



## PC BEST PRACTICES CASE STUDY

## Facing an Unsupported OS, Bank Finds an Accelerated PC Refresh Slashes Project Upgrade Costs by 16 Percent

### Standardization, Notebooks Bring Further Savings and Value

#### Situation: Unsupported OS Can Raise Risks, Costs

Is it possible to be too cost-conscious? Every Information Technology (IT) organization wants to deliver good value to the company, but when IT focuses on controlling costs rather than delivering business value, it can end up short-changing the business. Ironically, this raises costs while depriving the company of the business value delivered by wise IT investments.

That's what happened at a multinational retail banking company<sup>1</sup>. One of the bank's geographic units followed several PC best practices in its retail branches. The unit's branches had a highly standardized and well-controlled client environment, and its IT group was justifiably proud of the low total cost of ownership (TCO) of its branch-office PCs. But the organization was so intent on controlling costs that its users and IT department were struggling with a fleet of aging PCs based on the Intel® Pentium® II processor 400 MHz and running the IBM\* OS/2\* operating system and proprietary applications.

The bank's approach had several strengths, but also some serious weaknesses. Since the environment was highly consistent, IT could maintain a fleet of replacement systems and swap a machine in quickly when a user's PC failed. This minimized disruption to user productivity when systems failed outright, but also raised inventory costs. And while the bank's headquarters deployed Microsoft\* Windows\* 2000 and the Microsoft Office\* software suite, the branches in this geographical unit used legacy and proprietary software. The lack of uniform software created document incompatibilities, leading to inefficiencies for the enterprise and lost productivity for employees. Help-desk costs were high: For its base of less than 7,000 PCs, the help desk fielded approximately 34,000 support calls each year, with approximately half related to corrupt software that needed to be reinstalled.

Most seriously, with IBM deciding to drop general support for the OS/2 operating system at the end of 2004 and moving to "pay per view" support for 2005 and 2006, the bank faced the risks and exponentially higher costs of running an unsupported operating system. The company asked the Business Client Assessment Service team at Intel® Solution Services to help it decide what actions to take. The bank also asked for advice on two additional issues. The firm's regional headquarters had a non-standardized PC environment and wanted to identify cost savings it could achieve if it moved its users to a common client platform and a regular refresh cycle. The headquarters team also wanted to understand the impact of deploying mobile PCs to some of its users.

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PC Best Practices at Work

<sup>1</sup>Customer wishes to remain anonymous.

## Best Practice: Deploy the Latest or Next-Latest Operating System Version

Industry best practices call for deploying the latest or the next-latest versions of operating systems and applications. Despite the coming obsolescence of its operating system, the bank's geographic unit had planned to maintain its branch PCs running OS/2 until 2006. It would have then migrated to new PCs running Microsoft Windows XP for compatibility with its headquarters operation, which expected to be on Windows XP by that time. Intel Solution Services recommended a best-practices alternative that would freeze the OS/2 environment in 2003 and migrate the branches to new PCs based on Windows XP over the next three years (2003–2005) while running OS/2 under emulation.

Net present value (NPV) analysis is a method of accounting for the cost, earnings, and time-value of money. An NPV analysis by Intel Solution Services of the two approaches affirmed the wisdom of following best practices. Not only would the bank gain the business advantages of new PCs, but it would save almost \$9.6 million over three years, reducing the bank's total project costs—annual operation expenses plus investment in hardware, software, and implementation—by 16.4 percent. The cost savings included:

- Reducing its engineering and consulting costs by \$1.8 million
- Savings of almost \$3 million over the original plan for a one-year migration in 2006
- Avoiding an increase of nearly 132 percent in software support contracts
- Avoiding an increase of 315 percent in OS platform maintenance
- Eliminating the need for a memory upgrade to keep the older PCs viable (estimated at nearly \$667,000)

### Modernizing the PCs in its branch offices would also position the bank to enjoy:

- **More robust security.** An unsupported operating system presents a greater risk of security breaches. If a virus does target the legacy OS, the customer can't count on popular antivirus software to spot it or the vendor to supply updates. Moving to a supported OS, such as Windows XP, improves security coverage because of the significant money and efforts devoted to developing and continuously updating security patches, antivirus software, and corporate firewall applications as new threats arise.

- **Increased productivity.** More robust PCs and software should raise productivity by providing more uptime and improving browser compatibility. They also allow for greater standardization of office tools across the organization, reducing document incompatibilities and user hassles.
- **Greater manageability.** The reliability of the newer platforms and software, along with built-in remote management capabilities, should reduce the quantity and duration of help-desk tickets and lower the need for technician travel time. As a result, IT staff should have more time available for proactive activities that deliver greater business value.

## Best Practice: Replace PCs Regularly and Proactively

At the bank's headquarters, the client environment was not standardized and the 5,000 PCs at three headquarters offices were typically replaced on an as-needed basis (approximately every six years). The bank realized that it could gain efficiencies by reducing the complexity of its client environment, replacing its oldest PCs, and instituting a more regular client refresh policy. But where would the savings come from, and what would be the most cost-efficient cycle on which to replace the headquarters PCs?

Intel Solution Services analyzed three-year, four-year, and five-year proactive refresh policies and compared them to the bank's current corporate client refresh practices. Intel consultants used a total value of ownership (TVO) analysis to determine a return on investment (ROI) of the new approaches. Factoring in productivity savings using data based on the industry-standard SYSmark\* 2002 benchmark, the analysis showed that moving from the current six-year ad hoc refresh to a three-year proactive refresh cycle could provide a total NPV savings of 26%—more than \$1.2 million over a three-year period.

### SAVINGS FROM STANDARDIZING PCs AND REPLACING THEM PROACTIVELY

Summary	TVO (+/-)	TVO (+/-) ROI
3-year client refresh cycle	\$1.2M	26%
4-year client refresh cycle	\$905,000	20%
5-year client refresh cycle	\$635,000	14%

## Intel Solution Services identified several major sources of savings for the headquarter's environment:

- **System management costs.** Standardizing the desktop reduces the number of different products and software images that must be supported. This in turn enables IT to streamline its desktop management processes, and makes it easier to train staff to support the environment. In addition, newer operating systems offer advanced management tools that can help reduce management costs.
- **Help-desk costs.** Ridding the environment of aging PCs eliminates many system failures before they have a chance to occur. This avoids interruptions to end-user productivity and enhances IT staff productivity. When system problems do occur, they're easier to troubleshoot and resolve in a more controlled, standardized environment with remote management tools. Extrapolating from Rapid Economic Justification (REJ) studies conducted by Microsoft and others<sup>2</sup>, the bank could expect to reduce the number of trouble tickets by 2.5 calls per PC per year.
- **Warranty savings.** With a large number of aging PCs to support, the bank expected to spend \$835,000 in extended warranty costs over the next three years. Adopting a three-year refresh cycle would eliminate many of those charges and save the bank an additional \$607,000 over three years.
- **User productivity.** Faster PCs enable users to complete tasks more quickly and multitask more effectively among a variety of projects and applications. The productivity models used in the TVO analysis were conservative, projecting a gain of just 15 minutes per employee per week. Even so, the 15-minute-per-week productivity gains saved an estimated \$730 per user per year.

## Best Practice:

### Match PCs to User Requirements

To ensure their PC purchases provide maximum business value, IT departments need to focus not just on cutting costs but on providing the optimal platform and tools for each segment of their user base. The bank identified users at its headquarters offices that it felt would benefit from using notebook computers, and asked Intel Solution Services to determine the impact of deploying mobile PCs to half of its headquarters users.

The Intel consultants conducted an analysis of the costs and benefits of notebook computers for the bank, based on projections showing a typical user gains one hour of added productivity per week. The analysis showed that the bank's NPV cost of moving to an environment of 50 percent desktops and 50 percent notebooks would be higher than that of a 100 percent desktop refresh. However, the value of ownership ROI would be 191 percent greater than that of the current environment. Because of mobile users' increased productivity, the investment would be paid back in under a year.

### Final Word: Balancing Costs and Value

Working with Intel Solution Services, this leading multinational financial services institution took a fresh look at its PC management and purchasing practices. In doing so, it identified ways to lower the costs of deploying, managing, and supporting its PCs while enhancing the business value delivered to the company.

Applying PC best practices can save this firm millions of dollars while at the same time improve the productivity of users and IT staff. In particular, Intel solution experts recommended proactively refreshing the PC base, removing aging systems, and matching systems to the productivity requirements of different user groups.

## Make the Most of Your PC Base

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Are you implementing PC best practices? Let Intel Solution Services help you analyze your client base, identify areas for improvement, and plan for change.

To learn more about working with Intel Solution Services visit:

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