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Lessons Learned From Windows 7 Early Adopters

How IT Can Overcome The Most Common Migration Challenges

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EXECUTIVE SUMMARY

We're in the very early stages of Windows 7 adoption in the enterprise, but Forrester's worked with almost 40 early adopter customers to pull together an initial list of lessons learned. IT managers, who are developing their Windows 7 migration strategy, should keep these lessons in mind as they set milestones and time frames for their eventual deployment.

EMERGING BEST PRACTICES FROM SUCCESSFUL WINDOWS 7 EARLY ADOPTERS

With Windows powering approximately 96% of corporate PCs, it's a no-brainer for most firms to eventually transition to Windows 7.[1] Not only is Windows XP not going to be around forever, but —more importantly — Windows 7 is a solid release from Microsoft that more than makes up for the shortcomings of its predecessor, Windows Vista.[2]

Early feedback from IT managers worldwide shows that they are satisfied with Windows 7's productivity benefits, security and management enhancements, and green IT cost efficiencies. Through our customer interviews, we've consistently heard about faster startup and shutdown times, the more reliable sleep mode and overall stability of the OS, faster access to data and applications through improved search, and a superior mobile and branch office connectivity experience. IT managers appreciate the enhanced protection and control over computers and data through new or improved security features like BitLocker, BitLocker To Go, AppLocker, DirectAccess, and User Account Control, and they've also shared with us some impressive PC power management savings.[3] But it's the potential of third-party software avoidance that has IT really excited, and technology domains that have been specifically mentioned include encryption, desktop search, WAN optimization, software restriction, and VPN tools.

We typically don't see mainstream enterprise adoption of a new desktop OS until 12 to 18 months after its initial release — and Windows 7 won't be an exception.[4] However, IT managers who are heads down in strategy planning should keep in mind the following best practices that Forrester's pulled together over the past six months from almost 40 early adopter customers of Windows 7:

- **Don't underestimate the application compatibility challenge.** Microsoft has clearly done a better job preparing the hardware and software ecosystem for Windows 7 than it did for Windows Vista, but significant work still remains for IT managers responsible for application inventorying, testing, remediation, and packaging. While it's still too early for benchmark testing results, based on Forrester's discussions with early adopter customers, firms that are on Windows XP or earlier versions of Windows should anticipate approximately two-thirds of their applications to not be

natively supported on Windows 7. However, firms that have deployed Windows Vista or completed extensive application compatibility testing against it should anticipate this figure declining considerably, into a much more manageable 3% to 5% range. These issues can be resolved by upgrading applications to newer versions, recoding them for native Windows 7 compatibility, using shims when recoding is not an option, or virtualizing the applications locally through application virtualization (e.g., to resolve application-to-application conflicts) or hosted in the data center (e.g., to resolve application-to-OS incompatibilities). Microsoft offers a number of free tools, such as ACT and MDT 2010, to automate many of these processes. And there are a number of third-party tools, such as AppDNA, ChangeBase, and SpikeSource, that help further with application inventorying, analysis, and configuration. However, a fairly consistent lesson we heard from early adopter customers is to ensure that you have enough human resources tackling these tasks initially, particularly for multinational organizations that support thousands of applications worldwide — many of which were likely developed in-house.

- **Tie the OS upgrade to the natural PC refresh cycle to ensure hardware compatibility.** Most of the IT managers with whom we spoke treated their OS upgrade and PC refresh projects as one, meaning they simply purchased or leased new desktops, laptops, and netbooks from Dell, HP, Lenovo, and others with Windows 7 preinstalled. This is the optimal approach for firms that have resources available and are looking to avoid the complexities of hardware compatibility testing and manual upgrades. However, one-fifth of the firms with which we spoke treated Windows 7 as an opportunity to extend the life of their existing hardware by another two to three years because it delivers a lighter and snappier user experience that utilizes resources more efficiently than both Windows XP and Vista.

- **Invest in a client management suite to automate the deployment and ongoing management.** With PC refreshes and Windows 7 just around the corner for most firms, IT pros need client management tools to automate their hardware and OS upgrades. However, the continued spread of Macs in the enterprise and the emergence of netbooks require systems management tools to support heterogeneous clients, and the accelerating shift from physical to virtual clients places additional importance on having the right systems management tools in-house.[5] As a means to attract and retain employees who are requesting more flexibility in their computing platforms, IT managers should turn to client management suites to automate support for their increasingly heterogeneous environment. To free up IT resources for more strategic projects, firms must look to systems management tools to automate more support processes, and — fortunately or unfortunately depending on how you look at it — there's a crowded vendor landscape from which to create a shortlist and ultimately evaluate solutions.[6]

- **Explore client virtualization as a means to accelerate Windows 7 deployment.** For firms struggling with the cost and complexity of upgrading, recoding, or shimming applications for compatibility with Windows 7, application and desktop virtualization represents an alternative path to migration.[7] Application virtualization helps to significantly reduce application regression

testing cycles and the deployment process, and firms can package their applications in a matter of weeks or days rather than months, with little to no risk. Application virtualization helps to contribute significantly to building efficiencies into IT processes by encapsulating applications into simplified images that significantly speeds application deployment, improves remote access, remediates conflicts, and reduces service desk support calls. And once applications are repackaged and IT is ready with hardware, firms are increasingly virtualizing desktops so users can seamlessly transition from one desktop OS to another and IT can manage and secure these environments from a central location.[8] Approximately one-third of the IT managers with whom we spoke leveraged some flavor of client virtualization as a means to accelerate their Windows 7 deployment. However, firms increasingly view client virtualization as the future of their corporate PC rather than just a technology solution to throw at this relatively temporary Windows 7 scenario.[9]

- **Don't overthink training, but shrink the delivery time and get creative.** The Windows 7 user experience hasn't changed significantly from that of Windows XP and Vista and shouldn't warrant a large effort on training. Sure, the Start Menu looks different, search is everywhere, file and folder management has evolved, and some new tools exist, but many users have already been exposed to Windows Vista and 7 at home, and even those who haven't yet typically only need an hour or two to become accustomed to most of the changes. But IT must deliver some amount of training to strengthen understanding of what has and hasn't changed, particularly for users who are generally resistant to change. Still, the training required pales in comparison with that of Office 2007 and 2010, which came up frequently in our discussions because many viewed Windows 7 as their opportunity to standardize on Office 2007 across the enterprise while others are looking forward to the release of Office 2010.[10] Additionally, we heard a consistent story about tailoring training to the various user segments. IT is encouraging users to attend training by shrinking the time required and embracing Web 2.0 delivery mechanisms such as collaboration portals, blogs, wikis, podcasts, and two-minute tips and tricks videos.

ENDNOTES

[1] With Windows 7 generally available on October 22, 2009, most IT operations professionals are in a holding pattern. They successfully standardized on Windows XP, couldn't justify an upgrade to Windows Vista in tough economic times — or simply didn't even attempt to given the political hot button that Windows Vista has become — and plan to start their enterprisewide Windows 7 deployments in the late 2010/early 2011 time frame in line with the start of the next anticipated major corporate PC refresh cycle. Forrester's analysis of more than 85,000 enterprise clients found that Windows XP, while still king, is finally beginning its long-anticipated decline in the corporate PC market. See the July 22, 2009, "Corporate Desktop Operating System Trends, Q3 2008 To Q2 2009" report.

[2] Everyday client inquiries and research interviews with IT managers have turned up quite a bit of enthusiasm for Windows 7's eventual business deployment. While some clients describe Windows 7 as

"Windows Vista SP3" or "what Windows Vista should have been," Windows 7 delivers a lot of new features that make it a proper successor to Windows Vista despite the fact that it's quite clearly an evolutionary update rather than a revolutionary change. We expect most businesses will find compelling reasons for an eventual upgrade, such as simplified connectivity for mobile workers, improved branch office networking, tighter data security and more granular control of applications, and easier access to data across resources. See the July 22, 2009, "Plan Now For Licensing Windows 7" report.

[3] Forrester highlighted the top five Windows 7 features that IT operations professionals need to prepare for, including DirectAccess, BranchCache, BitLocker To Go, AppLocker, and federated search. See the April 14, 2009, "Get Ready For Windows 7" report.

[4] Already 66% of the firms we surveyed in Q3 2009 expect to migrate to Windows 7 eventually, although most don't have firm plans yet. That leaves just 27% of organizations that haven't yet looked into Windows 7 thoroughly enough and 2% that are considering alternatives to Windows 7, namely Windows 8, Mac OS X, and Linux. See the October 15, 2009, "Windows 7 Commercial Adoption Outlook" report.

[5] Commercial deployments of client management software solutions are maturing as desktop operations needs are expanding. See the November 17, 2009, "Client Management Software Adoption Trends, 2009" report.

[6] The client management market is full of vendors and products that are designed to help the desktop team manage and secure this changing desktop environment. While the market itself is quite commoditized as each of the suite vendors offers very similar functionality, new capabilities are being folded into solutions rapidly. While many of the technologies that Forrester defines as making up the core client management market are more or less standardized, there are a few that are quickly being added to solutions to meet the needs of the evolving desktop operations role. See the July 29, 2009, "Market Overview: Client Management Suites" report.

[7] To virtualize or not to virtualize? That is no longer the question. The new question that desktop managers should ask is, "What desktop environment strikes the balance between productive users and IT's need for increased manageability and security?" Emerging client virtualization technologies have the answer: Cost-effectively deliver a desktop tailored to each user scenario. This means that the traditional desktop model — inherently insecure, inflexible, and hard-to-manage — is a thing of the past. Organizations will instead identify their users by criteria like task-based, knowledge, or power users and will deliver dynamic desktops accordingly. After speaking to organizations looking at desktop and application virtualization, we know that client virtualization is not just an emerging trend; it's the future of the corporate PC. See the April 9, 2008, "Demystifying Client Virtualization" report.

[8] At the beginning of the year, Microsoft updated its Windows licensing for desktop virtualization. This means that IT professionals exploring the use of desktop virtualization to support various scenarios, such as contractors and "bring your own computer" (BYOC), now have the ability to license Windows legally. Unfortunately, Software Assurance remains key to any desktop virtualization scenario, so make sure to keep in close contact with your sourcing team to prevent any end-of-year true-up nightmares. At the end of the

day, these additional licensing options will only push desktop virtualization further into the mainstream by enabling flexible licensing to meet your users' diverse requirements. See the April 9, 2009, "Desktop Virtualization: The Updated Rules Of The Road For Virtualizing Windows" report.

[9] Client virtualization is a priority for companies, but adoption is ramping up slowly due to complexity and cost. While lowering costs is driving client virtualization interest, manageability, security, and remote access are the driving forces in the business case for client virtualization. See the October 6, 2009, "Client Virtualization Adoption Trends, 2009" report.

[10] When Microsoft Office 2010 arrives for consumers in June, many enterprises will have the opportunity to upgrade through their existing licensing programs. For others, upgrade plans may not be as clear. In Office 2010, the Fluent user interface (UI) that iWorkers loved to hate completes its transformation of the application suite. For those past the trauma of the design change, the upgrade should be relatively painless. In fact, the reimagining of Groove as the SharePoint Workspace and Web Apps might even lead to cheers as the ability to collaborate more easily with external partners, online or offline and authenticated or not, becomes reality. But with increasing competition and commoditization of productivity tools, Microsoft must convince enterprise buyers that Office 2010 provides compelling value to justify the upgrade effort and costs. See the January 7, 2010, "A Glimpse At The Best And Worst Of Office 2010" report.