

## WHITE PAPER

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# Analysis of the Business Value of Windows Vista

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## EXECUTIVE SUMMARY

Windows Vista is Microsoft's next generation client operating environment platform, which will broadly replace the existing installed base of Windows client operating systems over the next several years. The deployment of Windows Vista has the potential to deliver significant business value to organizations currently using older versions of Windows client operating systems, through the reduction of IT and user labor, and by improving user productivity and satisfaction.

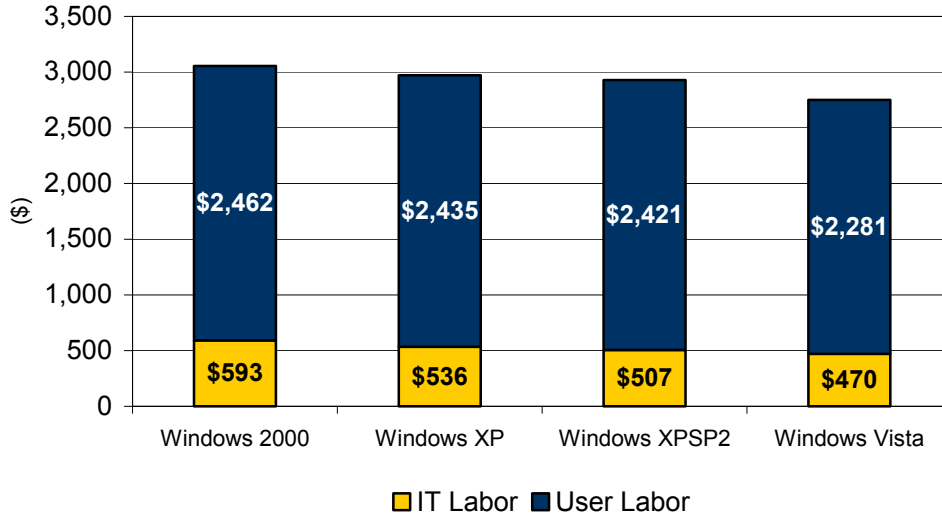
IDC draws this conclusion based on early research data collected from 206 organizations already using Windows Vista – organizations that joined Microsoft's Windows Vista Technical Adoption Program (TAP). These organizations are technically savvy, early adopters that have above average interest in learning about and deploying new products. TAP organizations typically have early access to Microsoft products and have significantly more interaction with Microsoft experts than the average organization.

IDC was engaged by Microsoft to benchmark operational costs and user experience associated with previous versions of Windows and then repeat this study after Windows Vista was deployed at these companies in their pre-general release deployments. The difference of business value and operational costs associated with earlier Windows operating systems, compared to Windows Vista, gives a preview of the potential value that Windows Vista could deliver on a broader scale. The metrics in this paper are from companies in North America from twelve industry segments (manufacturing, health care, financial services, etc.), with a median size of 15,000 employees.

Figure 1 shows the average annual cost per PC expressed in IT and User labor for Microsoft's last three operating systems and Windows Vista. These costs were measured directly from the participating TAP organizations and represent the average case. Windows Vista costs are projected based on their trial results. IDC assumed a direct OS replacement without any changes to IT processes.

**FIGURE 1**

**IDC Estimates of Annual User and IT Labor Costs Associated with Selected Microsoft Operating Systems**



Note 1: Average 5,000 PCs per organization (North America), burdened labor rate IT = \$53/hour, User = \$27/hour

Note 2: Graph excludes the impact of IT process improvements implemented as part of a Windows Vista deployment.

Source: IDC, 2006

More specifically, organizations in the TAP found value in the following areas:

- ☒ **Reduced Service Desk Costs.** Based on TAP participant experience, organizations that adopt Windows Vista will save an average of \$11 (8%) per PC in service desk-related IT labor when compared to Windows XP SP2. According to IDC research, TAP participants experienced fewer calls to the service desk, which we believe was most likely related to the improvements in the reliability and security features, and the self-healing capabilities built into Windows Vista.
- ☒ **Reduced Desktop Engineering and Support Costs.** Desktop engineering and support includes all IT functions associated with planning, project management, PC rollouts, security threat evaluation, application and patch deployments and image management. Compared to their experience with Windows XP SP2, the TAP respondents expect to receive an annual \$26 (7%) cost-reduction benefit in this category.

Since Windows Vista is built upon on a heavily re-architected code-base and was the first operating system developed under Microsoft's Trustworthy Computing initiative, we believe that this release of Windows will be more secure than previous iterations. As a result, we expect that less time will be spent evaluating and reacting to security threats.

We believe that other factors also will contribute to lower costs. For instance, Windows Vista is the first Microsoft operating system that can be treated as hardware independent in regard to the operating system image. Historically, organizations have maintained multiple images of Windows client operating systems – in some cases, dozens or hundreds of images, due to variations required by departmental, organizational unit, geographic segment, and of course, underlying hardware platforms in use.

In theory, organizations can potentially reduce the number of images they support by 50% or more since most organizations support – at a minimum – both notebooks and desktops. Now, a single image can be used for notebooks and desktops in a homogeneous 32-bit or 64-bit environment. Depending on the image strategy, industry and testing regimen, images cost organizations on average \$25-35 per PC annually and account for 20-25% of OS deployment costs.

- ☒ **Reduced User Costs associated with PC self-support and downtime.** User costs include the value of lost user productivity resulting from time spent maintaining a PC or through downtime impacting end users. These activities include installing software and patches, adding printers or other hardware, managing user data (backup, restore or transfer), troubleshooting (includes time on the phone with service desk) and supporting peers. Direct research with 330 Windows Vista users indicates that Windows Vista is expected to reduce the amount of time users spend maintaining their own PCs and experiencing downtime. Windows Vista's greater reliability and security should reduce the time users spend troubleshooting their PCs or on the phone with the service desk. Because of the more secure code, users will potentially spend less time patching (positively impacting organizations that patch systems manually). Each user could enjoy annual cost benefits from reduced downtime and self maintenance of \$140 compared to Windows XP SP2.
  
- ☒ **Increased user productivity.** In addition to spending less time maintaining their own PCs, users can become more productive through improved desktop search and collaboration. Users in this study found that Windows Vista reduced this search time by 42% and reduced unsuccessful searches by 16%, indicating that Windows Vista improved search capability could yield significant user productivity savings. IDC values the User productivity benefit at \$59 per user per year compared to Windows XP SP2.
  
- ☒ **A greater ability to implement best practices that improve IT processes.** Collectively considered, our research shows that TAP customers found Windows Vista out-of-the-box savings of \$236 per PC annually in IT labor, user labor, and improved productivity. It is reasonable to believe this benefit can be further increased if Windows Vista is used as part of an organization's move to improve its overall infrastructure optimization level – where an optimization level is determined by a company's adoption and use of IT best practices. Best practices are IT process improvements that either decrease costs or improve the quality of IT services, and usually involve automation delivered through technology. No best practice is technology specific, but Windows Vista has features that can make it easier for organizations to implement and support industry standard best practices.

TAP customers found that IT labor costs for Windows Vista deployment were 19% less than when they had deployed Windows XP or Windows XPSP2. Overall the most significant cost reductions were associated with image engineering and application compatibility testing. On average, Windows Vista deployment costs were \$94 per PC in IT labor and \$22 in user labor. Since the TAP customers were not able to leverage an existing hardware refresh cycle for their deployments, these organizations spent \$120 per PC in hardware upgrades. The total deployment cost for the TAP organizations was \$236 per PC. Non-TAP organizations that leverage the hardware refresh cycle will not have hardware costs and therefore will spend closer to the \$116 per PC in IT and User labor. Those doing in-place upgrades outside of the hardware refresh cycle using deployment aids such as Microsoft's Business Desktop Deployment (BDD) framework should expect to spend much less on labor.

In a separate research project, IDC determined that an organization spends between \$230 and \$1,320 per year in IT labor to support PCs depending on best practice adoption rates. In that research, IDC identified ten best practices that help organizations reduce IT labor costs by up to \$1,090 per PC per year. Virtually no organization has zero best practices and would spend the full \$1,320 per PC per year. On the other hand, few, if any, organizations utilize all ten best practices. Features in Windows Vista can help organizations implement and sustain three of the ten best practices, collectively worth \$430 per PC annually. A complete list of the ten best practices can be found in "Optimizing Infrastructure: Generating Value Through Improving IT Operations with Best Practices" published in December 2006.

In conclusion, IDC's analysis of these early adopters found that there is definitive business value and lower operational costs associated with a move to Windows Vista. IDC's research based on the TAP organizations show that the combination of core technology and best practices saves organizations on average 24% on IT labor and 19% on user labor per PC per year. While we caution mainstream organizations to remember that these calculated savings are based on pilot adoptions within technologically sophisticated, early adopter companies, we believe the study results indicates that mainstream customers can also achieve operational cost savings through a move to Windows Vista.

When taken in conjunction with other IDC research covering the use of best practices and infrastructure optimization, our guidance for organizations that want to maximize their return on investment of Windows Vista is that they should use the operating system as a catalyst for improving overall infrastructure optimization. By using this approach, the organization can receive both the core benefits and the potentially much larger IT process improvement benefits simultaneously.

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