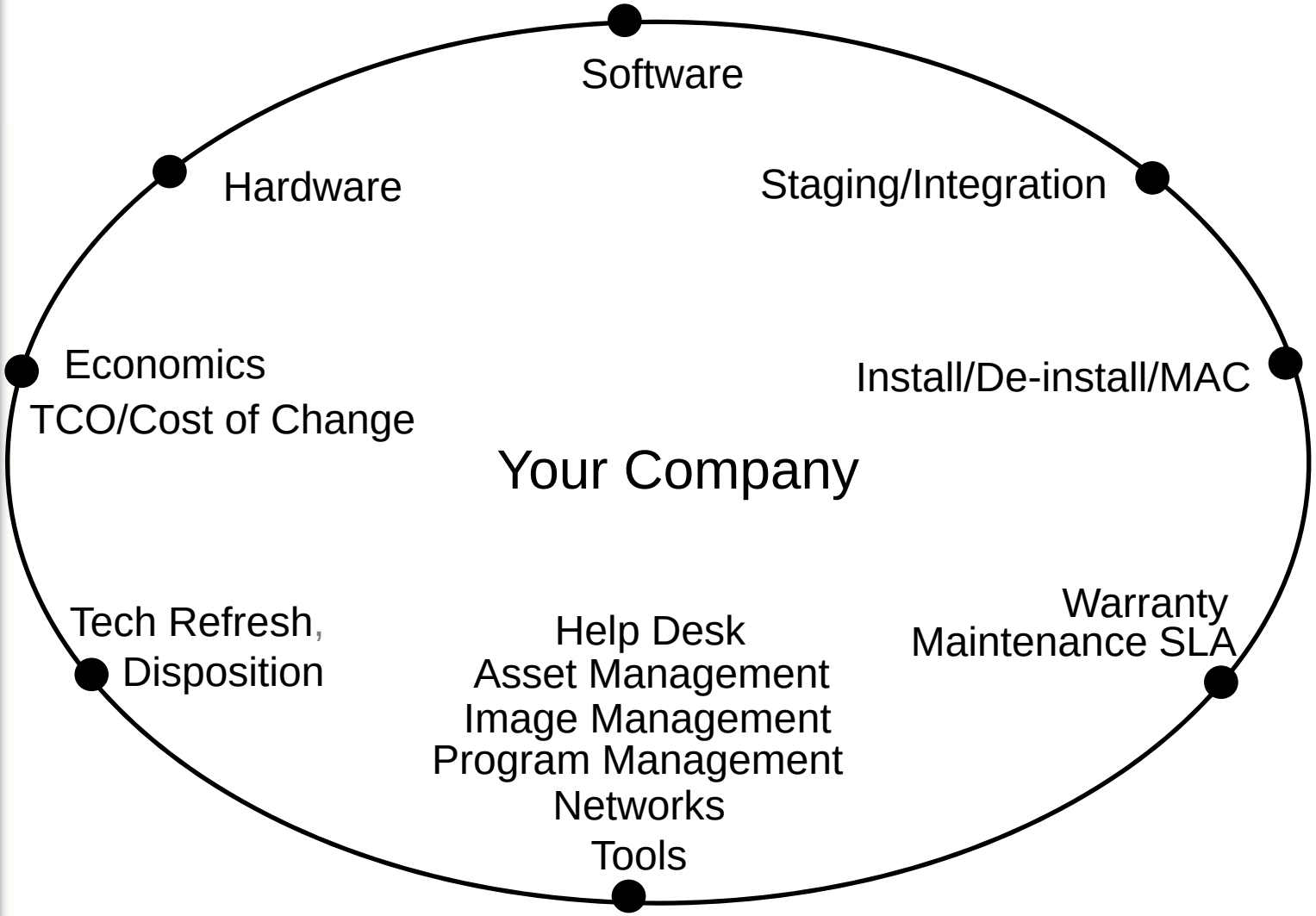

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Expectations

"From a perspective of *Closed Loop Lifecycle Planning©,* this is the first operating system and client technology refresh cycle that can actually save money."

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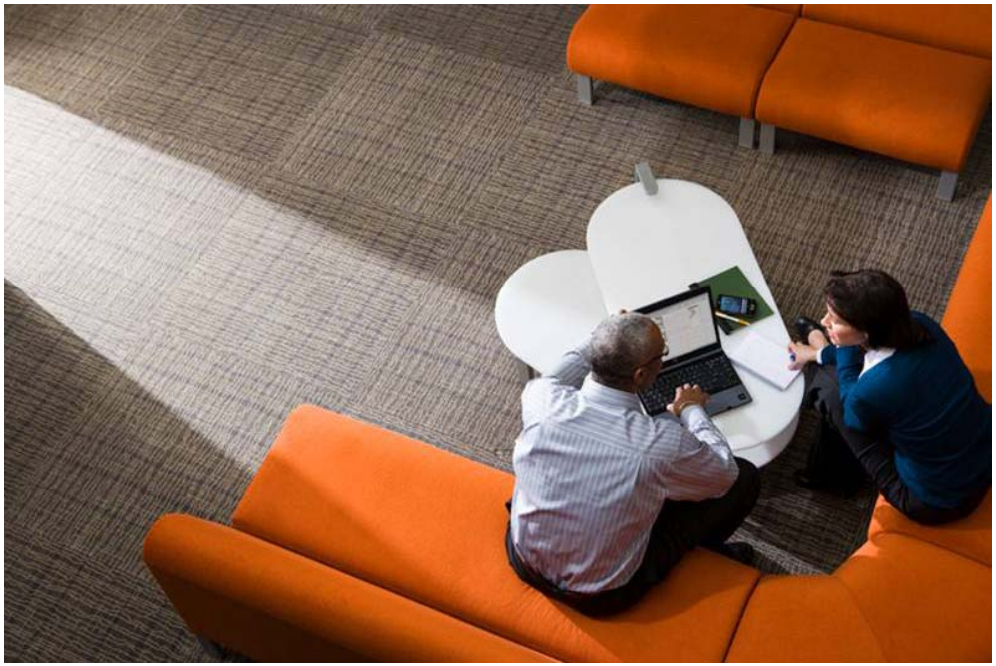
Key *Closed Loop Lifecycle Planning*© Premise

"When looking at innovation with Windows 7 and in the course of this technology refresh - *features matter*."



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Sometimes It Takes a Compelling Set of Events

Windows 7

- Windows 7 is a compelling event
- The economy is a compelling event
- The technology refresh itself is a compelling event
- Innovations are a compelling event
- New chip sets are a compelling event

"The combination of all of these factors will make this technology refresh cycle unique."

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This technology refresh cycle is one of convergence

1. We are coming out of a recession
2. Windows 7 represents an aggregation of current business and consumer features
3. This refresh cycle includes new form factors, product features and continuous process improvements from the manufacturer HP
4. Within the overall context is the new Intel® Core™ 2 Duo set and vPro
5. The lifecycle business practices can be optimized at this time, there is now an awareness that has not existed before
6. XP is an old operating system (8 years old)

intel vPro™

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Closed Loop Lifecycle Planning- Premise for Windows 7

"Optimizing is the initial step to innovation"

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We Have a Unique Opportunity

"The upcoming technology refresh cycle provides the business a unique opportunity to optimize."

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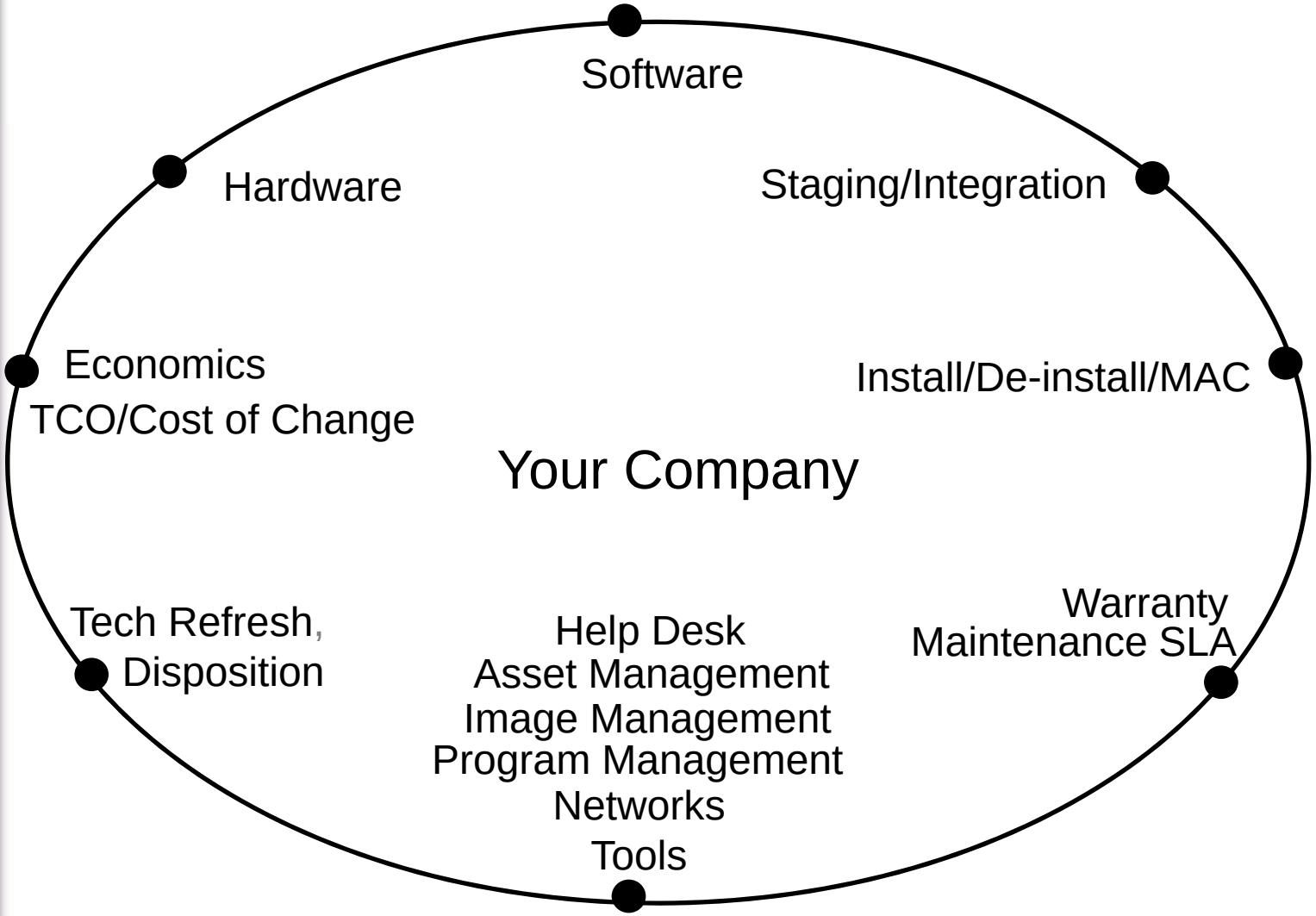

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Here is what we know about the upcoming technology refresh cycle for Windows 7

1. Extending beyond 4 years results in a big bang
2. The technology curve is rapid
3. Features do differentiate devices
4. Laptops = form factors and battery life
5. Desktop = real estate, weight, and power consumption
6. Not about refresh, it is about embracing innovation
7. GenZ conundrum
8. Consumer experience
9. Conscious vs. unconscious decisions
10. Everybody has an opinion

Windows 7

Key topics and features to consider

- Refresh or upgrade?
- Collaboration
- Touch
- Green
- Productivity
- Configuration management
- Staging and integration

Refresh or Upgrade?

- Older technology costs more
- A new HP desktop can consume up to 55% less energy than an older desktop.(1)
- Older technology is more vulnerable to security risks (53% more based upon Wipro study)(2)
- Upgrading regardless of who does the work costs an average of at least $200 (3)
- Upgrade may not necessarily extend the useful life (extend the application life by Windows 7 XP mode)
- Aging PC fleet usually results in a “big bang”
- New technology such as laptops with Windows 7 can deliver up to 68% increase in performance power(4)

Refresh or Upgrade – Objections

- Is it all about capital?
- Full lifecycle expense impact
- Political and cultural
- “Ride it till they die”
- “I would expect you to say that, your company sells PC’s”
- It is how we have always handled refreshes
- “It is not the time to challenge”

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Collaboration

- HP SkyRoom
- Z Workstations dual O/S
- Gobi Mobile Internet
- Remote Desktop

Gobi
Global Mobile Internet

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Touch

- First operating system to enable and embrace touch
- HP TouchSmart
- High definition displays
- Opens new potential

Sustainability

- Newer PC's consume less power and are environmentally improved for disposition
- Windows 7 has new sleep and hibernation levels complimenting HP Power Management
- "New HP Business laptops with Windows 7 can start up to 41% faster than an older laptop"(5)
- Manage power consumption from components and peripherals along with Intel architecture
- Often "low hanging fruit" in terms of the business case

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Future trends in Green

1. There will be more and more regulations
2. No reason to ignore
3. It will become more compelling

Note: Green does not cost more

4. Become a part of all RFP and RFI processes
5. Identified as a criteria
6. Leverages innovation
7. Practice levels become more relevant
8. Product lifecycle shorter
9. Everyone will have an opinion and message

Productivity

- Spots USB devices faster
- A new HP desktop with an Intel® Core™2 Duo processor and Win 7 Professional can boot up to 55% faster and shutdown up to 31% faster than your old PC. (6)
- New HP Business laptops with Windows 7 can have shut-down times that are up to 30% faster than an older laptop. (7)
- Full 64-bit support
- HP QuickLook
- Planned availability for XP mode (January)

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Example of Quantification

Base case of 5,000 devices

Assume: 1 minute to boot and 1 minute to shut down

Assume: With Windows 7 gain of 40 seconds per on/off

Assume: PC is only powered up and shut down once daily (which is a conservative assumption)

Calculation: If the PC is used 365 days/year X 40 seconds then 1 end user gains 14,600 seconds per year or 243 minutes or 4 hours annually.

In our example, 5,000 end users then equates to 20,000 hours per year! This creates a new metric – “giveback” as a result of innovation.

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Configuration Management

- Less disk and memory than you would expect
- 2GB and 80MB
- Less memory hungry than Vista (per Microsoft's website)
- XP mode for older applications
- Location aware routing for printing

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Staging and Integration

- HP Advisor Dock customize Windows 7
- Touch applications can be loaded in staging
- Consumer feel and touch
- Dynamic driver provisioning

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Consumerization

- Snap to resize and compare windows
- Windows Media Center
- Windows Live Essentials
- Simplified Taskbar
- HomeGroup file and print simplified
- HP MediaSmart
- SkyRoom and Webcam
- QuickLook while booting

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Consumer Features

"There is a continuing convergence of product features in business computing to incorporate consumer features that are relevant to the business."

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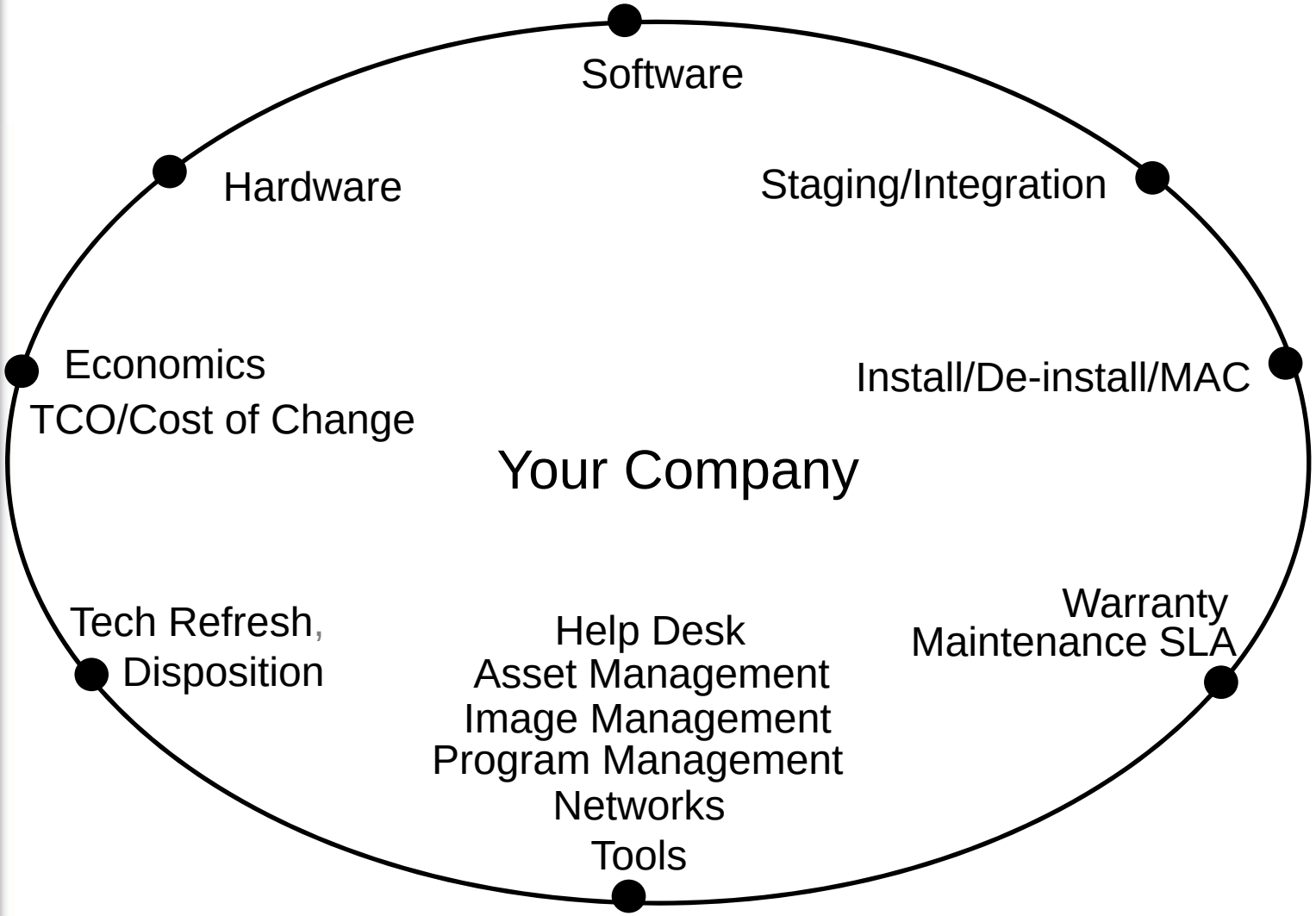

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Software Rationalization

- Cascading devices encourages more titles and manufacturers of software
- End users are not familiar with Internet licensing and downloads
- Personal or business PC's
- Home offices (formal and informal)

- Descending report
- Version control
- Dual purpose software
- Definitive Software Library
- Software audits
- Low hanging fruit and risk as well

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Asset management

- Hardware and software
- Time to optimize
- Impacts all other aspects of lifecycle management
- Get good at it
- Asset management = security

- The business case is straight forward
- “I manage every device on the network”
- Personal and enterprise liability
- IT is accountable (among others)

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User Segmentation

- *Old thinking*- standardization across the business is the best set of economics
- *New thinking*- standardization within user segment is the best set of economics

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Where to begin- the next steps

- Run the installed base hardware reports
- Baseline your costs
- Optimize your lifecycle practices
- Look at the Windows 7 features and adopt where you deem appropriate

- Look at the product features and adopt where you can
- Look at the comparison of old and new technologies from the chip, the operating system to the products
- Define your technology refresh plan and business case
- Client automation toolset

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“This is compelling, seize the moment.”

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Microsoft Windows 7 case study- City of Miami

IT Cost Savings ($ per PC per year)	
Direct Benefits (IT Labor)	Value US$
Deployment	$28
Service desk	$36
Desktop management	$25
TOTAL IT-LABOR BENEFITS	$89
Direct Benefits (Non-Labor)	
Power savings	$45
Branch office network bandwidth costs	$14
TOTAL NON-LABOR BENEFITS	$59
Total Savings per PC	

Note: This case study is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SUMMARY.
Document published September 2009.

Resources Available

- Client Computing Blog- www.hp.com/blogs/clientcomputing
- The wait for Windows® 7 is over! www.hp.com/go/windows7 www.microsoft.com/windows7
- “Microsoft launches a revolution…” www.technewsworld.com/story/68461.html

Sources

- (1) Bootup and shutdown times were calculated on the following configurations: D530 – Intel Celeron 2.53 GHz, 3x512MB DDR1-400MHz PC3200, 80G PATA HDD, on-board graphic. 8000 –Intel Core 2 Duo E8400 CPU, 2x1G, 160G 7200 rpm, on-board graphic.
- (2) Actual results may vary based on system configuration and performance will vary over time depending on software installed.(2) "Using Total Cost of Ownership to Determine Optimal PC Refresh Lifecycles", Wipro Technologies, May 2009 (www.wipro.com/industryresearch). Based on a survey of 106 firms in North America and Europe representing 15 different industries and projections based on a Model Company developed by Wipro Technologies. Actual results may vary based on the number of use-cases implemented and may not be representative of results that individual businesses may realize. For additional implementation examples refer to Intel Case Studies available at http://communities.intel.com/openport/docs/DOC-1494
- (3) Closed Loop Lifecycle Planning© - Bruce Michelson
- (4) PC Mark05 benchmark comparison of Intel T2400 (1.83 GHz) HP nc6400 Notebook to Intel Core™2 Duo T9600 HP EliteBook 6930p. Actual results may vary based on system configuration and performance will vary over time depending on software installed.
- (5) Test results compare HP 5310 systems with identical configurations with one system running Microsoft® XP Pro SP3 and the second system running Microsoft® Windows 7. Actual results may vary based on system configuration and performance will vary over time depending on software installed.
- (6) Bootup and shutdown times were calculated on the following configurations: D530 – Intel Celeron 2.53 GHz, 3x512MB DDR1-400MHz PC3200, 80G PATA HDD, on-board graphic. 8000 –Intel Core 2 Duo E8400 CPU, 2x1G, 160G 7200 rpm, on-board graphic. Actual results may vary based on system configuration and performance will vary over time depending on software installed.
- (7) Test results compare HP 5310 systems with identical configurations with one system running Microsoft® XP Pro SP3 and the second system running Microsoft® Windows 7. Actual results may vary based on system configuration and performance will vary over time depending on software installed.


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