



## Microsoft Windows Vista Customer Solution Case Study



### Windows Vista Can Help Société des Alcools du Québec Reduce PC Total Cost of Ownership By 7 Percent Per Year

#### Overview

**Country:** Canada

**Industry:** Government

#### Customer Profile

The government-owned Société des alcools du Québec (SAQ) is one of North America's largest purchasers and retailers of premium wines and spirits. SAQ taxes, duties, and dividend payments provide significant revenue to the government of Québec.

#### Business Situation

SAQ needed to increase its efficiency in desktop and notebook PC management and reduce costs of service desk and end-user support.

#### Solution

A business value study that included a total cost of ownership (TCO) analysis of the value of upgrading to Microsoft® Windows Vista™ showed that SAQ could use core capabilities of Windows Vista to improve PC management and reduce PC operational costs. Windows Vista will promote adoption of best practices, which will help to reduce service desk and support costs and end-user downtime. The study also quantified end-user productivity benefits.

#### Benefits

- Lower annual TCO per PC
- Lower IT labor costs
- Lower end-user operations costs
- Lower help desk costs

“The incremental cost of upgrading to [Windows] Vista is more than offset by the savings we expect to achieve by deploying [Windows] Vista rather than continuing with Windows XP over the life of our hardware replacement cycle.”

*Benoît Durand, Chief Information Officer, Société des alcools du Québec*

A business value study that included an analysis of total cost of ownership (TCO) showed that upgrading the PCs at the Société des alcools du Québec (SAQ) from Microsoft® Windows® XP and Windows 2000 to Windows Vista™ should improve management and reduce service desk and support costs. Deploying Windows Vista as part of SAQ's four-to-five-year hardware replacement cycle should reduce TCO by 7 percent or \$271 per PC per year. These TCO savings are based on:

- IT labor cost savings of 13 percent (\$140 per PC per year).
- End-user labor cost savings of 5 percent (\$131 per PC per year), the result of lower end-user support costs and less end-user downtime.

The study also measured benefits based on reduced PC electricity consumption valued at \$6 per PC per year and improved user productivity valued at \$34 per user.

When compared to deployment costs of \$227 per PC, the combined annual benefit of \$311 per PC will provide SAQ with strong return on investment. SAQ anticipates a 9-month-payback period, a 310-percent return on investment, and an internal rate of return of 125 percent.<sup>1</sup>



<sup>1</sup> The business value, TCO, and related metrics presented in this case study are denominated in Canadian currency (CDN\$).

“The results of the Windows Vista TCO study show a very compelling financial message of cost effectiveness of upgrading as part of our natural hardware refresh cycle. The business case is very clear.”

Philippe Boucher  
Director, IT Operations and Infrastructure  
Société des alcools du Québec

## Situation

Headquartered in the historic and culturally vibrant city of Montreal, the Société des alcools du Québec (SAQ) is responsible for the trade of all alcoholic beverages in the Province of Québec, Canada.

SAQ has a sales network of nearly 400 retail stores and corporate operations in a single location. The Société IT department operates a highly distributed client PC environment, which includes more than 2,800 desktop and notebook PCs. This environment includes PCs running the Microsoft® Windows® XP and Windows 2000 client operating systems (OS) but excludes point-of-sale PC-based machines.

At SAQ, most PC users are structured task workers. Fewer than 20 percent of employees are either knowledge workers or managers. Many PCs, especially those at retail locations, are used by several individuals, who have different operational roles, computing needs, application requirements, and security privileges.

Current SAQ client OS do not enable very effective centralized role-based PC management. To ensure compliance with the Société's IT management practices, the IT team has to disable individual or role-based permissions (desktop lockdown) for virtually all of the PCs at SAQ retail locations. Whenever SAQ end users needed to change PC settings or access something for which they did not have appropriate permissions, they called the service desk. As a result, SAQ experienced a high level of support calls and service desk costs for performing basic changes to PC configuration and user settings. This situation increased the total cost of owning (TCO) the SAQ desktop and notebook PC environment.

The IT team at SAQ tries to employ as many PC management best practices as possible to keep TCO low. They know that the more best practices they implement, the more

effectively they can manage the TCO of their PC environment.

SAQ uses the best practice of deploying new PCs as part of its four-to-five year hardware replacement cycle. This management practice results in two client OS being used at the same time. SAQ recognized that upgrading Microsoft Windows 2000-based PCs to Windows Vista™ would provide greater management flexibility than continuing with their current upgrade to Windows XP. Also, SAQ would be preparing its PC environment for the next generation of Microsoft PC management applications.

To help SAQ with its upgrade decision, the IT team wanted to compare three key areas of Windows Vista TCO to that of Windows XP:

- Service desk and support costs
- User downtime
- Centralized IT management of the desktop

## Solution

A business value study that included TCO analysis was conducted by Microsoft at SAQ in the spring of 2006. This analysis examined the financial value of upgrading Société PCs to Windows Vista.

The study compared the costs of the current SAQ client PC environment (about 33 percent Windows XP and about 67 percent Windows 2000) with the future state of Windows Vista over the full length of SAQ's hardware replacement cycle. The TCO analysis quantified the per-PC cost savings that could be gained by upgrading to Windows Vista instead of Windows XP.

The TCO analysis showed that SAQ could minimize deployment costs by upgrading to Windows Vista as part of its hardware replacement cycle. In this strategy, the cost to deploy Windows Vista would be \$227 per PC (see Exhibit 1 for a cost breakdown). This strategy would enable SAQ to take advantage of Windows Vista capabilities to improve desktop management, decrease user

## Definitions of Terms

**Hardware and Software** – Annual metric amortized over three years that includes PC hardware, spares, supplies, PC applications, Windows OS, and Windows OS Client Access License (CAL).

**IT Labor** – Annual IT full-time equivalent (FTE) cost for Service Desk (Tier 0 to 3), and desktop engineering and support.

**User Labor** – Annual cost for end users maintaining their own PCs through troubleshooting, installing and configuring software and/or software updates, data management (backup and restore), recreating lost work, and downtime.

**User Productivity** - Annual end user time saved by reducing the time to perform business-specific tasks. Example: Reducing the time to prepare a Microsoft PowerPoint® presentation because of better desktop search capabilities provided by Windows Vista.

**Best Practices** - IT process improvements designed to reduce cost, reduce risk or improve IT service levels. Most best practices are designed to use new or existing technologies to improve IT operations

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Philippe Boucher,  
Director IT Operations and Infrastructure  
Société des alcools du Québec

Deployment Costs for Windows Vista	
Hardware	\$8
Software	\$15
Application compatibility testing	\$57
Deployment	\$9
Other	–
– IT training and helpdesk costs	\$70
– End-user costs	\$31
– Design, engineering, and management costs	\$37
<b>Total Deployment Cost</b>	<b>\$227</b>

Exhibit 1: Windows Vista deployment costs

downtime, and reduce service desk and support costs.

In this strategy, SAQ would continue to support two PC operating systems during the four to five years needed to change to a 100-percent Vista environment. Improved management capabilities in Windows Vista should help reduce end-user downtime and service desk and support costs. Windows Vista would also provide a PC environment, in which SAQ could adopt more best practices.

Philippe Boucher, Director of IT Operations and Infrastructure for the Société des alcools du Québec noted, “Because Vista benefits are so compelling, and our deployment costs would be relatively low, we are considering an alternative deployment strategy, in which we standardize on [Windows] Vista as a single operating system in two years instead of four to five years by doing more in-place OS upgrades of existing hardware. This approach enables us to realize benefits more quickly.”

Exhibit 1 shows the breakdown of per-PC costs of deploying Windows Vista as part of SAQ’s hardware refresh cycle.<sup>2</sup>

Supplemental business value-oriented analysis beyond the scope of the TCO study identified the potential for improvements in end-user productivity, which is estimated to provide a financial benefit valued at \$34 per PC

Windows Vista Annual Costs and Benefits per PC				
TCO Benefits	Current Windows	Windows Vista	\$ Diff	% Diff
IT Labor	\$1,071	\$931	\$140	13%
User Labor	\$2,545	\$2,415	\$131	5%
Total Per PC TCO (1)	<b>\$3,616</b>	<b>\$3,346</b>	<b>\$271</b>	<b>7%</b>
Additional benefits				
Reduced electricity consumption		\$6	\$6	
Improved user productivity		\$34	\$34	
Total business benefits (2)		<b>\$40</b>	<b>\$40</b>	
Benefits compared to costs				
Total annual benefits (1+2)			<b>\$311</b>	
Cost to deploy Windows Vista			<b>\$227</b>	

Exhibit 2: TCO and business benefits in an all- Windows Vista environment

<sup>2</sup> Hardware and software costs are minimal because the Windows Vista deployment will be implemented through SAQ’s existing hardware refresh cycle.

per year, and an additional \$6 per PC based on lower PC electricity consumption for a total of \$40 per PC per year.

When presented with the results of the TCO analysis, Benoît Durand, chief information officer for Société des alcools du Québec, said “The incremental cost of upgrading to [Windows] Vista is more than offset by the savings we expect to achieve by deploying Vista rather than continuing with Windows XP over the life of our hardware replacement cycle. With Windows Vista, we expect to gain immediate benefits for our end users and service desk, and we are establishing a better foundation for overall PC management.”

### Benefits

The TCO study at SAQ focused on the value provided by Windows Vista in two key areas: IT labor, which includes cost for service desk and desktop engineering and support, and end-user labor, which includes lower support costs and less user downtime. Exhibit 2 shows the estimated financial benefits that SAQ could gain by deploying Windows Vista as part of its hardware replacement cycle.

Philippe Boucher commented, “We’ve always tried to be as current as possible with the client OS. Now, we can see the tangible cash

“Now, we can see the tangible cash savings that we can realize by upgrading to [Windows] Vista. We have hard metrics to demonstrate our business case.”

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 Director, IT Operations and Infrastructure  
 Société des alcools du Québec

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**Core Capabilities Can Help Reduce IT Labor Costs by 13 Percent Per PC Per Year**

Windows Vista is more reliable and more secure than either Windows XP or Windows 2000. Improved Windows Vista core capabilities such as PC configuration, deployment and management, improved security, and better reliability are expected to reduce IT labor costs by \$140 per PC per year, a 13-percent reduction from SAQ’s current PC environment.

**More efficient service desk operations.**

Service desk personnel will spend less time troubleshooting Windows Vista PCs because they will be able to use non-destructive, file-based re-imaging earlier in the troubleshooting process. This approach will help to reduce incident resolution times and costs. Non-destructive re-imaging is expected to save SAQ \$37 per PC annually.

**Fewer desktop images and lower costs.** SAQ expects to reduce the number of OS images from four to one because Windows Vista imaging is hardware independent. The 75-percent reduction in the number of images will reduce annual imaging costs by 50 percent and provide a savings of \$4 per PC.

**Less user downtime.** SAQ end users will benefit from a more reliable PC operating system and will likely spend less time troubleshooting PCs or being on hold with the service desk due to system failure.

Alain Donato, Desktop Manager for Société des alcools du Québec, noted, “Because so many of our employees perform task-based work, they don’t have the skills for troubleshooting or peer support. The re-imaging capability that our service desk can gain by using Windows Vista should help us keep our PCs up and running smoothly.”

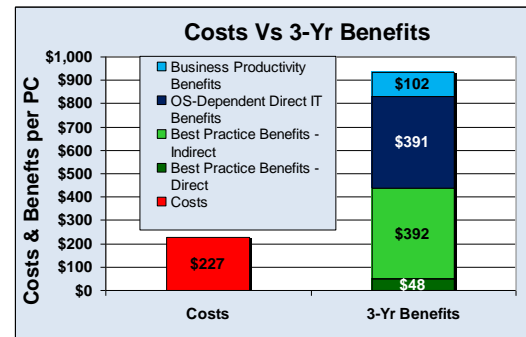


Exhibit 3: Costs and benefits of deploying Windows Vista

**End User Costs Could be Reduced by 5 Percent per PC per Year**

Better use of best practices is expected to reduce end-user costs by \$131 per PC per year, 5 percent less than those in SAQ’s current PC environment.

Of all the challenges facing SAQ, perhaps the biggest was how to minimize service desk requests each time a user needed to change individual or role-based settings on a shared PC. The potential savings in this cost category constitutes one of the largest areas of savings offered by SAQ’s use of Windows Vista. Windows Vista technologies that enable these benefits include:

- **Group Policy Objects**, which will enable the IT group to set multiple user settings on shared PCs. Users will not have to call the service desk every time they need to make changes to user PC settings.
- **New imaging and user state migration tools**, which will enable SAQ to transfer user state information more effectively than with previous operating systems.
- **Improvements in Microsoft IntelliMirror® technologies**, which make it possible to mirror more user data to servers and reduce recovery times after a failure.

Nathalie Arseneault, Helpdesk Coordinator for Société des alcools du Québec, said, “Minimizing end-user downtime, the number of calls, and the amount of time used for call

“Because so many of our employees perform task-based work, they don’t have the skills for troubleshooting or peer support. The re-imaging capability that our service desk can gain by using Windows Vista should help us keep our PCs up and running smoothly.”

Alain Donato  
Desktop Manager  
Société des alcools du Québec

resolution due to changes in user settings will provide a huge benefit to user satisfaction and productivity, not to mention significantly lower costs.”

#### **Business Benefits Add \$40 Per PC in Savings**

The financial analysis also looked at two categories of potential benefit that are not included in the TCO model—costs savings due to lower power consumption and improved user productivity. These benefits were valued at approximately \$40 per PC per year.

**Less electricity consumption per PC.** SAQ can better control PC power settings by enabling its central IT organization to use Group Policy Objects to reduce electrical power costs. This benefit is estimated at \$6 per PC per year.

**Improved end-user productivity.** Windows Vista will provide an annual \$34 per user productivity benefit through improved access to information (new Windows Vista search capabilities), faster application performance, an improved user interface, and better peer-to-peer collaboration. SAQ’s users will find Windows Vista’s new search functionality the most beneficial because users will now be able index and search documents stored on the hard drive as outputs of Web searches and in e-mail.

#### **Cash Flow Analysis Projects a 125-Percent Internal Rate of Return and 9-month Payback**

TCO analysis is an excellent way to compare the costs of the current state of SAQ’s PC environment with the proposed future state based on Windows Vista. The differences, both in real-dollar costs and relative value are important indicators of the cost savings that can be realized by SAQ’s IT organization. However, TCO by itself does not indicate how effectively SAQ’s capital is used for its investment.

A cash flow analysis was created to identify how much money was needed to deploy Windows Vista, when SAQ would begin to realize IT

savings, and what the potential break-even point of SAQ’s investment would be.

The cash flow analysis included all potential expenses and potential benefits as well as risk mitigation costs.

Results of the cash flow analysis showed that SAQ can pay back its IT investment within a 9-month period, can expect an estimated 125-percent internal rate of return (IRR) on its use of capital and expect a 310-percent return on its investment (ROI).

Philippe Boucher concluded, “The results of the Windows Vista TCO study show a very compelling financial message of the cost effectiveness of upgrading as part of our natural hardware replacement cycle. The business case is very clear.”

## For More Information

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For more information about the Société des alcools du Québec products and services, call +1-866-873-2020 or visit the Web site at: [www.saq.qc.ca](http://www.saq.qc.ca)

## TCO Analysis Methods

This study was performed using Microsoft TCO methods based on industry-standard TCO models. A TCO tool from Gartner was used to set up baseline costs for Windows 2000 and Windows XP. Projected cost savings for Windows Vista were provided by Microsoft. These savings are based on new product features and experience with the Windows Vista Early Adopter Program. Early adopters are Microsoft customers, who agree to test Microsoft beta release software in their production environments.

## Windows Vista

Windows Vista can help your organization use information technology to gain a competitive advantage in today's new world of work. Your people will be able to find and use information more effectively. You will be able to support your mobile work force with better access to shared data and collaboration tools. And your IT staff will have better tools and technologies to enhance corporate IT security, data protection, and more efficient deployment and management.

For more information about Windows Vista, go to:

[www.microsoft.com/windowsvista](http://www.microsoft.com/windowsvista)

### Software and Services

- Microsoft Server System
  - Microsoft Windows Vista™
- Windows Server System™
  - Systems Management Server 2003
- Active Directory® service
- Group Policies
- Microsoft Solution Accelerator for Business Desktop Deployment (optional)

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