

MAKING THE BUSINESS CASE FOR IP COMMUNICATIONS

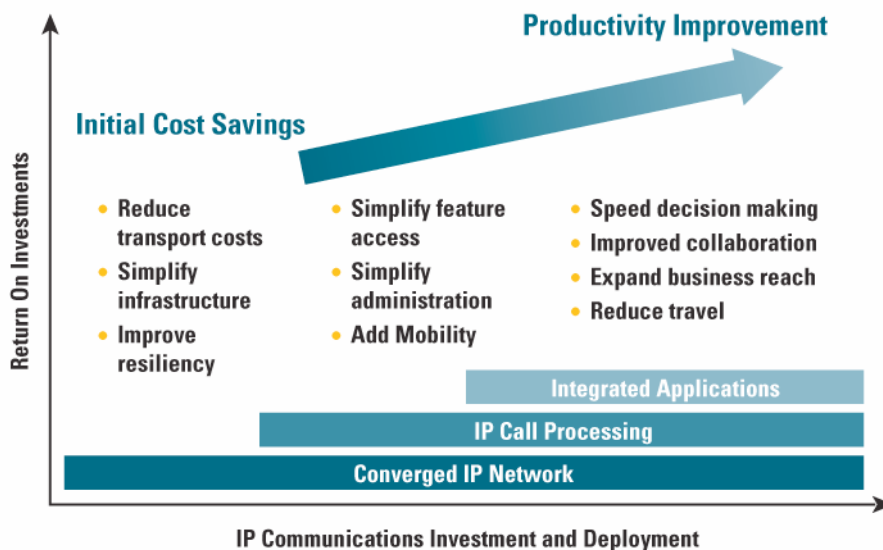
This white paper describes the factors to consider in developing a strategic and financial business case for Cisco® IP Communications solutions. It covers the distinct value delivered by Cisco Systems® for different IP Communications technologies and deployment scenarios. It also discusses the measurable, highly attractive financial returns and productivity benefits that businesses have gained from Cisco IP Communications solutions.

Today, business executives understand that IP-based solutions operating over a converged voice-and-data network are the best choice to replace aging telephone systems. But because the expense for fully implementing IP Communications (IPC) also impacts the data network, decision makers want assurance that their investment will deliver a rapid and adequate return, with both strategic and financial value.

Projections of this value can be made in an in-depth and properly focused business case for any planned IPC deployment. Certainly, cost savings and related financial measures are still an important part of the decision whether to implement IPC. However, the IPC business case has grown beyond this foundation analysis of cost savings, and beyond the basic deployment of IP telephony over a converged network.

Today, any IPC business case should also consider the broad range of financial and strategic improvements that are enabled by the many available IPC solutions. These benefits include more effective communications, increased user and IT productivity, greater operational resilience, better customer service, and powerful capabilities to integrate technologies and applications to achieve business advantage (Figure 1).

Figure 1. IP Communications Delivers Increasing Financial and Strategic Value as New Deployments Build upon the Initial Investment



In a study commissioned by Cisco Systems, the firm Sage Research surveyed a variety of businesses about their IPC deployments. When asked about the factors influencing their decisions, 70 percent of these companies indicated that potential gains in employee productivity were important. In addition, 74 percent stated their belief that IPC increased their competitiveness.

Salire Partners has performed numerous, complex analyses of IP telephony return on investment (ROI) for enterprise customers. These analyses found the average enterprise customer realized an 88-percent ROI and a 24-month payback. Projected savings differed by industry: for example, public-sector customers saw Centrex charges as the primary factor of savings, whereas financial services companies saw large savings from reduced use of long-distance services. Across all industries, the largest savings came from maintenance; moves, adds, and changes; and Centrex charges.

Tony Kevin, senior executive partner for Salire Partners, advises, “One important consideration in doing your ROI analysis for IPC is to prepare a deployment plan to work with before you begin. Variances in which locations or sites you deploy first can have a dramatic, positive impact in the ROI results.”

CISCO CUSTOMER ANALYSES SHOW STRONG VALUE

Cisco has created the Cisco Network Investment Calculator (NIC), an internal tool to help customers calculate the potential ROI for an IPC deployment. The thousands of customer analyses entered into the Cisco NIC provide valuable insight into potential ROI for a broad range of IPC solutions, customer industries, and deployment scenarios. An assessment of a sample containing more than 600 Cisco NIC analyses yielded the average financial metrics summarized in Table 1.

Table 1. Average Financial Returns Projected by Cisco NIC Tool for Customer Deployments of Cisco IP Communications Solutions

		ROI	IRR	NPV	Break-even (yr)	Number of Phones		
Vertical	Avg .ROI Period (yrs.)	Avg. (%)	Avg. (%)	Avg. (\$)	Avg.	% Immediate	Avg.	Net/Ph/Yr
Education	4.8	41	55	\$310,021	2.2	24%	283	\$456
Financial Services	4.8	136	99	\$288,071	1.8	28%	273	\$357
Government	4.7	85	77	\$342,339	1.8	41%	400	\$155
Medical	4.8	52	178	\$396,333	2.0	41%	371	\$232
Professional Services	4.9	117	131	\$222,703	1.5	35%	275	\$546
Retail/CPG Manufacturing	4.8	118	129	\$324,189	1.8	31%	263	\$255
Technology	4.7	148	173	\$275,619	1.7	31%	310	\$227
Other Vertical Market Selected	4.6	65	84	\$302,730	1.9	21%	342	\$234
Vertical Market Not Selected	4.6	140	93	\$271,403	1.7	28%	485	\$143
Grand Avg.	4.7	100%	113%	\$303,712	1.8	31%	334	\$290

The “Grand average” line at the bottom of the table shows the highly attractive potential for financial return offered by Cisco IP Communications solutions. Of particular interest to executives are the following results:

- The average time to payback was less than two years. More notably, 31 percent of the customers’ analyses showed that payback could be achieved immediately upon IPC implementation.
- Although the ROI percentage varied substantially by industry, all scenarios saw a positive return within the analysis period, which averaged less than five years.
- The average number of phones may appear small because of the sample set chosen for the analysis. However, the ongoing savings that can be gained per phone, per year points to the value that IPC solutions can bring to whole-enterprise or single-site deployments of various sizes.

“Having a precise ROI analysis was the primary factor in our securing budget to move forward with our enterprise IP telephony rollout.” –Sandy Davis, NCR Corporation

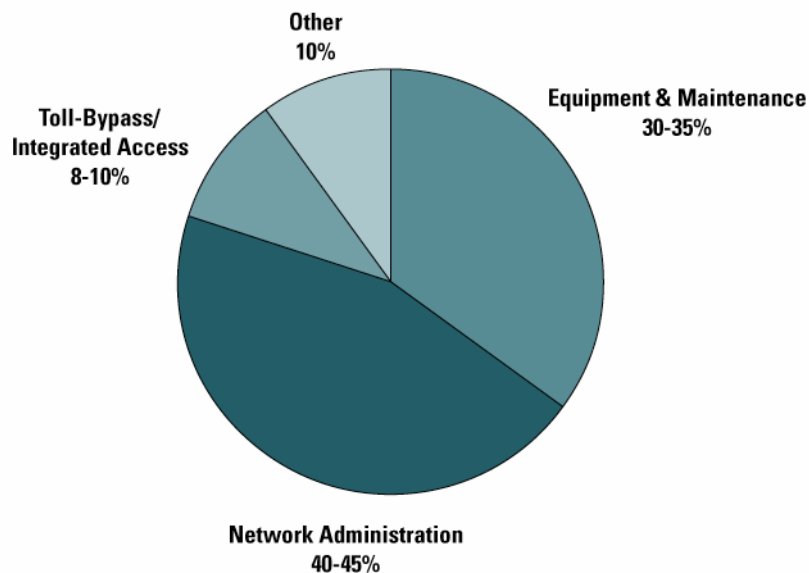
ROI FACTORS TO CONSIDER

In general, business managers look at four major categories when calculating potential ROI for an IPC solution:

1. Reduced hardware, software and maintenance costs
2. Reduced network management costs
3. Improved line usage
4. Increased productivity for users and IT staff.

These categories encompass a variety of quantitative and qualitative factors, as described in this section and illustrated in Figure 2.

Figure 2. Data from Customer Analyses in the Cisco NIC Tool Project that IP Communications Cost Savings Are Distributed Among Four Primary Areas.



Reduced Hardware, Software, and Maintenance Costs

Any move to IPC begins the process of convergence—combining multiple and separate voice, data, and video infrastructures into a single, IP-based network. This convergence yields cost savings in four major areas: network consolidation, desktop wiring, system connections, and annual maintenance fees. In many cases, these cost reductions are ongoing, contributing to a higher ROI over time.

- **Network consolidation and centralized call processing**—Enterprises with many independent sites can consolidate voice and data networks, and where appropriate, deploy a centralized call-processing system in a headquarters or regional office. This consolidation eliminates the equipment and maintenance expense of branch-office critical systems as well as the overlapping equipment, lines, and facilities in separate voice and data networks. This scenario is particularly appropriate to consider when opening new offices, moving a central facility, or trying to reduce communications expenses within a region or country.
- **Desktop wiring costs**—Connecting a PC and an IP phone on the same Ethernet port can reduce wiring expense by up to 50 percent per desktop. Although the per-desk charge can seem small, the savings across a facility can be significant. In its own IP telephony deployment, Cisco Systems saved more than US\$1.5 million total on wiring costs in six new buildings.

- **System connection expense**—Service provider links are commonly used to interconnect private branch exchanges (PBXs) and automatic call distribution (ACD) and voice messaging systems. In a converged IP network, these connections can be made on the internal network, eliminating the high monthly expense of T1/E1 and similar carrier links.
- **System maintenance and upgrade fees**—Many enterprises have disparate networks of standalone voice systems that are nearing obsolescence. It is often difficult to find parts for the system hardware and phones, and the aggregate fees for the multiple upgrade contracts involved can reach US\$100,000 or more. Businesses that use Centrex services face monthly charges that typically increase with each contract renewal.

Edwards Lifesciences has seen a significant cost difference between maintaining PBXs and a centralized Cisco CallManager system. “The support for maintaining a PBX can easily be three times the yearly recurring cost for a Cisco CallManager cluster,” says Ric Lebrecht, vice president of global technology for Edwards Lifesciences. “The ROI on our European installations was somewhere around 30 percent, with payback within a year and half. The same was true in Japan.”

Reduced Network Management Costs

An ROI calculation should also include the ongoing expenses associated with managing the voice network, maintaining equipment, administering user changes, and supporting business growth. Cisco IP Communications solutions can help organizations reduce network management costs through several improvements.

- **Improved staff productivity**—A converged network is simpler to manage, freeing the time of support staff from routine maintenance and troubleshooting to projects that deliver more substantial strategic or operational value. For example, many Cisco customers in higher education report productivity improvements in the range of 10 to 40 percent.
- **Option to reduce outsourcing**—Because internal staff can work more productively, a company may choose to perform in house all or certain network support functions that were previously outsourced. Manufacturing company H.B. Fuller has eliminated outsourcing altogether in locations where a Cisco IP Telephony system is installed, yielding tens of thousands of dollars in savings each year.
- **Growing networks, stable staffing**—With the efficiencies of a converged network and IPC, network support staff can manage much larger user communities with the same number of personnel. One Cisco customer, the Ministry of Social Policy in New Zealand, was able to support an additional 2500 users with the same network support staff of 10 people.
- **Reduced costs for moves, adds, and changes**—Although the costs of moves, adds, and changes activity can vary significantly around the world, these expenses are estimated to be as much as US\$75 to \$135 each. Cisco IP phones support extension mobility, helping organizations reduce this ongoing cost. For example, a typical enterprise with 5000 employees that performs 2000 moves per year at an average cost of US\$105 per move can save more than US\$210,000 per year by deploying Cisco IP phones.

Improved Line Usage

By making more efficient use of communications lines, a converged network also cuts the recurring expense of service provider charges for traditional voice services.

- **Reduced costs through toll bypass**—Internal long-distance (toll) calls that were previously connected over the public switched telephone network (PSTN) can now be carried over the internal network at no cost. These savings can be significant for businesses with high volumes of internal calls among company locations, especially in areas with expensive long-distance rates. After Arizona State Savings and Credit Union deployed a Cisco IP Telephony solution, monthly long-distance charges dropped dramatically, from \$11,000 per branch office to \$3500 for the entire company.
- **Lower voice circuit costs**—The ability to use the data network to transport voice traffic has allowed Cisco customers to significantly reduce annual voice circuit costs. By using a Cisco IP Communications solution, companies can eliminate redundant, expensive leased lines that interconnect PBX and voicemail systems. The flexible choice of a centralized or distributed implementation of Cisco CallManager and Cisco Unity® systems can help network managers make the most efficient use of network resources while meeting local communications requirements. It may also be possible to consolidate unused T1 channels previously assigned to voice to create fully available T1 circuits that can be used as needed for all types of network traffic.

“By replacing a traditional network and implementing Cisco IP Communications, we realize a return on investment of \$1.2 million per year,” says John McGowan, CIO and vice president of IT, Florida International University.

Increased User and IT Productivity

The savings described in the previous sections are all “hard” costs—quantifiable and easily determined. The savings generated by improvements in productivity for users and IT staff are “soft” costs—less easy to predict.

The Sage Research study found that 86 percent of companies using IPC reported that productivity benefits have grown since initial deployment. For example, some survey respondents reported average time savings of 1.6 hours per move for moves, adds, and changes activity and four hours per week in all communications by each branch-office employee.

An estimate of savings generated by productivity improvements can be made by looking at factors such as those listed in Table 2. Of course, each business should consider the unique set of productivity factors that reflect its goals and operations.

Table 2. Example Factors for Calculating Savings from Improved Productivity (Source: Taken in part from a survey conducted by Sage Research for Cisco Systems, 2005)

End-User Productivity	IT Staff Productivity	Organizational Productivity
<ul style="list-style-type: none">• Reduced “telephone tag”• Anytime, anywhere access to telephony features for mobile workers• More efficient, easier-to-use features for call handling• Unified messaging• Ability to integrate communications with core business applications	<ul style="list-style-type: none">• Less travel to remote sites• Single voice and data network is easier to manage with fewer support calls• Fewer support staff required, even with network growth• Reduced training requirements• Less time managing spare parts	<ul style="list-style-type: none">• Increased call volumes handled by contact centers• Improved customer satisfaction from better call handling and responsiveness• Increased agent usage in contact centers through voice calls, e-mail, and interactive Web sessions• Selected data and applications presented on the phone display, especially for employees with no computer access

Cisco customer SouthTrust Bank consolidated the telephone and messaging functions used in many of its branch offices into a centralized deployment of Cisco CallManager and Cisco Unity systems. This centralized design reduced maintenance expense by requiring fewer technician visits and substantially fewer spare parts. “We have added 150 new branches since 2000, our baseline year for evaluating savings from this project, and our head count has not grown. Because of this project, we have eliminated more than \$700,000 in annual key system and PBX maintenance [costs], and we have reduced our IT staff by three people.” –Stan Adams, group vice president of network services, SouthTrust Bank

CHOOSING A PRIMARY VENDOR CAN INCREASE ROI

A study and in-depth interviews conducted by Sage Research (commissioned by Cisco) found that implementing a network with a single, primary vendor gives the customer a substantial opportunity to achieve better ROI than a network built with systems from multiple vendors. A primary vendor supplies the network equipment, telephony systems, IP phones, and associated applications.

The financial benefit found by this study is compelling: the network cost of ownership per endpoint in a primary-vendor network is 26 percent lower than that of a multivendor network. Savings are spread equally across all areas, including network deployment and maintenance, network performance improvements, and benefits for IT and end users.

Sage Research also found that organizations that use a single, primary vendor for IP telephony have a 43 percent lower network cost of ownership than those that do not. The interview participants indicated that these savings come from factors such as 80 percent faster moves, adds, and changes (reported by a manufacturing company), 50 percent less installation time for new sites (cited by a pharmaceutical company), and US\$100,000 savings per year by not hiring additional staff (from a government agency).

Cisco Systems offers the products, services, support, technology expertise, and market leadership that make it a strong choice as a primary vendor. Cisco customers gain unmatched, comprehensive solutions—backed by expert services throughout the network lifecycle—while preserving their technology investments for the future.

“When you are stepping into new technologies, you have to rely on someone who fully understands them. How else can you ask the right questions? How else can you ensure that you are going in the right direction? I know if we had not gotten that help, we would have wasted a lot of time and energy trying to get to where we are today.” —Steve Perkins, manager of systems and networks, Exempla Healthcare

THE BUSINESS CASE FOR CISCO IP COMMUNICATIONS SOLUTIONS

Cisco IP Communications solutions help organizations of all types and sizes take full advantage of existing IP networks to deliver new voice services. Whether implemented individually or in combination, Cisco IP Communications solutions help customers reap the highest possible productivity and cost-savings benefits and achieve a fast, measurable ROI.

Most businesses plan to make a gradual migration from existing systems to new IPC solutions. These deployments will be made as needed, for example, to serve a new office, replace an obsolete PBX, or take advantage of new applications. Each of these scenarios, and each IPC technology, has distinct considerations for determining ROI.

Deployment Scenarios

Table 3 shows the most common scenarios that prompt an organization to deploy an IPC solution. Also shown are the major factors influencing the business case in each scenario.

Table 3. Typical Deployment Scenarios and Business Case Factors for IP Communications

Scenario	Business Case Factors
Greenfield	A new telephone system is installed to serve a new or relocating facility. This presents the most compelling business case with the largest number of potential benefits because fewer traditional systems and processes must be accommodated.
Centrex Replacement	The recurring costs of an outsourced service are replaced by an internally owned telephone system.
Multisite Centralized Call Processing	Separate systems are replaced within a company or region with centralized call processing that serves multiple sites. This presents significant potential for reducing costs, consolidating redundant infrastructure, streamlining support, and standardizing network services.
Single-site PBX and ACD Replacement	The need to replace aging or obsolete voice infrastructure often begins the migration to IPC. A PBX that has reached maximum capacity or a system that is no longer supported by the vendor are typical situations for considering IPC.

IP Telephony

Cisco IP Telephony solutions are created from a comprehensive suite of IP-based hardware and software voice systems and applications. This suite of solutions can integrate with existing PBX and key systems to help businesses migrate gradually to IP telephony while protecting current technology investments.

Cisco CallManager is a software-based call-processing system that delivers IP telephony on a converged network. It can replace or interoperate with traditional PBX and key systems and serve a variety of deployment scenarios. For example, by consolidating communications for multiple sites in a centralized Cisco CallManager, companies can reduce equipment and line expense, as well as increase productivity through simpler network management and fewer requests for user support.

A Cisco product-based IP telephony system enabled H.J. Heinz Europe to make moves, adds, and changes 86 percent faster than with a traditional PBX; decrease call hold time by 87 percent; gain a time savings of 10 percent for the nontechnology staff responsible for managing remote phone

systems by centralizing phone management; and realize a 25-percent productivity improvement by effectively using IP telephony-enabled voicemail. (Source: Yankee Group case study, commissioned by Cisco)

Cisco IP Communications solutions also can be cost-effective for standalone small branch offices, as well as those connected to a headquarters site. The innovative Cisco technology design—placing telephony and messaging functions in the router—makes Cisco IP Communications a compelling replacement for traditional key systems or small PBX systems.

The Cisco CallManager Express call-processing solution runs as an optional feature in Cisco IOS® Software routers. It can be enabled easily in Cisco integrated services routers and multiservice access routers, delivering an all-in-one voice and data solution for small- and medium-sized businesses and enterprise branch offices. Alternatively, Cisco CallManager Express offers an economical, easily deployed way to conduct a trial of Cisco IP Communications for up to 240 users at any enterprise site.

Bloodsource, a California-based blood bank with a national clientele, deployed Cisco CallManager Express to upgrade its outdated traditional voice system and communicate more effectively with staff, blood donors, and hospitals. The superior performance and reliability of the Cisco CallManager Express solution, its productivity-enhancing features, and the savings in maintenance and support costs quickly justified Bloodsource's investment. Subsequently, the organization extended IP telephony organizationwide by upgrading to a Cisco CallManager system. Based on Bloodsource's internal ROI calculations, savings would be in the thousands of dollars each month from the elimination of long-distance toll charges for calls to donors and remote offices.

Customers that grow beyond 240 users per site or that require more advanced IPC features can deploy a centralized Cisco CallManager system and simply upgrade the Cisco CallManager Express software on the router to Cisco Survivable Remote Site Telephony (SRST) software—at no additional license charge. With this migration option, Cisco offers customers an investment protection strategy that contributes to ROI for the overall IPC solution.

Johnson Inc., a leading Canadian company for personal insurance and benefit consulting and administration, has deployed a centralized Cisco IP Telephony system to serve 650 employees at its provincial contact centers and 43 branches across the country. Cisco SRST software installed in the local office routers helps ensure continuous telephone service in case of disruption in the central system. “We were spending a lot of money on Centrex lines annually,” explains Glen Ryan, manager of network operations. “Already we are recovering more than CDN\$400,000 a year, and we will save even more in the long run. Whenever we make an outbound call, we save on our long-distance rates.” He estimates reaching the payback point in 18 months on the company's investment in Cisco IP Communications solutions.

Cisco IP phones enhance employee productivity by addressing the mobility needs of users. Features such as extension mobility, the Cisco IP SoftPhone, and Cisco IP Phone 7920 wireless phones help employees stay connected wherever they work. More than 60 percent of companies participating in the Sage Research study reported savings of three or more hours per week for each mobile worker. These mobility features also free time for IT staff because, in most cases, no moves, adds, and changes activity is needed.

By switching to the Cisco IP Phone 7920G, First Health of the Carolinas Hospital has made it easier for medical staff to communicate and saves maintenance costs of more than US\$90 per phone per year. Other Cisco hospital customers report that by saving nurses as little as 150 footsteps per shift, the recaptured time provides the payback on a wireless IPC nurse-call system.

Unified Messaging

The Cisco Unity unified communications system delivers powerful, integrated messaging (e-mail, voice, and fax messages sent to one inbox) and intelligent voice messaging. Like Cisco CallManager, the Cisco Unity system has a very flexible deployment architecture, reducing the number of servers an organization must maintain, simplifying administration, and allowing common, automated moves, adds, and changes activity. These benefits can produce meaningful cost savings and productivity improvements for a business. In some voicemail applications with several thousand users, Cisco Unity deployments have reduced the total number of messaging servers in the network by 70 percent.

With unified messaging applications, the Cisco Unity system can accelerate further consolidation because the system shares the same directory as Microsoft Exchange or IBM Lotus Domino. As an added benefit, subscriber moves, adds, and changes activity can be performed in one place, eliminating redundant tasks and saving the typical cost of US\$75 to US\$100 per change. User features, such as the ability to change passwords on a Website instead of calling the help desk, can reduce the costs of technical support and improve user productivity and satisfaction. In addition, eliminating duplicate administration activity and backup storage for separate voice and e-mail systems can quickly pay for the entire system.

Unified messaging can also yield notable gains in user and IT staff productivity. Several Cisco customers have indicated their employees save up to one hour per day by accessing all messages in one system. A study by the Radicati group found a 70-percent cost reduction in system administration costs by using the common directory and message store found in unified messaging systems.

“We estimate that the Cisco Unity system is saving our workers roughly an hour a day by eliminating the steps previously required to access all their messages throughout the day.”—Steve Eager, director of network systems administration, NFL Films.

For small businesses and branch offices, Cisco Unity Express is an ideal voicemail and auto attendant solution. It is implemented as a simple add-on module for selected Cisco routers and can run in parallel with Cisco CallManager Express. Customers can also network Cisco Unity Express with a corporate-level Cisco Unity system, making it easy for all employees to share important communications.

Cohos Evamy, one of the largest architectural firms in western Canada, uses Cisco Unity Express as part of its voice and data services on a single access router for branch offices. This solution enabled the company to quickly establish its Toronto office and eliminate the substantial costs of deploying a separate PBX voice system and voice-cabling infrastructure. In addition, the firm has realized a significant reduction in maintenance costs by handling moves, adds, and changes activity internally, saving CDN\$175 per update.

Rich-Media Conferencing

Conference calls are an increasingly popular way to conduct business for many organizations. Although audio conferences are still the most common form, videoconferences and collaborative Web sessions are growing in importance.

- **Cost savings**—Although most businesses use external audio conferencing services that carry traffic on the PSTN, some have a separate network to connect conferencing systems. On-network conferencing solutions, such as the Cisco MeetingPlace® system, are more cost-effective because they help businesses use secure internal IP networks for audio and videoconferencing traffic. Conference traffic can account for 50 percent or more of a company’s overall voice communications, meaning the transport fees paid to off-net service providers can be significant. Running conference calls on the internal network virtually eliminates transport fees and results in significant cost savings.

In early 2003, Agilent formed a task force to evaluate how to reduce voice transport costs between Agilent’s North American facilities and customers and those in its Asia Pacific and EMEA (Europe, Middle East, and Africa) regions. “We knew that our current voice network traffic was costing us several million dollars each year,” said Pete Kimball, Agilent network engineer. “And, of that, we could save more than 50 percent just by using the Cisco MeetingPlace solution. We determined VoIP could shave even more off that figure.”

- **Promoting collaboration**—Rich-media conferencing technologies also help companies realize productivity improvements by enabling people to meet at any time from anywhere, promoting effective communication and collaboration. The benefits are magnified for multinational organizations that frequently conduct meetings with participants from multiple countries.

Rich-media conferencing solutions (such as the Cisco MeetingPlace solution) that integrate audio, video, and Web conferencing are far more effective than simply conducting an audio conference call. The ability for meeting participants to hear and contribute to the discussion, to view other participants and read their body language, and to share presentation slides and documents are all elements that contribute to productive and effective collaboration. It is much simpler to integrate voice, video, and Web media streams over a secure converged IP network than when voice is carried over the PSTN and video is carried on a separate network.

- **Improved user experience**—On-network deployment also makes it easier to integrate conferencing with related enterprise applications. The Cisco MeetingPlace solution can be integrated with calendaring, messaging, and directory services applications to make conference scheduling and activation a simpler and more productive task for users.

“We were paying US\$1.29 million a year [for conferencing]. As long as we were billed per minute, we knew the costs would grow each year. The Cisco MeetingPlace solution has been extremely cost-effective. We expected to see ROI in 18 months; instead, the solution paid for itself in just seven months, because our conferencing calling volume increased. And because we own the Cisco MeetingPlace solution, it will cost us no more to conduct more conferences as the business grows.” –Jeff Sira, manager of conference services, Lexis Nexis Group.

- **Economical video communications**—As network and equipment costs decline, videoconferencing and video broadcast capabilities appeal to more organizations. Avoiding travel is the most common factor for calculating the cost versus potential return of video systems. Wainhouse Research estimates at nearly US\$2400 per trip the hard and soft costs of a single employee traveling to a meeting. (Source: Wainhouse Research: The Benefits of IP-Based Videoconferencing)

Cisco offers a variety of IP video solutions, including the Cisco IP/VC videoconferencing systems, the Cisco IP/TV[®] system for live broadcasts, and the Cisco CallManager video telephony solution, which quickly and easily brings video communications functions to Cisco IP phones. These IP video solutions can improve productivity by increasing the effectiveness of remote communications. Routing video communications over IP networks instead of ISDN networks can also reduce transport expense.

Contact Centers

Cisco IP Contact Center (IPCC) Enterprise and Express Editions provide IP-based contact center solutions that help enable transparent integration of inbound and outbound voice calls with real-time chat, Web collaboration, e-mail, and other applications. This integration allows a single agent to support multiple customer interactions simultaneously—a tremendous productivity gain. Integration with ACD, interactive voice response (IVR), and other systems help customers preserve the value of existing call center investments.

Cisco IP Interactive Voice Response (IP IVR) and Cisco Customer Voice Portal provide open, extensible, and feature-rich self-service solutions for the creation and delivery of IVR applications. With support for automated speech recognition (ASR) and text-to-speech (TTS) capabilities, callers can obtain personalized answers to increasingly complex questions and conduct business in new and innovative ways—all without the costs of interacting with a live agent.

A study conducted by Sage Research for Cisco reports the following productivity results gained by customers using IP Communications in contact centers:

- Seventy-four percent reported generating an additional \$5000 or more per month per sales agent
- Nearly 50 percent reported agents handled an average of 30 or more additional calls per day
- Sixty-seven percent reported being able to assist an additional ten or more customers per day
- Ninety-one percent reported completion of an additional ten or more outbound calls per day per agent

Thrifty Car Rental has been able to reduce staffing levels in its two customer contact locations by nearly 40 agents by using Cisco Customer Contact solutions. Equally significant, employee turnover has dropped by half, to 20 percent. “Our investment paid for itself in only one year, while at the same time lowering our operational costs and increasing efficiencies,” says Bob Dupont, vice president of reservations for Dollar Thrifty Automotive Group, Inc.

Another Cisco customer achieved similar results. Legal Seafoods, a group of restaurants and an online retailer, reached the payback point in less than a year on its deployment of Cisco CallManager, the Cisco Unity system, and Cisco IPCC Express Edition for its telephone sales center.

Network Management

The CiscoWorks IP Telephony Environment Monitor (ITEM) application suite complements the management features in Cisco CallManager. This management environment helps Cisco customers assure high-quality deployment of IPC components and applications, and support proactive capabilities for service assurance.

Many Cisco customers have found that an integrated network and the CiscoWorks management applications improve the productivity of network staff and accommodate network growth with the same staffing levels. Companies interviewed for the Sage Research study report productivity benefits in five areas, as shown in Table 4.

Table 4. IT Productivity Benefits and Average Time Savings Reported by Companies Using IP Communications Solutions (Source: Survey conducted by Sage Research for Cisco Systems, 2005)

IT Productivity Benefit	Average Time Savings
Faster moves, adds, and changes activity	1.6 hours per move
Reduced user support	4.4 hours per week per employee
Simpler vendor management	5.5 hours per month per employee
Improved IT productivity	3.7 hours per week overall
Easier equipment management	4.9 hours per week overall

At clothing manufacturer Liz Claiborne Inc., the IP Communications team uses a single set of tools, CiscoWorks, to manage its entire converged infrastructure. “The network convergence and resulting organizational convergence have helped to reduce costs,” says John Kovac, vice president of IT for Liz Claiborne Inc. “Notably, our management overhead dropped because the Cisco IOS Software is at the heart of both voice and data communications.”

Services Management

The award-winning Cisco IP Communications Service and Support solutions, delivered by Cisco and its partners, provide strategic and consultative support throughout the network lifecycle. These services help customers enhance network and IT planning, increase network resiliency, sharpen the budgeting process, and improve ongoing network operations. By using Cisco services and best practices to complement in-house knowledge, customers can lower the cost of network ownership, reduce the risk and achieve faster implementation of new applications and services, and assure high network availability—all factors in realizing a high ROI.

Cisco develops and delivers lifecycle services collaboratively with a global network of carefully selected partners. These partners bring the added value of experience and expertise in particular technology, deployment, and management disciplines.

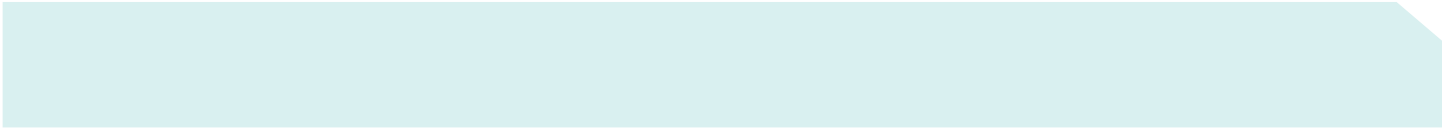
“We looked at moving to IP telephony by ourselves, but it would have cost too much and taken too long. The Cisco IP Communications system and the Cisco lifecycle services approach represented a fast track to achieving the highest degree of success in the shortest period.” –Marc Shipman, director of telecommunications, Novartis

Security

Although network security does not have an easily measurable ROI, enterprises understand that strong protection is a requirement for conducting business. However, an organization may not have fully considered the cost implications of poor security.

Network intrusions and disruptions can have measurable and nonmeasurable costs that each enterprise must assess based on its unique operations, risk factors, and network environment. Measurable costs include the expense of call fraud, system downtime, staff hours for recovery, physical destruction of equipment, theft of intellectual property, and lawsuits. Nonmeasurable costs include loss of corporate reputation, invasion of customer privacy, and physical or personal harm.

The good news is that if a network is properly secured for running critical business applications, that security will also effectively protect voice systems. If adequate security measures are in place, the enterprise will not need to consider additional security costs when planning an IPC deployment.



A properly secured IP telephony network can be more trusted than a PBX system because of the coverage and sophistication of network security technologies. In addition, converting voice traffic to data bits precludes the most common methods for service theft, eavesdropping, and disruption that are used on traditional PBX and voicemail systems.

CISCO CAN HELP DEVELOP YOUR BUSINESS CASE

As the discussion and examples presented in this paper have shown, it is possible to develop a strong business case for implementing IPC in many scenarios. Customers deploying Cisco IP Communications solutions have gained significant advantages in terms of direct costs savings, measurable improvements in employee and IT productivity, and the ability to operate in new and more efficient ways.

Cisco is ready to help you develop a business case for deploying IPC and other advanced networking technologies. Using a variety of in-depth modeling and analysis tools, your Cisco representative can help you identify the strategic and financial factors that reflect your current environment and future directions. Assistance from Cisco also includes sharing of best practices for developing business cases, drawn from work with thousands of customers worldwide.

Contact your Cisco account representative for assistance with developing a business case and identifying the right IPC solution for your needs. For more information about Cisco IP Communications solutions, visit www.cisco.com/go/ipc.

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