

Windows NT

awards innovative *thinking*

Low cost of ownership for powerful new applications

Marty Weil

WMC Inc.
Arlington Heights, Ill.

To reach a better understanding of the benefits Microsoft's Windows NT platform is delivering in manufacturing, visit Bill Nichols. Nichols is a process control supervisor for BP Exploration's (BPX) Milne Point facility on Alaska's North Slope. Located 240 miles north of the Arctic Circle, this plant—a Microsoft Technical Innovations in Manufacturing (TIM) award finalist—processes raw crude drawn from nearby oil wells. In an effort to improve its production capability, BPX installed a process management system using Norwood, Mass.-based Intellution's FIX and Windows NT technology. BPX and other companies profiled here received TIM awards for their ability to use technology to improve a manufacturing process, enhance a product, or provide benefits to users.

"One key reason we selected NT is that the platform provided lower total cost of ownership," says Nichols. "For us, the biggest impact wasn't the hardware or software costs, but the costs of managing the system. We have to run pretty trim up here, and the FIX on Windows NT was far more user-friendly than many of the other packages out there. This made it easier to install, easier to manage, easier to learn, and easier to maintain; and because it's easier to integrate with other systems, it's cost-effective."

The real issue

Nichols' words echo sentiments coming out of Redmond, Wash., where Microsoft has been focusing on total cost of ownership issues.

While initial cost is a critical component of any information technology investment, companies are scrutinizing the comprehensive, long-term value of computing solutions and how they will serve their organizational needs over time. Microsoft's strategy to address these concerns and reduce the cost of owning technology is supported by two primary efforts: Zero Administration Windows and the NetPC.

Zero Administration Windows refers to a set of core technologies that give infor-

mation-technology professionals "new levels of control and manageability" over Windows-based environments. Key capabilities enabled by the initiative include: automatic system update and application installation, persistent data and configuration information caching, central administration and system lock, and application flexibility to ensure design of the best solutions.

The NetPC—introduced last fall by Microsoft and Intel, with support from more than 100 PC manufacturers—reduces total ownership costs by taking advantage of the latest computing innovations to enable full remote management from central MIS departments, while offering traditional computing and standards-based benefits of PCs running Windows 95 and Windows NT.

Beyond traditional benefits

Two independent studies by Deloitte & Touche's consulting group show dramatically lower cost of ownership for companies running Windows NT workstations versus those running Unix. These detailed studies considered acquisition and maintenance costs of hardware and software, technical support costs, and user self-support costs related to workstations. The results suggest that for a group of 25 workstations, savings can amount to more than \$1 million over a three-year period.

This doesn't surprise Ken Ouchi, vice-president for Solectron Corp., Milpitas, Calif., one of the world's largest contract assemblers. According to Ouchi, establishing automated business processes with Windows NT can be achieved for 20 percent to 25 percent of the cost of Unix. He adds, "Because so many people are using Microsoft's products, new development and training costs are minimized."

Solectron achieved a breakthrough implementation of an enterprise management application using Menlo Park, Calif.-based The Baan Co.'s Baan IV software with Microsoft BackOffice and Windows NT. Among other accomplishments, using Internet-based technology, Solectron reduced its prototype manufacturing cycle time from two weeks to two days.

Other benefits achieved through the project include: greater integration of the materials process, with elimination of many manual processes; better and faster knowledge transfer; and fast return-on-investment.

No fear for future

According to Mark Garnett, instrumentation and control superintendent of Uniroyal Chemical Ltd., Elmira, Ontario, Canada, one of the major benefits in implementing enterprisewide systems on Windows NT is that "people aren't afraid of change, as they're familiar with Microsoft or know someone who is working in Microsoft applications. Even our 'non-computer' people easily adjusted to our new system."

The TIM award-winning system Garnett refers to, installed at Uniroyal—a producer of chemical additives for the oil, rubber, and agricultural markets—was developed by Fisher-Rosemount Systems, Austin, Texas. Fisher-Rosemount used Windows NT technology, the OLE for Process Control (OPC) specification, and its DeltaV product to build a distributed control system that allows real-time information to be routed directly from the plant floor to engineers' and production managers' desktops. The system enabled Uniroyal to respond faster to product demand, improve process quality control, maximize internal product analysis, and reduce training time by 60 percent. The NT-based system is estimated to have saved 30 percent more than comparable implementations.

"The Windows technology has moved so quickly and broadly that Microsoft has a responsibility to address these cost-of-ownership issues closely," says Solectron's Ouchi. "What's involved is much more than just running Windows on the desktop."

Ouchi believes Microsoft's increased focus on total cost of ownership is a good thing. "We're going to get results," he says.

With solutions such as those implemented by BPX, Uniroyal, and Solectron successfully driven by total cost of ownership issues, Ouchi's confidence is well-founded.

For further information on Microsoft and manufacturing, visit:

<http://www.microsoft.com/industry/man>

Microsoft Windows NT Server 4.0

lets you build an intranet

right in the comfort of your own network.



New [Windows NT* Server 4.0](#) extends beyond file, print, application and communication services to offer a complete and integrated [Internet and intranet platform](#). You can easily expand your existing network to include the Internet and intranet because Windows NT Server 4.0 comes with Microsoft* [Internet Information Server](#) and Microsoft [FrontPage™ Web authoring tool](#) included—and Microsoft [Index Server](#) is free off the Web.* Innovations like [PPTP](#), [MultiLink Remote Access](#) and [DNS](#) make it even easier by offering you secure, flexible, high-bandwidth communication across the Internet.

And, of course, Windows NT Server supports all standard [Internet protocols](#) so you're never locked in or left out in the Internet cold. Windows NT Server 4.0 performance is better too: It offers over twice the network throughput and is 35% more scalable than Windows NT Server 3.51. Most importantly, Windows NT Server is easy to use. With features like the [Windows* 95 interface](#) and [wizards](#) that automate common administrative tasks, you can move on to more important things, like lunch. If eating somewhere other than at your desk sounds like something you'd be interested in, take a closer look at Windows NT Server 4.0 at our Web site.

Microsoft®

Where do you want to go today?* www.microsoft.com/ntserver/

*Connect time charges may apply. ©1996 Microsoft Corporation. All rights reserved.

Microsoft, Windows, Windows NT and Where do you want to go today? are registered trademarks and FrontPage and the Start logo are trademarks of Microsoft Corporation.