

Empowering Information Workers: The Financial Benefits of Windows XP Tablet PC Edition

Summary of Key Findings



Abstract

In today's business environment, equipping and supporting information workers for increased productivity while they are away from their desk or out of the office is a vital element of maintaining competitive advantage.

This report of key findings summarizes a soon-to-be published white paper that shows the results of business value studies that were conducted by Microsoft and assessed by Gartner Measurement. These studies and customer use research demonstrate the financial value provided by Microsoft® Windows® XP Tablet PC Edition and the Microsoft Office XP Pack for Tablet PC. Key findings demonstrate that information workers can:

- Work more productively and collaborate more effectively away from their desks or out of the office by using a Tablet PC powered by Windows XP Tablet PC Edition.
- Use Tablet PCs in new ways that enhance their personal productivity and improve the efficiency of existing business processes.

These findings and the subsequent white paper are prepared for line-of-business, financial, and IT managers, who are concerned with or make decisions about their organization's IT investments and have an interest in ensuring the productivity of their organization's workforce.

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Executive Summary

This report demonstrates that deploying Microsoft® Windows® XP Tablet PC Edition¹ and the Microsoft Office XP Pack for Tablet PC² provide capabilities that can help any organization improve the productivity of its information workers.

Key findings of this report are the results of business value studies³ conducted at five enterprises that participated in the Tablet PC Rapid Adoption Program (RAP). These studies were conducted by Microsoft and assessed by Gartner Measurement, a business unit of Gartner Inc.⁴ These findings confirm that information workers will regain an average 147 hours annually due to greater efficiency in capturing, organizing, and searching for information, as well as accelerated annotation and review of documents. These time savings are valued at an average of \$9,525 per information worker per year.

Table 1 summarizes the findings of the five business value studies. The first three benefits apply to all Tablet PC users; the fourth benefit applies to information workers, who used the Tablet PC in a wireless LAN environment.

Mobile Computing Benefits Enabled by the Tablet PC ⁵	Average Time Per Task (Hours per user-year)		Improvements Time / Task Efficiency / Money		
	Before Tablet PC	Using Tablet PC	Hours per User-year	% Improvement Task Efficiency	\$ Equivalent Per User-year
Capture and organize information more efficiently. Five RAP participants used digital ink and Windows Journal to take meeting notes instead of transcribing paper-based information.	77	47	30	39%	\$1,951
Reduce information search costs. Four RAP participants used digital ink and Windows Journal to reduce costs and time searching for handwritten paper-based information.	96	37	59	62%	\$3,815
Accelerate information review and annotation process. One RAP participant used digital ink to annotate and add diagrams to Office documents and third-party applications.	211	153	58	27%	\$3,759
Total Average Improvement per Information Worker	384	237	147	38%	\$9,525
Improve information sharing and enhance collaboration. Two RAP participants used digital pen-and-ink computing in a wireless LAN environment to simplify and expedite routine communication tasks such as e-mail and scheduling meetings. ⁶	294	228	66	22%	\$4,278
Total Average Improvement per Information Worker using a WLAN	678	465	213	31%	\$13,803

Table 1 - Tablet PC Mobile Computing Benefits

These benefits represent productivity improvements gained by upgrading notebook PCs running Windows XP Professional to the Tablet PC running Windows XP Tablet PC Edition. Organizations running Windows 2000 Professional and earlier versions of the Windows desktop operating system will experience additional benefits, which are documented in the Microsoft white paper, "Higher Yields: The Financial Benefits of Windows XP Professional."⁷

At three of the five organizations whose benefits are presented in Table 1, the productivity gains enabled by use of the Tablet PC are sufficiently compelling to justify upgrading all information workers to a Tablet PC. Table 2 presents key findings from the perspective of traditional business valuation.

Traditional Valuation Measure	Average Value ⁸
Return on Investment (ROI)	159%
Internal Rate of Return (IRR)	114%
Payback Period	11.6 months
Net Present Value per Tablet PC	\$1,161

Table 2 - Business Value Benefits of the Tablet PC

Vertical Industry Experience

Research at 11 additional organizations that participated in the Tablet PC RAP validated that the Tablet PC could help users to streamline company-specific business processes and improve information worker productivity. At some organizations, benefits were derived from specialized line of business applications developed for the Tablet PC. Other organizations benefited by modifying existing third-party and line of business applications with Tablet PC capabilities such as digital ink.

The following examples demonstrate how RAP participants in a wide variety of industries made significant productivity gains by using the Tablet PC.

- **Healthcare** –The Tablet PC helped a home healthcare company to reduce potential errors associated with manual records keeping by replacing lengthy paper-based forms with electronic data entry that used digital ink and handwriting recognition. The ability to fill out forms directly into a computer without time-consuming transcription enabled the company’s healthcare workers to reduce the time needed to transfer patient care information and timecard-related billing information to the corporate database.
- **Engineering and construction** - Tablet PC mobility and pen and ink capabilities enabled two engineering and construction firms to replace various paper-based document generation activities with digital pen-and-ink computing. Workers at both firms used Tablet PC capabilities to electronically annotate job-related documents. The Tablet PC Software Development Kit (SDK) also enabled these companies to enhance existing or develop new line of business applications to help their mobile PC users work more efficiently in the field. For example, one company used the Tablet PC and digitized signatures to eliminate the need to revise, sign off on, and scan versions of contractual documents. As a result, this phase of the contract closeout process during the company’s pilot deployment took 25% less time.
- **Banking and insurance** – A national insurance company and a national bank used the mobility and versatility of the Tablet PC to make company-specific business processes more efficient. A test group of claims representatives at the insurance company used the Tablet PC to write and draw claims-related information directly into electronic claims files. The insurance company estimates that by eliminating the electronic transcription, drawing, and scanning steps of the claims process, use of the

Tablet PC would help reduce the company's average claims adjustment time by 24 to 48 hours and improve claims representative productivity by an average of 10%.

The bank's corporate real estate group used the Tablet PC to reduce the time required to conduct real estate site surveys. This company estimates the time required to conduct these surveys will drop from 5,200 hours to 2,600 hours annually and result in an estimated annual savings of \$500,000.

As an example of the power of the Tablet PC applied to a professional services company, the President and CEO of the interactive advertising business unit of a national advertising agency, describes the productivity gains that the Tablet PC can contribute to his company, saying, "We're ecstatic about the efficiency gains our teams are experiencing! Our company could see an incremental \$1.1 million in annual net profit from increased value-added billable hours."

Conclusions

Results of the business value and customer use studies at RAP participants confirm that the Tablet PC running on Windows XP Tablet PC Edition is a full-featured notebook PC that can be used in a wide variety of situations, tasks, and industries. This experience validates that using the Tablet PC can provide enterprises with the following benefits:

- **Immediate improvements in information worker productivity** - This report demonstrates immediate productivity enhancements for any information worker who is either away from their desk or out of their office for extended periods of time. These productivity improvements are based the ability of users to:
 - **Capture and retrieve information more efficiently by using digital ink and Windows Journal to take meeting notes instead of transcribing paper-based notes.** In business value studies of three participating organizations, information workers spent 39% less time in this task, a time saving valued at \$1,951 per worker per year.
 - **Reduce information search costs by using digital ink and Windows Journal to reduce the time searching for hand-written notes.** In business value studies of five participating organizations, information workers spent 62% less time in this task, a time savings that was valued at \$3,815 per worker per year.
 - **Accelerate the annotation and review of document created with Microsoft Office XP or other productivity applications.** In business value studies of one participating organization, information workers spent 27% less time in this task, a time savings valued at \$3,759 per worker per year.
 - **Improve information sharing and enhance collaboration by using pen-based computing to simplify and expedite routine communication tasks.** In business value studies of two participating organizations, information workers spent 22% less time in these tasks, a time savings valued at \$4,278 per worker per year.
- **Optional wireless connectivity benefits** - Information workers, who perform routine messaging, scheduling, and data access tasks in a wireless LAN environment could experience an additional \$3,921 in annual per-user productivity benefits, a 62% improvement in task efficiency.
- **Mobility benefits** – Many RAP participants used the mobility and unique pen-based capabilities of the Tablet PC for specialized line of business applications and the power of a full-featured notebook PC for routine tasks that are not practical on a handheld digital device. These users achieved all of the practical benefits noted above plus the unique benefits of using the Tablet PC in new company-specific business situations at a cost comparable to the hardware, deployment, and management costs of a mid- to high-range notebook PC operating Windows XP Professional.
- **Mobile device consolidation** - The power and versatility of the Tablet PC make it possible to enhance the productivity of information workers by using the Tablet PC rather than multiple digital devices.

These benefits represent productivity improvements gained by upgrading from Windows XP Professional; additional benefits would accrue by upgrading from notebook PCs running on the Windows 9x or Windows NT Workstation operating systems.

Recommendations

The Tablet PC offers organizations in any industry the opportunity to optimize business processes and gain greater efficiencies that translate directly to the bottom line. To realize these benefits, organizations should consider these recommendations:

- **Users of specialized line of business applications should be upgraded to or issued a Tablet PC at the next available opportunity, regardless of the status of the hardware refresh cycle.**

Virtually all companies have applications that would be improved by Tablet PC capabilities or users who can benefit from using a Tablet PC. These users can achieve immediate productivity gains and their company can realize an immediate return on investment by deploying the Tablet PC to improve the efficiency of company-specific business processes.

- **Highly mobile information workers who spend significant time away from their desks should have a Tablet PC deployed at an accelerated hardware refresh cycle.**

Highly mobile PC users would gain immediate benefits that provide compelling business value, especially if they have access to a WLAN or spend most of their work day away from the office. Tablet PC users with access to a WLAN will experience greater productivity improvements than users working in conventional LAN environments.

- **All notebook PC users, especially those who are upgrading from Windows 2000 and earlier versions of the operating systems, should have their notebooks upgraded to the Tablet PC.**

All notebook PC users would gain important reliability, security, and manageability benefits of the Windows XP Professional operating system as well as productivity benefits derived from the unique mobility and pen-based computing capabilities of the Tablet PC. Additional productivity benefits could be gained if users could get access to corporate resources with a WLAN.

For More Information

For more information about Windows XP Tablet PC Edition, see:

- <http://www.microsoft.com/tabletpc>
- <http://www.microsoft.com/windowsxp/tabletpc/evaluation/casestudies/default.asp>

For more details about the overall business value of Windows XP Professional and the white paper, "Higher Yields: The Financial Benefits of Windows XP Professional," see <http://www.microsoft.com/windowsxp/pro/evaluation/whyupgrade/bizval/>

For more information about the business value group at Microsoft and the Rapid Economic Justification approach to IT investment valuation, see <http://www.microsoft.com/value>.

For Tablet PC sales information, please see <http://www.microsoft.com/worldwide>.

For information about Gartner Measurement, see <http://www.gartner.com>.

¹ The Windows XP Tablet PC Edition operating system was pre-installed by the OEM on each Tablet PC received by RAP participants.

² The Office XP Pack for Tablet PC is available as a free download for registered users of the Tablet PC and Office XP. Office XP and the Office XP Pack for Tablet PC were pre-installed on each Tablet PC received by RAP participants. Each RAP participant had a Microsoft Enterprise Agreement or Select Agreement, which included Windows XP Professional and Office XP software.

³ Business value studies are based on the Microsoft Rapid Economic Justification (REJ) framework. Each of the participating companies used the features of the Tablet PC in similar ways but in different company-specific situations. Not all features were used by all RAP participants.

⁴ To ensure that the business value studies conformed to REJ standards, Microsoft contracted Gartner Measurement to assess the study results.

⁵ All financial measures based on a 2,000 hour per year work period and an average annual fully burdened salary of \$129,626 per information worker.

⁶ This benefit applies only to locations with a wireless local area network (WLAN).

⁷ For a complete version of this white paper, please see <http://www.microsoft.com/windowsxp/pro/evaluation/whyupgrade/bizval/>

⁸ These financial metrics reflect preliminary cost and benefit data resulting from Tablet PC pilot deployments at three participating organizations. An updated version of this report will include additional financial information that reflects a larger data set derived from full deployment of the Tablet PC.