



ROI Analysis

Intel® Core™2 Processor with vPro™ Technology

Consumer Industries

Realizing Significant Cost Savings and Improved Productivity through Remote Management Capabilities

Founded in 1935, Tyson Foods is the world's largest processor and manufacturer of chicken, beef, and pork and is the second largest food company in the Fortune 500. With nearly 114,000 employees in over 300 locations, Tyson has a large and dispersed computing environment.

Tyson started with 1,500 PCs (13% of their desktop environment), which were already capable of being managed with Intel® Standard Manageability, built into PCs with Intel® vPro™ technology.¹ Within 3 days Tyson had enabled their infrastructure and 3 weeks later they were well on their way to realizing the cost savings inherent in PCs with Intel vPro technology. Based on these results, Tyson plans to have 100% (11,500) of their desktop PCs refreshed with this technology over 4 years through their standard refresh program.

TCO/ROI investigation

In evaluating Tyson's environment, the following opportunities were identified using Intel Standard Manageability: reduced shipping costs, increased end-user productivity, and enhanced remote diagnostics and repair. Additional benefits were also identified that address asset management and reduced power consumption, which will help Tyson reap increased operational efficiencies and cost savings.

With over 50% of Tyson's PCs in remote locations, systems in need of hardware and software repair are shipped back to corporate headquarters in Springdale, Arkansas. Once received, salvageable data is recovered; hardware and/or software is fixed, and the end-user data is restored. Upon completion, the PC is shipped back to the remote end-user in an average of 3 days²

Intel vPro technology was used to change Tyson's remote support model by addressing lost end-user productivity and related shipping costs.

Since it takes up to 3 days to turn around a failed PC, the remote end-user is without a PC and essentially unable to work effectively. In this situation, lost end-user productivity can be addressed with Intel's Integrated Device Electronics Redirection (IDE-R) feature, which is available in PCs with Intel vPro technology. IDE-R is used to boot the PC into an Intel vPro technology-enabled terminal services client, which provides an end-user the ability to continue to work while waiting for the IT support staff to repair their failed hardware or software configuration.

This change in Tyson's support model will enable Tyson to take full advantage of their OEM warranty repair service to replace failed components across their enterprise – eliminating the costly need to ship the PC back to headquarters for repair.

Additionally, this remote manageability now gives the help desk specialist the ability to boot the system remotely with Intel vPro technology-enabled diagnostic tools and the capability to control those tools to salvage user data on a failed OS image or partially working hard drive. It is projected that this modification to Tyson's support model increases end-user productivity by **23%**, **saving \$136,002** during system failure and **virtually eliminating shipping costs** for remote support resulting in a savings of **\$56,927 over 4 years**.

For desktop connectivity issues it typically takes a help desk specialist approximately 25 minutes to walk the end-user through diagnostic steps to determine where a problem exists² Using the out-of-band connectivity feature, the help desk specialist is able to remotely

Key findings from ROI analysis

- **Positive ROI of 181% over 4 years** by deploying PCs with Intel Standard Manageability technology and enabling the infrastructure, **resulting in a 29 month break-even point**.
- **Projected savings of \$56,927 through a changed support model** which virtually eliminates shipment of PCs³
- **End-user productivity increase of 23%**, **saving \$136,002 over 4 years** by using Intel vPro-enabled remote tools.

identify the issue without end-user involvement. Once Tyson has fully deployed PCs with Intel vPro technology into their enterprise, Tyson's help desk specialists will be able to pinpoint desktop connectivity issues, saving **\$17,550 by year 4** in phone diagnosis costs alone.

Positive ROI results

The ease with which Tyson was able to activate Intel Standard Manageability, coupled with **the success of the ROI study, has led Tyson to extend this capability to their remaining desktop environment consisting of 10,000 PCs over the next 4 years.** Using the latest Intel® vPro™ technology capabilities, Tyson could extend remote manageability beyond their firewall to their dispersed locations without IT staff. This would allow Tyson to resolve hardware and software issues, as well as ensure their PCs are in compliance – a very difficult challenge without Intel® vPro™ technology-enabled PCs.

This ROI study was also able to demonstrate how Tyson, when using Intel Standard Manageability, could remove the guesswork on asset inventory while increasing accuracy and reducing the time it takes to manually account for hardware inventory.

Furthermore, Tyson has the opportunity with Intel Standard Manageability to substantially improve power savings, while also supporting sustainability efforts. The result of this finding should increase Tyson's ROI by reducing power consumption during idle time, with **a savings that could easily double the net savings state in this ROI over 4 years.**

With an impressive **total ROI of 181% over 4 years** and a break-even point obtained in **29 months**, Tyson should be able to improve their IT support model and drive more productivity and cost savings across their enterprise.

Table 1. Results of ROI investigation

Use case	Without Intel® vPro™ technology	When upgrading to PCs with Intel® vPro™ technology				Estimated savings with 100% Intel® vPro™ technology
	Year 0 1,500 PCs	Year 1 2,875 PCs	Year 2 5,750 PCs	Year 3 8,625 PCs	Year 4 11,500 PCs	
Infrastructure costs to support Intel vPro PCs and one-time deployment expense in Year 0.	One-time deployment cost: (\$23,700)	(\$15,150)	(\$15,150)	(\$15,150)	(\$15,150)	Cumulative 4-year costs: \$84,300
Remote support model cost reduction ³		\$791	\$4,745	\$16,604	\$34,788	Cumulative 4-year cash savings: \$56,927
End user productivity savings - terminal services client		\$1,889	\$11,335	\$39,667	\$83,111	
Help desk specialist productivity savings - desktop connectivity		\$4,388	\$8,777	\$13,163	\$17,550	Cumulative 4-year productivity savings: \$179,878
Overall savings		\$7,067	\$24,856	\$69,434	\$135,448	Break-even point: 29 months
Total costs	(\$84,300)					
Total savings	\$236,805					
Net savings	\$152,505					
Return on Investment (ROI) ^{4,5}	181%					

For more information about PCs with the Intel® Core™2 processor with vPro technology, visit www.intel.com/vpro.

¹ PCs with Intel® Core™2 processor with vPro™ technology include powerful Intel® Active Management Technology (Intel® AMT). Intel AMT requires the computer system to have an Intel AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. Setup requires configuration by the purchaser and may require scripting with the management console or further integration into existing security frameworks to enable certain functionality. It may also require modifications of implementation of new business processes. With regard to notebooks, Intel AMT may not be available or certain capabilities may be limited over a host OS-based VPN or when connecting wirelessly, on battery power, sleeping, hibernating, or powered off. For more information, see www.intel.com/technology/platform-technology/intel-amt/.

² All content about Tyson Foods, Inc., was provided by the Tyson Foods, Inc., IT staff.

³ Shipping costs of PCs to headquarters eliminated due to Tyson leveraging their OEM to replace hard drives locally or having local IT support staff help reinstall OS with CD.

⁴ Return on investment (ROI) calculations are based on the company's annual refresh rate for PCs, and calculated based on the difference between the company's typical PC and a PC with Intel® vPro™ technology. Costs for PCs purchased over and above the typical annual refresh rate are based on the full cost of the additional PCs with Intel vPro technology.

⁵ Return on investment (ROI) results and projections include savings from improved user uptime or productivity.

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