Transforming its Global Communications Processes, IBM Turns to IP Communications for Improved Productivity and Cost Savings

Executive Summary

CUSTOMER NAME
IBM

INDUSTRY
Information technology

CHALLENGE
- Transform the company's business via next-generation communication and collaboration technologies to deliver improved productivity.
- Reduce global communications expenses.
- Develop a prioritized plan for the most effective rollout of new IPC services across the enterprise.

SOLUTION
- IBM collaborated with Cisco to develop a cost-effective plan for the internal deployment of 300,000 IPC phones in a more productive and less costly global voice network.
- Plan for IP Communications to transform multiple business processes
- Cisco also helped develop a business case identifying opportunities for IBM's own engagement in the IPC marketplace.

BUSINESS VALUE
- Nearly 30 percent savings in IT voice expense by moving to IPC over a three-to-five-year period.
- Transformative business process and productivity benefits.

IBM, the world's leading on-demand information technology business, partnered with Cisco® to significantly improve productivity through the transformation of its global voice and data communications infrastructure. They are replacing hundreds of traditional PBX systems with a highly centralized Internet Protocol Communications (IPC) architecture to cut voice IT costs by 30 percent. The conversion also showcased IBM's own expertise in IPC, helping to drive services opportunities for the IBM Global Services Group as demand in the industry for large-scale IPC transformations grows.

CHALLENGE

IBM's internal voice system was encumbered with complexity and high support, relocation, conferencing, and long-distance telephone costs. The company managed voice services at more than 1500 locations in 160 countries, where in excess of 900 PBXs supported 400,000 hard telephones, 450 voice-mail systems, 160 voice-response systems, 156 call centers, and 160,000 cell-phone users.

Fred Spulecki, director of IBM/Cisco IPC initiatives, says the environment was further complicated by the fact that "an increasingly large percentage of our workforce is mobile. That number right now is about 40 percent and growing." The company needed to transform its voice communication operation into a more strategic, collaborative environment that would accommodate IBM Lotus® Instant Messaging and Web conferencing software. Some four million instant

Prepared by Cisco Systems, Inc.
Internet Business Solutions Group

messages are exchanged each day within IBM, and a system was required to cost-effectively manage them and enable live team collaboration, regardless of geography.

"Our second challenge was cost containment," adds Spulecki. The company's outlook for further cost reductions appeared limited as tariff and circuit switching rates for its existing TDM environment bottomed out. "Formerly we had been able to deliver 10 percent annual reductions based on rate cuts," according to Spulecki, "but we hit a plateau in North America around 2000, in Europe in 2001, and in Asia in 2003. We needed to cut costs to make other investments in IT."

Outside North America, Denis Gatti, CIO for IBM EMEA, says, "In Europe, my concern is integration. I need to integrate very quickly and be able to provide flexibility at a country level. My priorities in deploying IP communications are increased productivity, sales support, and cost reduction."

"PRODUCTIVITY BENEFITS FROM BUSINESS PROCESS IMPROVEMENTS COULD BE AS MUCH AS EIGHT TIMES GREATER THAN IT INFRASTRUCTURE SAVINGS."

Fred Spulecki, Director of IBM/Cisco IPC Initiatives

Demanding on Demand

At the same time, IBM—the industry's preeminent provider of on-demand information services—found itself surrounded internally by a traditional voice communications operating environment that was limited in the kinds of on-demand capabilities it could offer. Bryan Tantzen, director of the Cisco Internet Business Solutions Group (IBSG) Technology Provider Practice, says TDM platforms aren't known for their flexibility and responsiveness to changing customer and market demands. They exhibit limited adaptability to variable organizational requirements and do not easily scale up or down to meet changing needs.

"My dream," says Gatti, "is a fully integrated telephony network running on the data network, where new users and buildings can be plugged in on-demand, and we can take advantage of IP for toll bypass and productivity applications."

IBM Global Services and its Networking Services Business Line also was interested in implementing a system that would serve as a showcase for the company's own IPC capabilities and help spur its own customers, including its outsourcing customers, to migrate to a more cost-efficient, on-demand IP communications environment.

SOLUTION

IBM is working with Cisco to replace its 900 PBX sites with approximately 25 global call manager sites and to deploy more than 300,000 IP phones, all running on the IBM Power 9 wide area data network. IBM already is well on its way. Some 50,000 Cisco IP phones are deployed and the company aims to complete its IPC transformation within five years.

The Armonk, New York-based systems development and integration leader, also worked with the Cisco Internet Business Solutions Group (IBSG) to identify opportunities to capture the benefits of IPC within its own operating environment, and to bolster its external IPC consulting and outsourcing services. IBSG put together a complete, five-year IPC transformation business case for IBM North America that helped quantify employee productivity improvements and pointed the way to cycle time reductions and lower IT costs. Following that assessment, Cisco recommended integrating and converging voice, video, and data networks to cut cycle times and increase responsiveness and productivity across many areas of the business.

Working together with IBM, Cisco and IBSG found that benefits from switching to IPC increased substantially in terms of improved business processes and employee productivity. It was projected that IPC could help enable three million hours in near-term productivity time efficiencies that could save IBM more than $25 million a year in North America alone after full deployment. That was in addition to an expected 30 percent decrease in dollar-per-phone costs.

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Denis Gatti, CIO for IBM EMEA

BUSINESS VALUE

Spulecki says IBM had performed its own detailed assessment of potential operational and productivity improvements resulting from a companywide implementation of IPC, but "we wanted a second opinion from IBSG. They came in and very independently built their own case. It was almost scary how close it was to our number, and it told us we had made an accurate assessment."

But there were some important differences, too. Spulecki says IBM's estimate of moves, adds, and changes was lower than the Cisco determination, which had an impact on final costs. In addition, says Spulecki, "IBSG made us aware of new perspectives on migration and the value of a multi-year deployment strategy instead of a site-by-site plan."

Based on a three-to-five-year implementation period, "We're expecting returns through IPC audio conferencing, and productivity benefits from business process improvements could be as much as eight times greater than infrastructure savings," says Spulecki. "We'll also drive around a 30 percent savings in voice expense by moving to IPC."

In Europe, Gatti says the decrease in his fixed telephony voice costs has been steep; voice costs dropped more than enough to be able to fund new services like cell phones. "I don't even talk about TDM any longer," he adds. "Working with Cisco, I can open a new office for 2000 people at less than half the cost of TDM."

Equally important, IBM is using its IPC experience to enhance its own global information services business. Spulecki says the company has capitalized on its network control center knowledge to add to its leading IPC service offerings and best practices portfolio for customers. "The folks who deploy those systems for us internally are out working with our customers," he says.

"THIS IS A DISRUPTIVE TECHNOLOGY, AND THERE'S A CALL FOR TRANSFORMATIONAL LEADERSHIP. WE HAVE A PRETTY WELL-DEFINED VISION, AND FOLKS REALLY ARE RALLYING AROUND IT."

Fred Spulecki, Director of IBM/Cisco IPC Initiatives

NEXT STEPS

Spulecki says IBM's IPC roll-out will continue over the next three to five years until the company's IP communications transformation is complete. A strategic part of the plan is to fully integrate telephony with e-mail and messaging to provide richer, more productive collaboration channels and a better user experience. Beyond that, he adds, the company expects to mix in applications such as click-to-call, workflow, and contact centers.

"This is a disruptive technology," Spulecki says, "and there's a call for transformational leadership. We have a pretty well-defined vision, and folks really are rallying around it."

MORE INFORMATION

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