Forrester Consulting

Unified Communications Delivers Global Benefits

Study Indicates Major Savings For Organizations Across Three Key Industries

A commissioned study conducted by Forrester Consulting on behalf of Cisco September 2007



Table Of Contents

Executive Summary4	
Retail Banking Business Challenges5	
Survey Methodology6	
Major Findings From Retail Bank Survey7	
UC Improves Staff Utilization While Reducing Branch Expenses13	
UC Improves Response Time For Decision-Makers14	
Conferencing And Collaboration Improve Banks' Performance17	
Training Expenses Are Necessary But Controllable19	
Retail Bank Summary22	
Manufacturing Business Challenges	
Survey Methodology24	
Key Findings From Manufacturing Survey2	
Collaborative Environment Accelerates New Product Development25	
Easier Access To Resources Supports Rapid Problem Resolution	
Enhanced Communication Promotes Greater Efficiency	
Addressing High Costs Of Employee Training33	
Improved Response Times Vital In Critical, Time-Sensitive Situations	
Manufacturing Summary	
Education Key Challenges	
Survey Methodology	
Key Findings From The Survey	
Travel Is Time Consuming For Many School Administrators	
Technology Cost Containment Is A Significant School Challenge	

	Emergency Preparation Is A Major Concern For School Officials	.44
	Schools Advance Curricula With Better Access To Peers	.47
	Web And Video Conferencing Expand Educational Experiences	.50
	Getting Messages Through To Teachers Is Not Easy	.53
	Educational Summary	. 56
О	Overall Summary	.57
A	ppendix A: Endnotes	. 58

© 2007, Forrester Research, Inc. All rights reserved. Forrester, Forrester Wave, RoleView, Technographics, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. Forrester clients may make one attributed copy or slide of each figure contained herein. Additional reproduction is strictly prohibited. For additional reproduction rights and usage information, go to www.forrester.com. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change.

Executive Summary

Unified communications (UC) transforms how businesses communicate by making it simpler to contact others over any device in any location resulting in improved business processes and customer experiences. Organizations run on information and UC facilitates the flow of information to speed the decision-making process, respond more quickly to customers, and reduce latency in employee communications. UC technology connects communication applications like voice, video, and audio conferencing with collaboration applications like calendars, email, Web conferencing, instant messaging, and presence on an open standard platform to position companies to become more responsive and agile.

Forrester Research conducted surveys of more than 420 key business decision-makers in <u>retail</u> <u>banking</u>, <u>manufacturing</u>, and <u>education</u> in six countries to identify areas in which their organizations experienced communications difficulties, and to quantify the extent to which these issues could be improved with UC. Survey respondents were given a description of how UC would function in certain situations and asked if these new capabilities would affect their ability to communicate more effectively. The situations described typical scenarios that were specific to each vertical industry. The survey did not identify any specific product or vendor.

The survey evaluated key communication situations common to most organizations: support for mobile employees, delays in business processes, lack of knowledge sharing among a distributed workforce, and slow response times to critical business issues. Although each industry has its own priorities, improving business agility, reducing costs, and increasing employee productivity are common across all industries.

The following sections describe the key findings of these surveys for each of the three vertical markets. Although there were some differences among countries, the survey confirmed the following:

- Organizations around the globe have multiple areas within their lines of business in which workers experience communication challenges.
- A distributed workforce adds more complexity making it necessary for organizations to support effective communications across remote sites and for emergency response.
- Unified communications provides real value in every industry surveyed in terms of cost reductions, increased productivity, rapid problem resolution, improved customer response, and business agility.

Retail Banking Business Challenges

Retail banks face a competitive environment and place a high priority on customer responsiveness and retention.¹ Ineffective communication results in customer dissatisfaction and customer attrition. Retail banks' primary goals are to improve customer satisfaction and retention, increase sales revenues and profitability, and contain costs through increased operational efficiency.

Retail banks face several communications obstacles that affect the delivery of service to their customers. Typical problems that occur within retail banks include the following:

- Customer dissatisfaction due to inefficient service. Regardless of the channel a customer chooses when contacting a bank branch, telephone, Web, ATM, or kiosk slow response times cause customers to consider other banking alternatives.
- Lack of available personnel to handle complex matters. Banks cannot always have the appropriate subject matter expert available at every branch when needed. This results in service issues that affect customer satisfaction, organic growth, and new customer acquisition.
- **Peak banking hours support**. Customer traffic tends to concentrate around certain hours each day, creating longer wait times and drops in service levels during busy hours. Banks strive to find ways to better support these peak hours without incurring additional headcount, but often fall short.
- **Drop in service levels for telephone and Web customers**. Banks promote the benefits of using alternative channels other than the branch like the contact center and Web site, but support on these channels sometimes falls below branch service levels.
- Need to control operational expenses. Banks strive to find ways to increase employee productivity and serve all channels more efficiently without increasing headcount. Additionally, expansion costs need to be contained without negatively affecting a bank's ability to support its customers.

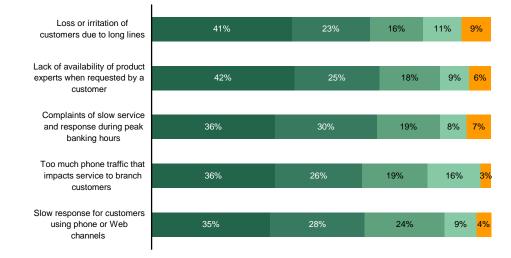


Figure 1: Please rate how challenging each of these issues facing banks today is for your bank.*

■1 - not a challenge ■2 ■3 ■4 ■5- a significant challenge

Base: 140 senior retail banking managers *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Survey Methodology

Forrester interviewed 140 retail banking business decision-makers in six countries (Australia, France, Germany, India, the United Kingdom, and the United States) to evaluate the benefits of UC for their operations. Survey participants included president or head of business unit (18%), VP/director of branch operations or COO (53%), VP/director of channels or CMO (21%), and VP/director of finance or CFO (8%). Questions provided to the participants described how UC capabilities would apply to issues, and respondents were given a choice of responses for each situation including a negative response.

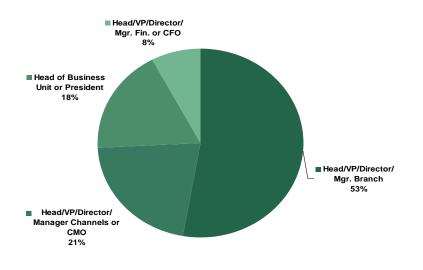


Figure 2: Which of the following best describes your role?

Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

This survey included various attributes of unified communications that improve business processes including the ability to reach subject matter experts (SMEs) more quickly, improve customer response times, reduce delays in finding and collaborating with colleagues, share senior staff across locations, and improve the accessibility of remote employees.

Major Findings From Retail Bank Survey

This survey provided senior managers of retail banks with a description of UC capabilities across various business areas. Key findings of this global survey include the following:

- 80% could generate more Web site sales with online collaboration with experts.
- 85% could increase customer satisfaction by reducing delays in customer response times.
- 80% could speed project completion with improved collaboration.
- 76% indicate digital merchandising at branches could offer brand differentiation.
- 76% could increase sales to customers with immediate support from banking experts.
- 89% could save time with more effective branch manager communications.
- 78% could reduce training costs with Web/video conferencing.
- 82% could increase sales activities by using e-learning for training.
- 81% could gain more productivity from remote workers with advanced business features on their mobile devices.
- 73% could improve overall employee productivity by sharing staff with call center teams.

Improved Contact With Headquarters Supports Sales Efforts

Branches often need to consult with subject matter experts (SMEs) at headquarters to support complex sales opportunities, receive approvals, or resolve complex customer issues. Typically, contact with SMEs requires several attempts by branch employees and additional time to coordinate meetings, which often results in delays in responding to customers.

Ability To Connect To SMEs Increases Sales Opportunities For 76% Of Branches

Respondents were asked if branch employees had the ability to reach SMEs and immediately connect them with customers, would this affect sales opportunities. Seventy-six percent indicated that this immediate connection to experts would increase sales opportunities at the branch.

Figure 3: If branches had the ability to know the availability of subject matter experts (SMEs) and connect them with customers in real time, how would this affect sales opportunities?

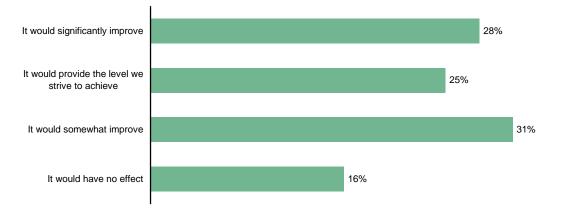


Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Faster Response Time Improves Customer Satisfaction For 84% Of Branches

The ability to respond quickly and connect them immediately with experts would positively affect branch customers. Results indicated that 84% of branches would generate higher satisfaction, with responses ranging from significant improvement to some improvement in customer satisfaction.

Figure 4: If branches had the ability to know the availability of subject matter experts (SMEs) and connect them with customers in real time, how would this affect customer service?



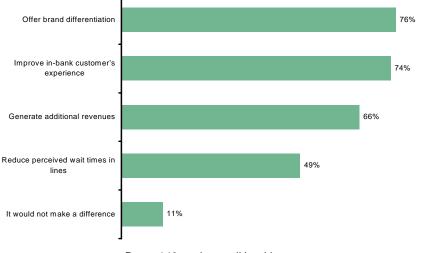
Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Digital Merchandising at Branches Creates Positive Benefits

Centralized applications that create audio, video, and graphical content for digital signs in branches provide real time information to customers on special events and bank promotions. Survey respondents were asked if their marketing department had graphical tools for digital merchandising in what ways would those tools affect the bank's marketing efforts. The majority of managers indicated that these applications would support brand differentiation, improve the customer experience, and generate additional revenue for the bank.

- Support brand differentiation: 76%.
- Improve the customer experience: 74%.
- Generate additional revenue: 66%.

Figure 5: If your marketing department had the tools available to create and edit audio, video, and graphical content for digital signs to alert customers to special events and promotions at the branch, how would this affect your bank? (Select all that apply)

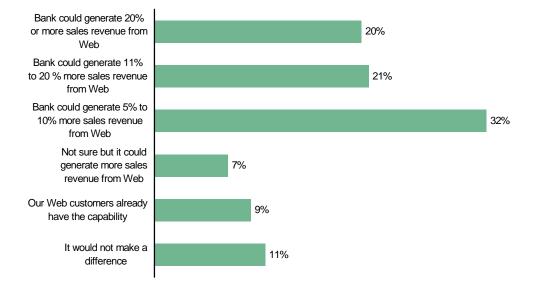


Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Immediate Web Access To SMES Generates Sales For 80% Of Banks

More banks are offering banking services on their Web sites as customers are increasingly adopting this channel for higher value services. However, when customers require assistance from SMEs they frequently encounter long delays and either have to wait or look elsewhere for answers. Survey respondents were asked to estimate the sales benefits of allowing their Internet customers to collaborate with experts while online; 80% indicated that it would increase revenues, 41% estimating gains from 11% to more than 20%. Another 32% predicted revenue gains in the range of 5% to 10%, and an additional 9% said they already offer this capability.

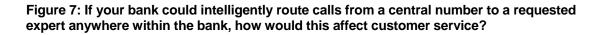
Figure 6: If Internet banking customers could collaborate with experts in real time while online, how would this affect sales for this channel?

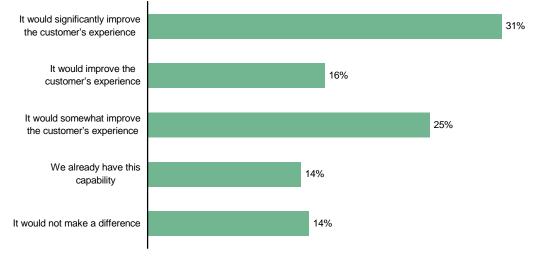


Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Centralized Routing To Experts Creates Positive Customer Experiences For 72% Of Banks

Banks could engage their staffs more effectively by creating a centralized contact phone number for their customers and intelligently routing calls to experts located virtually. Respondents were asked to indicate how this capability would improve customer service. Seventy-two percent indicated that this capability would be an improvement, an additional 14% that they already have this feature.

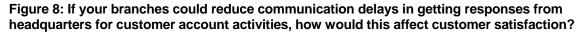


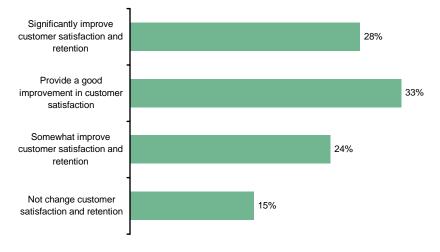


Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Reducing Delays In Bank Response Increases Customer Satisfaction

Branch employees regularly communicate with headquarters regarding customer account activities. Frequently, branch employees must wait for responses, resulting in delays in providing answers to their customers. Eighty-five percent of banks reported that reducing communication delays would improve overall customer satisfaction with branches.





Base: 140 senior retail banking managers

Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

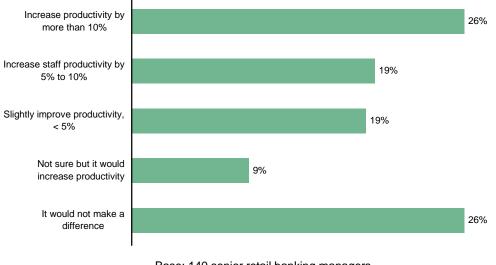
UC Improves Staff Utilization While Reducing Branch Expenses

Staffing represents a major expense for retail banks both in salaries and indirect expenses like space and area requirements. Optimizing the workforce offers opportunities for cost containment and operational efficiency by reducing down times and unbalanced work loads. By improving staff utilization, banks deliver more consistent service to their customers, while lowering operational expenses.

Banks' Sharing Of Staff During Peak Call Times Improves Employee Productivity

Sharing service staff to support peak hours for call centers improves service employees' productivity. Respondents stated that sharing staff to support telephone traffic would improve branch staff productivity for 73% of banks, 45% estimating that it would improve productivity by 5% or more.

Figure 9: If branches could share their customer service staff to support call centers during peak call times, how would this affect the overall productivity of bank employees?*



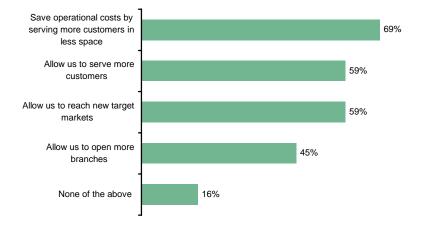
Base: 140 senior retail banking managers *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Increased Self-Service Options Reduce Operations And Staffing Costs

Banking automation provides self-service options to customers. Survey respondents were asked if self-service options increased, how would this change staffing, operations, and facility costs compared to how they currently operate. The following benefits were cited:

- Reduce operational costs by serving more customers in less space: 69%.
- Enable banks to serve more customers: 59%.
- Enable banks to reach target markets: 59%.
- Enable banks to open more branches: 45%.

Figure 10: If you could reduce office space requirements with increased automation, how would this change staffing and new facility costs compared to managing larger staffs at bigger sites? (Select all that apply)



Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

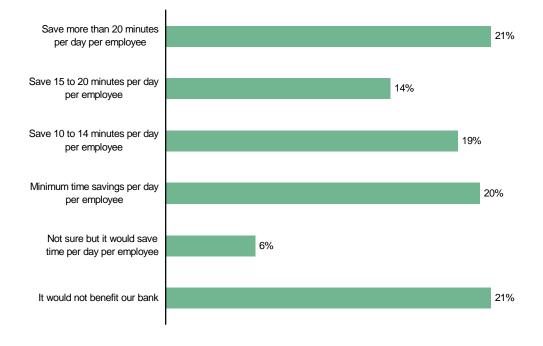
UC Improves Response Time For Decision-Makers

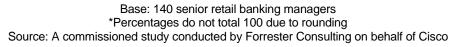
Retail banks support a distributed workforce with many employees traveling to multiple locations. This often makes it difficult for branch employees to reach their managers for critical questions. The inability to reach decision-makers for essential matters results in delays, slows response to customers, and wastes the time of the branch staff searching for them.

Ability To Reach Others Quickly Saves Valuable Time For 80% Of Banks

Survey respondents were asked if branch employees who attempt to locate key managers using multiple modes like cell phone, email, telephone, and instant messaging had the ability to reach them using only a single telephone number, how much time would this save employees per day. Seventy-nine percent of respondents indicated that this would be a benefit, 54% that it would save from 10 to more than 20 minutes per employee per day.

Figure 11: If branch employees who attempt to locate key managers using multiple modes (telephone, cell phone, email, and instant messaging) had the ability to reach them using only a single telephone number, how much time would this save?*



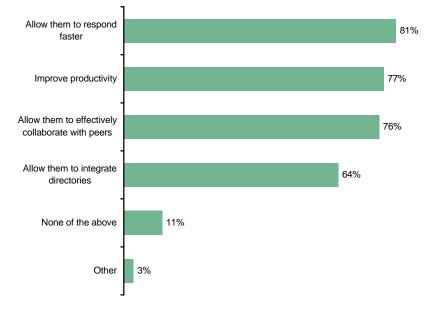


Access To Applications Makes Mobile Employees More Productive

As more employees work away from headquarters and travel more frequently, the need to stay connected increases. Banks are increasing their mobile sales forces to support ever-expanding footprints. Mobile employees face time constraints and need to optimize their time away from the office. Survey respondents indicated that if mobile employees could view from their mobile phones or PCs their colleagues' availability, and point and click to immediately start a conference call, productivity would improve in the following ways:

- It would enable them to respond faster: 81%.
- It would improve productivity: 77%.
- It would enable banks' employees to effectively collaborate with peers: 76%.
- It would enable banks to integrate directories: 64%.

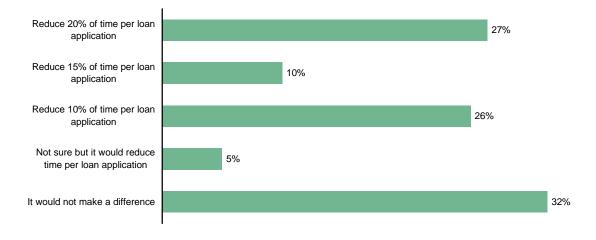
Figure 12: If mobile employees could view from their mobile phones or PCs the availability of teammates or point and click to start conference calls, how would this affect their productivity? (Select all that apply)



Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Improved Visibility Of Loan Officer's Status Speeds Loan Processing

Banks consider the turnaround time for processing loan requests a key competitive differentiator. Survey respondents were asked if account managers could determine which loan officer was available from either their desktop or telephone and connect immediately, how would this affect the branch's ability to service customers' loan requests. Sixty-eight percent of banks indicated that this capability would reduce loan-processing time, 63% that it would do so by 10% to more than 20%. Figure 13: If account managers could determine which loan officer was available from their desktop or telephone and connect customers immediately, how would this affect the ability to service customers' loan requests?



Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

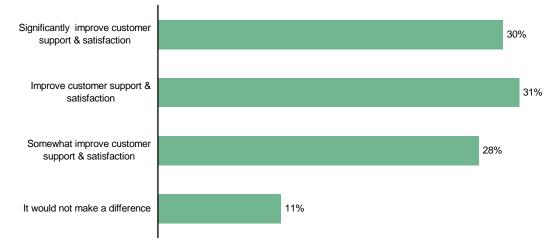
Conferencing And Collaboration Improve Banks' Performance

Retail banks rely on the ability to connect with customers and respond quickly to their requests. This requires effective communication between branch employees and headquarters. Additionally, banking staff members need to collaborate with each other to solve business issues. Conferencing and interactive collaboration enable faster exchange of information and help banks respond more quickly.

UC Capabilities Save Time For 89% Of Branch Managers

Branch manages often meet regularly to share ideas and discuss issues regarding branch management. Advanced desktop and video conferencing systems and desktop collaboration tools enable branch mangers to initiate interactive conferencing sessions by pointing and clicking on their colleagues' names. Eighty-nine percent of respondents indicated this capability would save them time.



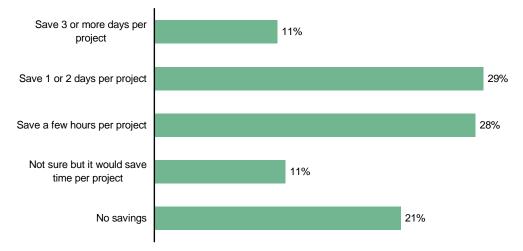


Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Improved Collaboration Accelerates Project Completion For 79% Of Banks

Banking projects often involve several employees who need to communicate back and forth numerous times to review and comment on documents. Survey respondents were asked if staff members could view and edit documents simultaneously online rather than communicate back and forth by email, how would this affect projects. Seventy-nine percent indicated that it would save time, 40% estimating that it would save from one day to more than three days per project, and 28% that it would save a few hours per project.

Figure 15: If you could improve internal communications for projects or customer applications by enabling key participants to view and edit documents simultaneously during a teleconference rather than communicate by email, how would this affect project completion time?



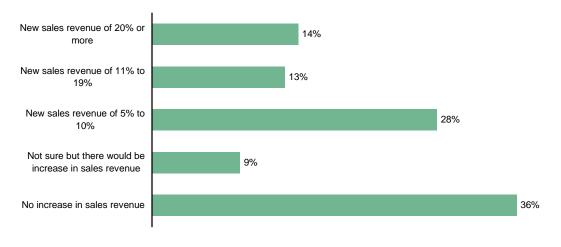
Base: 140 senior retail banking managers

Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Interactive Video Kiosks Augment Sales Revenue For 65% Of Banks

Customer self-service kiosks with live video connections provide an opportunity for retail banks to offer services previously available only inside banks. Survey respondents were asked if banks offered conveniently located kiosks with live connections to experts for advanced services such as opening new accounts, how would this affect sales revenues. Sixty-five percent of respondents indicated revenues would increase, 56% that they would do so by from 5% to more than 20%.

Figure 16: If you offered conveniently located kiosks or self-service machines with live video connections to experts for more advanced services like opening new accounts, how would this affect sales revenues for non-branch locations?*



Base: 140 senior retail banking managers *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

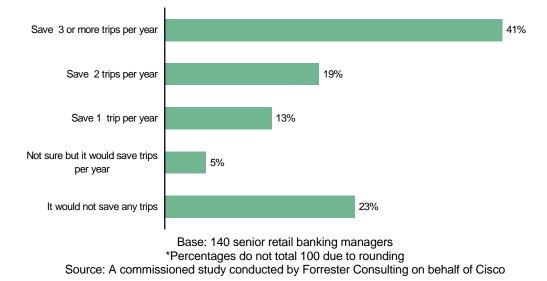
Training Expenses Are Necessary But Controllable

Banks' training is frequently held in conference room settings, either at the branch or external locations. Only a few branches offer desktop learning for their employees. Although banks consider training a necessity, training costs represent a significant expense. Many banks consequently look for new ways to reduce their training expenses without sacrificing the quality of learning.

Web And Video Conferencing Reduce Travel Costs For 78% Of Banks

Most classroom training subjects are suitable for interactive desktop courses. E-learning courses reduce travel time and expenses and provide flexibility, enabling managers to schedule training during slower business hours. Seventy-eight percent of respondents indicated that interactive Web and or video desktop training would reduce the number of training trips per employee, 60% that it would do so by two or more trips per employee per year.

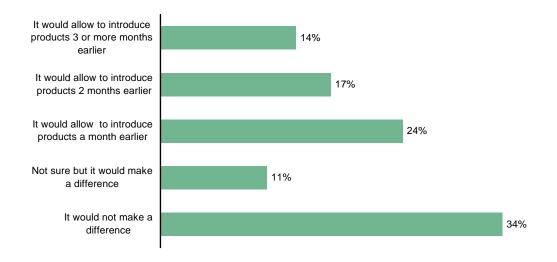
Figure 17: If you could train branch personnel on new products or services via Web conferencing and video, how would this affect the number of external trips required for training purposes, on average, per employee per year?*



Products Introduced Sooner With Web/Video Conferencing Training

Banks can introduce new products and services faster by offering desktop training for their employees. Asked how Web/video conferencing training would affect their ability to introduce new products and services, 66% of respondents indicated that it would enable them to speed up the introduction of new services, 55% that it would enable them to introduce products from one to more than three months sooner.

Figure 18: How would offering desktop training using Web/video conferencing affect your ability to introduce new products/services?



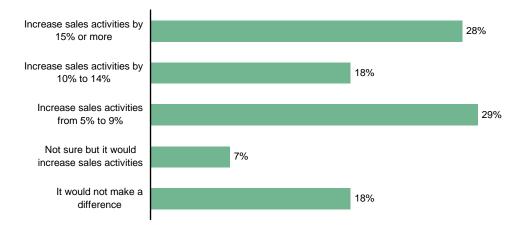
Base: 140 senior retail banking managers

Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

E-Learning Capabilities Increase Sales Opportunities For 82% Of Banks

Providing employees with regular training on new products and services via Web and or video conferencing increases sales activities that drive revenues and profits. Respondents were asked how offering regular employee training via Web or video conferencing or both would affect sales opportunities. Eighty-two percent said that sales opportunities would be increased, 75% that sales opportunities would be increased by from 5% to 15% or more.

Figure 19: If employees could regularly receive new product training via Web/video conferencing, how would this affect new sales opportunities at branches?



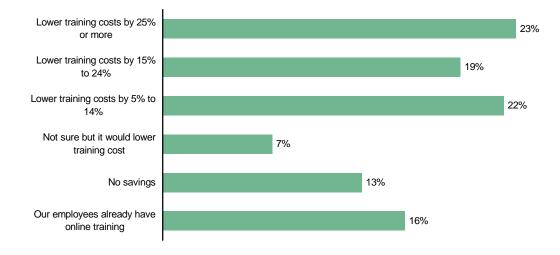
Base: 140 senior retail banking managers

Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Web/Video Conferencing Training Reduces Banks' Training Budgets

Lower training costs go right to a bank's bottom line. Seventy-one percent of respondents indicated that offering Web or video training on desktop PCs rather than having employees travel would lower overall training expenses (including facility costs, room set up, instructor fees, and employee back up support at branches), 16% that they already use this capability to reduce training costs.

Figure 20: If your bank could offer Web or video training on desktop PCs rather than have employees travel for classes, how would this affect your training costs (including facility and room set up costs, instructors' fees, and employee back up support)?



Base: 140 senior retail banking managers Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Retail Bank Summary

Retail banks need to grow revenues and provide value to their customers. This survey identified several areas that positively influence a retail bank's ability to achieve its business objectives. Major benefits identified in this survey include the following:

- Improve customer support. There are numerous ways UC improves a bank's relationship with its customers. With UC, banks can respond more quickly to customers' requests and speed delivery of products and services as well as access to the appropriate experts. Retail banks can better accommodate their customers over all communication channels and improve customers' experiences in contacting the bank.
- Increase sales opportunities. Retail banks have the ability to better serve their customers by having the appropriate expert available to handle customer calls and provide information as needed. Additionally, internal staff can be trained on new products and services more quickly and be better able to support new product offerings, enabling faster response to market changes. By improving the response to new sales opportunities, banks can shorten the sales process and handle more opportunities.
- Reduce or contain costs. UC offers several ways for banks to manage costs. Web and audio and video conferencing reduce distances and facilitate collaboration among bank employees and with customers. These technologies leverage the skills of existing subject matter experts by increasing their availability across a wider geography. Improved communication tools enable banks to share staff members to support peak customer traffic in call centers, and video kiosks are a way for retail banks to improve customer service and increase their presence in the community without erecting new buildings.
- **Improve staff productivity.** Staff members can receive at their desks training to help them become more skilled at their jobs and information about new products and services. UC, through improved conferencing features, reduces employee travel to other locations. This potentially supports a broader footprint of distribution locations as well. Additionally, internal

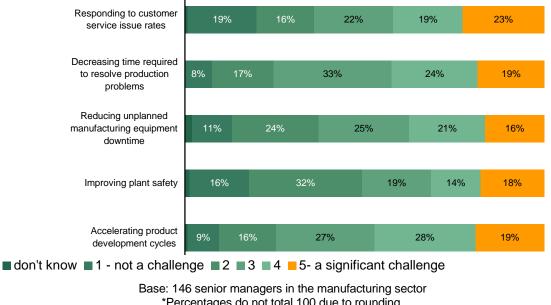
staff members spend less time trying to reach others and more time doing their jobs and thus become more productive.

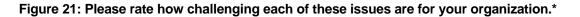
Manufacturing Business Challenges

Manufacturing companies face competitive pressure to meet new product and production deadlines, deliver quality products, and respond quickly to customers' changing demands.² It is essential for them to keep in step with variability in their buyers' behavior and adapt quickly to dynamic market conditions. Manufacturers realize that meeting product delivery schedules and managing supply chains are critical to obtaining and maintaining high customer satisfaction ratings. UC offers manufacturing companies several capabilities that enable them to better meet their customers' demands and business goals while balancing business agility and cost containment.

Key areas of concern for manufacturing companies include:

- Accelerating product development cycles. Manufacturing companies face constant pressure to continuously speed product innovation as measured by time to market; slow response to changing market conditions in today's hyper-competitive environment places companies at a distinct disadvantage relative to competitors.
- **Managing plant safety.** The health and productivity of employees requires that manufacturers maintain a safe working environment that is supportive of sound working conditions.
- **Decreasing time to resolve production problems.** Companies often spend as much time trying to locate individuals to address various production problems as is actually spent diagnosing and fixing the problems. This potentially adds hours to the resolution of everyday production issues.
- **Meeting customer expectations.** Customers expect companies to meet service level commitments for product delivery and address any quality issues or concerns with products. Delayed responses are a common cause of customer dissatisfaction.
- Managing costs. Companies face rising costs and so look for ways to contain expenses and reduce overhead. Improving worker productivity and reducing overhead are major objectives for most companies.





*Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Survey Methodology

Forrester conducted a global survey of manufacturing companies ranging in size from 100 to 5,000 employees. The interviews covered a mix of companies including computer hardware, electronic components and equipment, telecommunications equipment, security products, consumer products, and pharmaceuticals. Surveys were conducted in Australia, France, Germany, India, the United Kingdom, and the United States and directed to senior manufacturing executives. Interview respondents included: director/VP level in production or operations manager, 48%; VP or director of IT, 42%; director/VP of product development, 10%. Questions described unified communication capabilities related to business processes within manufacturing companies. Respondents were given a choice of answers for how UC would affect each situation.

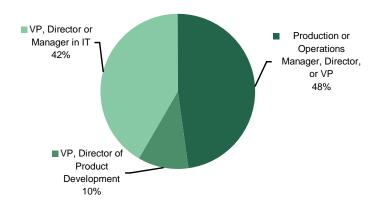


Figure 22: Which of the following best describes your role?

Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Key Findings From Manufacturing Survey

This survey described UC capabilities for product development and production within a manufacturing setting. Senior managers from the manufacturing sector indicated the following UC benefits.

- 83% of manufacturers could improve customer satisfaction if they had the ability to directly connect customers with subject matter experts.
- 87% of manufacturers could save time in the new product development cycle with information portals.
- 72% of manufacturers could reduce personnel travel with Web/video conference capability.
- 84% of manufacturers consider rapid production problem resolution a major benefit.
- 75% of manufacturers experience project delays due to inability to reach key decisionmakers.
- 73% of manufacturers could shorten new product development cycle times with ad hoc conference capabilities.
- 70% of manufacturers could decrease problem resolution times if they could enable solvers to find each other more quickly.
- 68% of manufacturers could reduce training costs with Web/video conferencing.
- 71% of manufacturers could increase plant floor productivity if they had the ability to know the availability of personnel.
- 68% of manufacturers could save time in emergency response situations if personnel had the ability to contact each other via any device using a single address.

Collaborative Environment Accelerates New Product Development

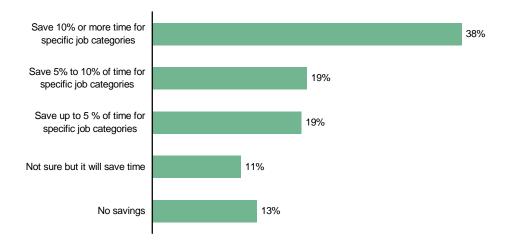
Product developers need to respond promptly to dynamic market conditions and accelerate the release of new products. Adhering to schedules is important, as extended product development cycles result in higher manufacturing costs, excess overhead, and shorter windows of market

exclusivity. Agility and collaboration among employees are key to meeting production ramping schedules for new products.

Information Portals Save Time In The New Product Development Cycle For 87% Of Companies

Information portals simplify and automate product development tasks and improve the flow of information to employees. Respondents were asked if they could improve task assignments and reduce process time with enterprise information portals, how much time would they save. Eighty-seven percent of manufacturers indicated that portals would save time, 57% that the time saved would range from as much as 5% to more than 10% for specific job categories.

Figure 23: If task assignments could be improved and process time reduced with enterprise information portals that simplify and automate product development tasks, what percentage of time could be saved?

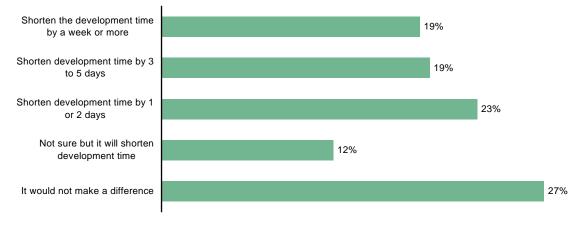


Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Direct Connection With Experts Shortens New Product Development Cycle Times For 73% Of Companies

Collaboration with team members on projects is critical, but trying to determine the availability of others is sometimes difficult due to distributed locations and lack of visibility of co-workers. Respondents were asked if project teams could determine an expert's availability and launch an ad hoc conference call to discuss critical information, how much time would be saved. Seventy-three percent of respondents indicated that time would be saved, 61% that cycle time would be shortened by from one day to more than one week.

Figure 24: If product development project teams could easily determine an expert's availability and preferred communication method and launch an ad hoc conference call to discuss critical development issues, how would this affect development time?

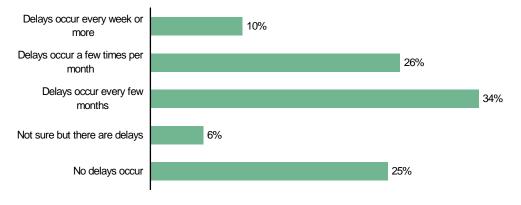


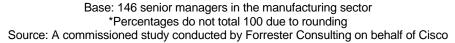
Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Difficulties Reaching Decision-Makers Cause Product Development Project Delays For 76% Of Companies

Ineffective internal communication directly affects business productivity and response to problems. The consequences of not reaching decision-makers — project slowdowns and work stoppages — occur more frequently than most companies realize. Respondents were asked what was the frequency of projects delayed due to the inability of the project team to reach the decision-maker to get sign off on a project or milestone. Seventy-six percent of respondents indicated they experience some delays, 69% that the frequency of these delays ranges from every few weeks to every few months. Shortening product development time leads directly to increased revenue from a time to market advantage.

Figure 25: How often during product development are projects delayed due to the inability of the project team to reach the decision-maker to get sign off on the project or milestone?*

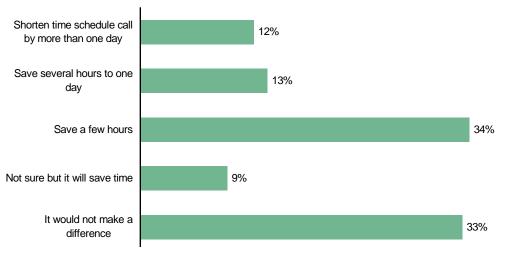




Point And Click Scheduling Of Conferences Saves Time For 68% Of Companies

For many organizations, it takes more than one day to plan a conference session and notify all necessary participants. This delay slows projects due to the back and forth nature of setting up conference calls. Respondents were asked if they could invite all participants and immediately launch a multiparty conference session from their PC by just pointing and clicking on co-workers' names, how much time would be saved. Sixty-eight percent of respondents said this would save time, 59% that it would save from a few hours to more than one day per call.

Figure 26: If you could invite participants and immediately launch multiparty conference calls from your PC just by pointing and clicking on co-workers' names, how much time would this save you?*

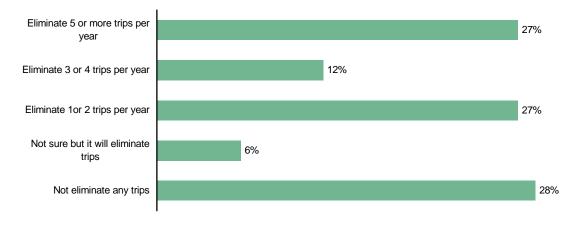


Base: 146 senior managers in the manufacturing sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Web/Video Collaboration Reduces Travel For 72% Of Companies

Business travel incurs many costs including transportation and employees' time spent commuting to meetings. Collaborative work sessions via Web and video conferencing enable employees to share information in real time, make changes, and reach agreements quickly and without time lost to travel. Asked if they could facilitate collaborative work sessions this way across their product development teams would it make a difference, 72% of respondents indicated that it would reduce internal travel, 66% that it would save from one to five trips per year.

Figure 27: If product development teams could facilitate collaborative work sessions via Web and video conferencing, how would this affect the number of trips per year required for internal meetings among team members?



Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Easier Access To Resources Supports Rapid Problem Resolution

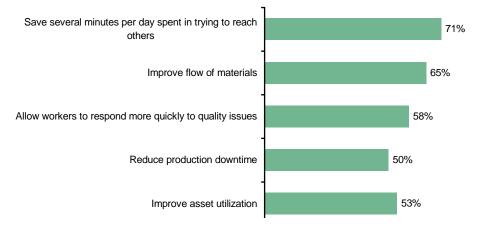
Manufacturing problems range from recurring glitches to full-stop shut-downs, all of which lower production throughput and affect not only costs but also business partners and customers. Manufacturers need to quickly address production problems to minimize disruptions. To solve shop-floor problems, companies need to bridge the distance limitations of a distributed workforce and provide employees with the ability to communicate effectively across any two locations in a minimum amount of time.

Improved Access To Co-Workers Increases Plant Floor Productivity

Most manufacturing facilities extend across multiple buildings or locations, making it difficult at times for employees to reach key managers and supervisors. Although many supervisors and managers use mobile devices, they still might not be accessible when needed. Survey respondents indicated that seeing team members' availability on their handheld devices would provide the following benefits:

- Save several minutes per day trying to reach others: 71%.
- Improve the flow of materials: 65%.
- Enable workers to respond more quickly: 58%.
- Improve asset utilization: 53%.
- Reduce production downtime: 50%.

Figure 28: If plant/production floor supervisors and managers could see other key team members' availability, how would this affect plant floor productivity? (Select all that apply)

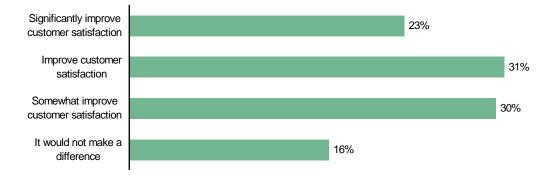


Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Rapid Problem Resolution Considered A Major Benefit By 84% Of Companies

Companies that are responsive and make every attempt to solve problems quickly earn the respect and loyalty of customers. Improving customer satisfaction provides significant competitive differentiation for most manufacturers. Respondents were asked if their company became known for rapid problem resolution by reducing communication delays, what would this mean in terms of customer perceptions. Eight-four percent indicated that it would improve customer satisfaction.

Figure 29: If your company could become known for rapid problem resolution by reducing delays in internal communications, what would this mean in terms of customer satisfaction?



Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

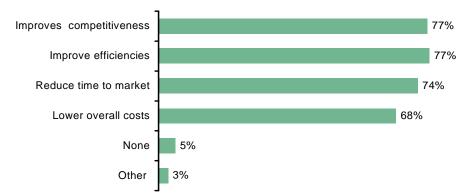
Companies Cite Several Benefits From Reducing Delays In New Product Development

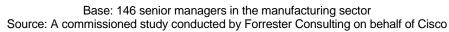
Respondents indicated that if their companies could effectively reduce communication delays, they would realize the following benefits in their new product development processes:

- Improve competitiveness: 77%.
- Improve efficiency: 77%.
- Reduce time to market: 74%.

• Reduce overall costs: 68%.

Figure 30: What is the business impact of reducing communication delays on new product development? (Select all that apply)





Enhanced Communication Promotes Greater Efficiency

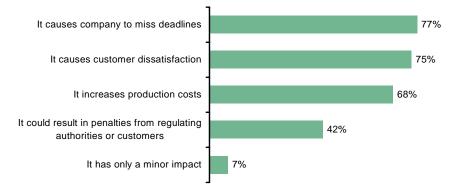
Manufacturing managers pay close attention to adherence to schedules and must communicate timely information to their employees continuously. To avoid costly delays, workers need to be informed promptly of all changes in production schedules. Companies are tasked with finding innovative ways to operate more efficiently and improve employee productivity. Missed or delayed communications in the manufacturing process are a source of business disruptions, which affect margins and profits.

Manufacturing Communication Delay Triggers Costly Consequences

Several activities that cause problems within the production process can be linked to how effectively employees and managers communicate. Among the serious consequences respondents attributed to communication delays were the following:

- Missed deadlines: 77%.
- Customer dissatisfaction: 75%.
- Increased production costs: 68%.
- Regulatory penalties: 42%.

Figure 31: When communication delays occur in the manufacturing process, what are the business consequences? (Select all that apply)

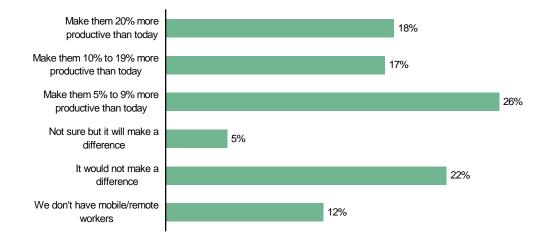


Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Providing Advanced Features On Mobile Devices Improves Remote Workers' Productivity

With a growing mobile workforce, employers need to support their remote employees with the same business communication capabilities as employees working from office locations. Respondents were asked if remote workers' mobile devices or PCs had access to advanced business telephone features like conferencing, integrated calendars, directories, and email, how would this affect their productivity. Sixty-six percent indicated that this capability would make remote workers more productive, 61% that it would improve productivity by from 5% to more than 20%. Twelve percent of respondents indicated they did not have remote workers.

Figure 32: If you could give mobile workers access through their mobile devices or PCs to advanced business telephone features like conferencing, calendars, directories, and email, how would this affect their productivity?

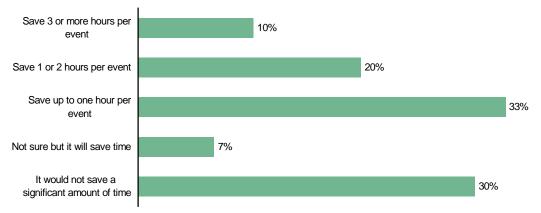


Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Finding Others Quickly Reduces Problem Resolution Times For 70% Of Companies

When problems arise and the technical person responsible for fixing the problem is not immediately available, delays occur as employees try to locate the appropriate support resource or expert. Respondents were asked if in the event of a production problem manufacturing employees could locate engineers via multiple devices using only a single address, how would this affect problem resolution time. Seventy percent of respondents said that it would save time, 63% that it would save one hour or more per event.

Figure 33: If in the event of a production problem manufacturing employees could locate engineers using a single address over multiple devices, how would this affect problem resolution time?



Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

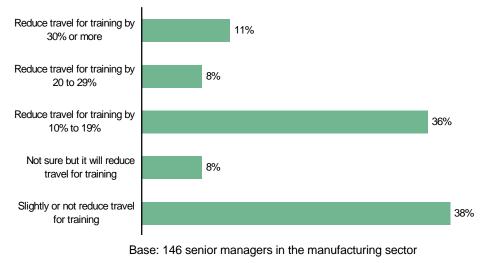
Addressing High Costs Of Employee Training

Companies need to provide quality training to attract and retain employees. Leading companies provide their employees with continuous training throughout their careers to improve job performance and introduce new skills and product knowledge. When companies send employees to distant locations, the travel costs for training are substantial, which often deters companies from offering as much training as is considered warranted.

Decentralized Training With Web/Video Reduces Travel Time For 63% Of Companies

Traditional classroom training for employees often incurs travel time and related expenses including missed time from work. Web and video training provide the flexibility to schedule training during slower work periods. Sixty-three percent of respondents indicated that training scheduled during non peak times from decentralized locations by means of Web and video conferencing would reduce travel time, 55% that it would do so by 10% or more.

Figure 34: If regular internal training could be scheduled during non-peak times and from decentralized locations by means of Web and video conferencing, how would this affect travel time for training?*

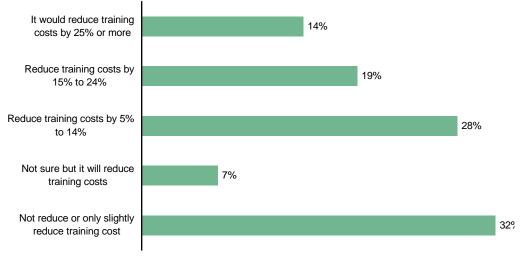


^{*}Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Web/Video Employee Training Reduces Training Costs For 68% Of Companies

Training costs include as well as the travel expenses of each employee the cost of the facility and room set up and instructor fees. Respondents were asked if desktop training were provided at employees' current locations, how would this affect training costs. Sixty-eight percent indicated that their companies would reduce overall training costs, most that they would do so by from 5% to 25%.

Figure 35: If desktop training were provided at employees' current locations, how would training costs (including travel, facility, room set up, and instructor costs) be affected?



Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

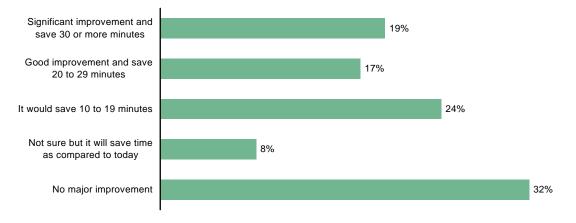
Improved Response Times Vital In Critical, Time-Sensitive Situations

Companies need to respond quickly to any critical situation to protect their employees and customers. Minimizing time spent responding to critical situations and connecting customers with appropriate experts when needed shows a company to be flexible and capable of handling difficult situations.

Unified Communications Improves Emergency Response For 68% Of Companies

Response time is critical when addressing emergency situations in which every minute counts. Sixty-eight percent of respondents indicated that if in an emergency security personnel and key managers could connect to all other necessary parties using a single number on the device most convenient to them at the time, valuable minutes would be saved, 60% that from 10 to more than 30 minutes would be saved.

Figure 36: If during an emergency security personnel and key managers could connect to all other necessary parties using a single number on the device most convenient to them at the time, how would your notification procedures be affected?



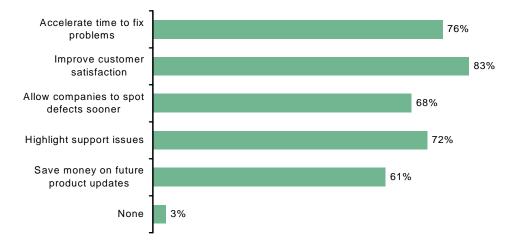
Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Contacting Subject Matter Experts Quickly Accelerates Problem Resolution

Often, product defects are not discovered until customer complaints accumulate and senior management is notified of the problem, which can take days or weeks. With the ability to directly transfer customers' calls from service desks to available experts, companies can quickly identify product issues. Respondents indicated that this capability would provide the following benefits:

- Accelerate fixing of problems: 76%.
- Improve customer satisfaction: 83%.
- Highlight support issues: 72%.
- Identify defects sooner: 68%.
- Save money on future product updates: 61%.

Figure 37: If you could directly transfer complex customer product questions to product support personnel, how would this affect product development and service? (Select all that apply)



Base: 146 senior managers in the manufacturing sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Manufacturing Summary

Manufacturing companies need to be responsive to their customers and employees by meeting design, delivery, and support goals for their products. Internal communications and flow of information plays a critical role in how manufacturers meet their commitments. Unified communications provides manufacturers with the ability to do the following:

- **Speed problem resolution.** UC enables employees to discuss and resolve problems more quickly, resulting in improved time-to-market as well as cost savings across product development and production. Distributed organizations can communicate more effectively among teams, significantly reducing the time it traditionally takes to set up calls to discuss pending issues and reach decisions.
- Manage costs more effectively. Manufacturers can reduce costs and shorten the new product development cycle with ad hoc conferencing capability. This capability also supports remote workers by providing business telephone features on their PCs or mobile devices that enable them to become more productive while traveling. Additionally, training expenses are reduced when advanced Web/video conferencing capabilities are used.
- Improve critical response times. Plant safety is a top priority, and UC enables manufacturers to respond more quickly in emergency situations and contact key personnel much faster. Improved response time also shortens the time to fix problems by quickly connecting key personnel regardless of location.
- Form better relations with customers. UC enables companies to link customers directly with SME for better service and problem resolution. This positions the manufacturer to be more attentive and responsive to customer issues. Also, with improved communications, manufacturers are better able to meet deadlines, which benefits business partners and customers.

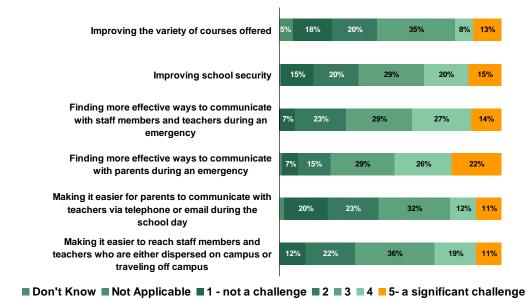
Education Key Challenges

School districts face many challenges in managing ongoing operations while adhering to current budgets.³ School districts endeavor to foster communication between teachers and parents and provide safe environments for students. School administrators must carefully evaluate all purchases and prioritize their expenditures to provide environments that are conducive to student learning and supportive of teachers.

Key challenges facing school districts include the following:

- **Providing a secure environment for learning.** Improving school security is a priority for many districts that seek to ensure the safety of pupils and teachers campus wide.
- Improving communication within districts. Schools often have difficulty relaying information to staff members and teachers during emergency situations. Many modes of communication used by schools are outdated and lack full coverage.
- **Outbound message notification to parents during critical situations.** Schools are often hampered by not having an effective communication channel with parents during emergency situations. This often results in frustration as parents try to call into schools and are met with busy signals or no response, further complicating the situation.
- **Expanding parent-teacher communication**. Schools want to improve communication between parents and teachers to ensure that all messages are received.
- Developing new course delivery and training for teachers and students through distance learning. Expanding course offerings for students and content planning and inservice training for teachers are top priorities for schools. But budgets are often an obstacle to hiring new teachers and providing easy access to collaboration and inservice programs.

Figure 38: Please rate how challenging each of the following issues facing schools today is for your school or schools.*



Base: 143 senior administrators in the education sector *Percentages do not all total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Survey Methodology

The education survey was directed to school administrators in elementary and secondary schools who have responsibility for their schools' communications technology investment. Six countries participated in the survey: Australia, France, Germany, India, the United Kingdom, and the United States. Survey participants' titles include: operations manager, 55%; facility manager, 32%; telecommunications manager, 13%. All participants are responsible for purchasing communications equipment directly or making recommendations. Participants were not given specific vendor or product information, but were given examples of how unified communications would support specific situations found within school environments.

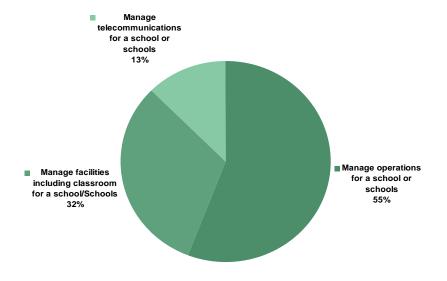


Figure 39: Which of the following describes your role?

Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Key Findings From The Survey

- 71% could reach mobile employees more easily with single number access across devices.
- 80% could save time by knowing co-workers availability prior to contact.
- 81% could improve emergency response with single outbound call notification.
- 75% could improve security with video monitoring of remote locations.
- 83% could contact parents faster with automatic outbound dialing notification.
- 75% favor internal emergency alerts or "panic" buttons in classrooms.
- 71% could reduce curriculum development time with concurrent collaboration.
- 83% could reduce time consuming methods of locating others.
- 79% could enrich "sister" school programs through video exchanges.
- 70% could support richer curriculum choices with advanced conferencing capabilities.
- 94% could improve security by providing electronic updates on classroom PCs.

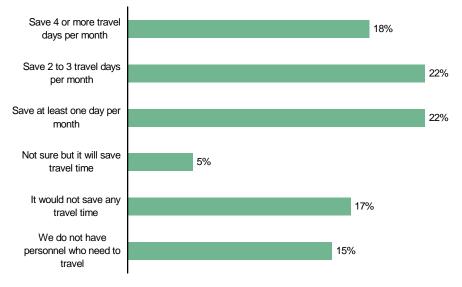
Travel Is Time Consuming For Many School Administrators

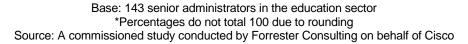
School administrators often need to travel to many locations within their district throughout the school day, and it is often difficult for others to reach administrators who are visiting school sites. Administrators consider saving travel time important so they can better focus on their job responsibilities. UC offers administrators many options for decreasing the considerable amount of time spent traveling between school sites.

Advanced Conferencing Features Reduce Travel Days For Administrators By 67%

Most administrators drive back and forth to off site meetings regularly to meet with school faculty and other administrators. Advanced conferencing features enable administrators to reduce the number of trips they have to make by engaging in interactive Web conferences with remote sites. Sixty-seven percent of respondents indicated that if they could collaborate with remote schools' officials via Web or video sessions, travel time would be reduced, 62% that it would be reduced by from one day to more than four days per month.

Figure 40: If key administrative personnel who drive site to site to participate in meetings could effectively collaborate with remote schools' officials via Web or video sessions, how much time would be saved?*

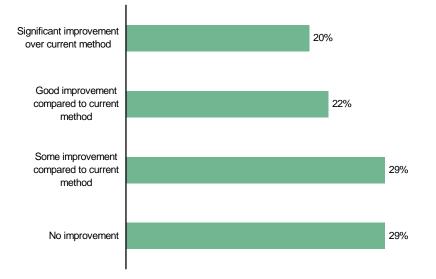




Ability To Reach Others Quickly And Simply Improves Current Methods For 71% Of Districts

Trying to contact mobile workers is often a frustrating experience for school administrators who must call and leave messages at several locations. With UC, employees can contact co-workers on any device (e.g., telephone, mobile device, or PC) using only a single telephone number. Seventy-one percent of respondents indicated that having this capability would improve their ability to reach mobile workers.

Figure 41: How much would a district's ability to reach mobile employees be improved if key personnel could be reached immediately on any device (telephone, mobile phone, or PC) using a single telephone number?

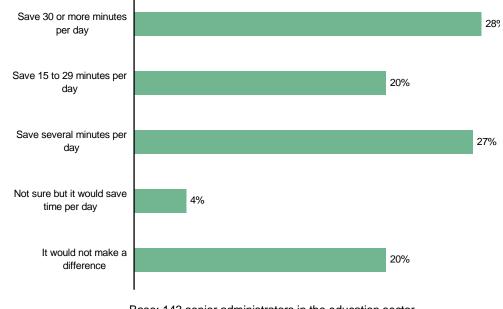


Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Knowing Co-Workers' Availability Saves Time For 80% Of Respondents

The distributed environments of many schools makes it difficult to know the current location and availability of co-workers. Asked if district and school administrators' status was automatically updated so that their availability could be viewed by others from their phones or PCs, 79% of respondents indicated that valuable time would be saved, 75% from several minutes to more than 30 minutes per day.

Figure 42: How much time would be saved if the status of district and school administrators was automatically updated and you could view their availability on a PC or phone prior to trying to reach them?*



Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Technology Cost Containment Is A Significant School Challenge

Schools look for savings in every area possible, and reducing IT support costs is considered highly beneficial. Many school districts manage disparate systems across their networks, which requires IT staff to be trained in multiple technologies and applications. More efficient, centralized management of IT infrastructures offers potential cost savings for school districts.

Mixed Implementation Of Technologies Across School Districts

Respondents were asked to identify the extent of adoption of communication technologies by their schools. Broadband access leads with an 87% adoption rate. Districts also reported that 83% had some telephones, but only 32% had telephones in all classrooms. Campus wide wireless access is found in only 44% of districts, and 32% have wireless hot spots.

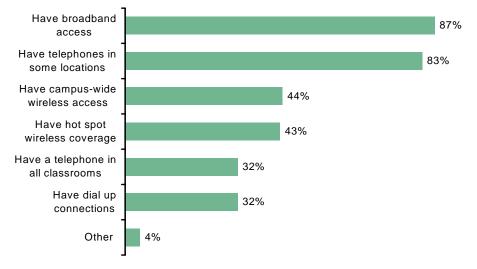
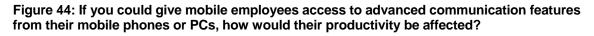
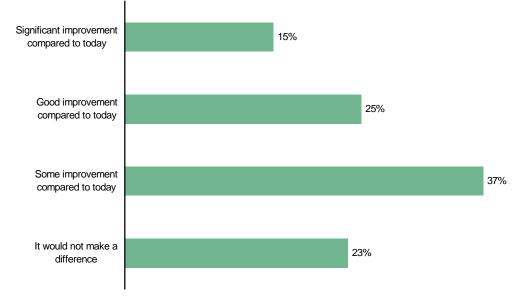


Figure 43: What is the communications coverage for your school district today? (Select all that apply)

Extending Applications To Mobile And Remote Employees Improves Productivity For 77% Of School Districts

UC provides mobile workers access from their mobile phones or PCs to advanced communication features like directory sharing, ability to view co-workers' status, and one click conferencing. Asked to indicate how this capability would affect worker productivity, 77% of respondents indicated that it would improve productivity.





Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

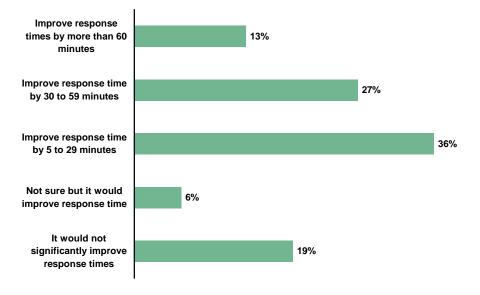
Emergency Preparation Is A Major Concern For School Officials

Managing security and safety for students and faculty is a primary objective for school administrators. Many school districts still rely on older technology like two-way radios to support security, but these devices have limited range and do not offer the advanced capabilities of newer solutions. All school districts agree on the need to notify all key personnel of emergency situations in the shortest time possible.

Ability To Reach Others Quickly Over Any Device Improves Emergency Response Time By 82%

UC enables all key staff members including principals, security personnel, and other administrators to be reached over any device in a single outbound call. Asked what this capability would mean in the event of an emergency situation, 82% of respondents indicated that it would shorten response times, 76% that it would do so by from five minutes to more than one hour.

Figure 45: If all principals, security personnel, and other key administrators could be reached over any communication device in a single outbound call, how would this affect the speed of the school's response in an emergency?*

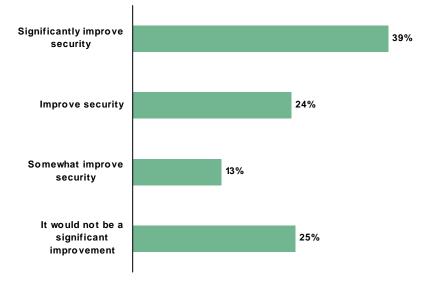


Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Live Video Surveillance Improves Security For 76% Of School Districts

Live video monitoring enables staff members and even local police to monitor remote spots on campus like parking lots. Respondents indicated live video surveillance capabilities that enable staff members to view remote areas would improve security for 76% of school districts.

Figure 46: How would security be affected if your school had live video monitoring of remote spots on campus (parking lots, etc.) that could be viewed from anywhere by staff members or local police?*

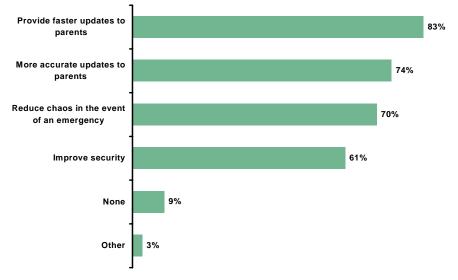


Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Automatic Notification Delivers Faster Updates To Parents For 83% Of School Districts

Most schools do not have an effective means of reaching large groups of parents when an event occurs that requires their immediate attention. With UC, schools can send emergency notifications or text messages regarding the status of an emergency to all designated parents by automatically dialing their phones. Most respondents believed that this capability would provide faster, more accurate updates to parents and reduce chaos in the event of an emergency.

Figure 47: What would be the effect if schools could automatically dial all parents' phone numbers simultaneously to send emergency notifications or text messages on the status of an emergency? (Select all that apply)

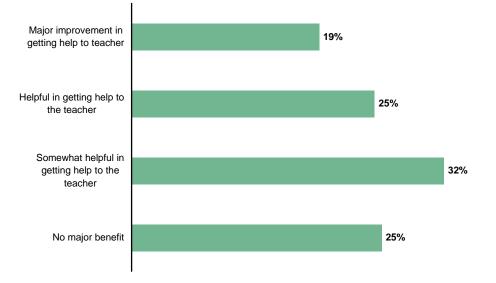


Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Internal Emergency Alert Provides A Safer Environment For 76% Of School Districts

Classroom telephones can do more than enable teachers to make and receive calls. They can also be equipped with a "panic" button that enables teachers to send a silent alarm to adjoining classrooms, the school principal and emergency services. Asked how this would affect the safety of teachers and students, 76% of respondents indicated that the feature would be helpful in getting needed aid to teachers more quickly.

Figure 48: What would be the effect on safety of having a "panic" button on classroom telephones by means of which teachers could send a silent alarm to adjoining classrooms, the school principal and emergency services?



Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

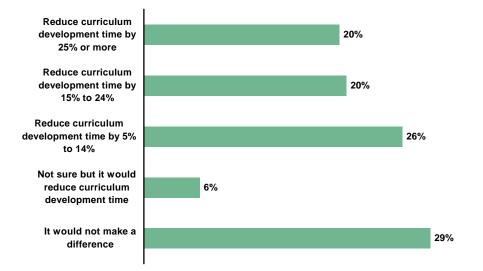
Schools Advance Curricula With Better Access To Peers

Schools look for ways to enhance their curricula to enrich their students' experiences. Issues that prevent upgrading a school's curriculum include teachers' limited ability to collaborate with peers and budget constraints on funding for new courses. UC fosters internal team collaboration and affords lower cost alternatives to hiring teacher specialists for every school.

Ability To Collaborate Concurrently Reduces Curriculum Development Time For 72% Of School Districts

With teachers working in separate locations and communicating with colleagues via email, the process of sharing class planning, classroom preparation, and curriculum development and receiving feedback often takes days or weeks. Respondents were asked how much curriculum development time would be reduced if staff and curriculum developers were able to share and edit documents collaboratively from any location rather than send documents back and forth via email. Seventy-two percent of respondents indicated that curriculum development time would be reduced, 66% that it would be reduced by from 5% to more than 25%.

Figure 49: If school curriculum developers and staff members were able to share and edit documents collaboratively, in real time, from any location rather than send them back and forth by email, how would curriculum development time be affected?

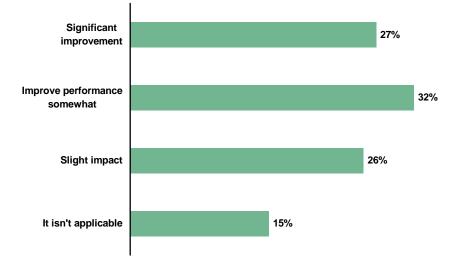


Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Easy Access To External Resources For Collaboration Benefits 85% Of Teachers

Teachers often find it difficult to access external resources for instructional materials and collaborate with peers who might have specific expertise in certain fields. Asked how better access to resource materials and peers would affect teachers' performance, 85% of respondents indicated that it would benefit teachers.

Figure 50: If teachers had immediate and easy access to external resources for instructional materials and could collaborate with peers (within the school and the district) remotely, how would teachers' classroom performance be affected?

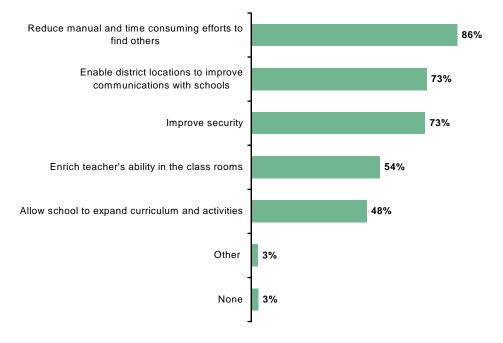


Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Ability To Reach Teachers And Staff Members Without Delays Yields Numerous Benefits

Much of school communication is manual and time consuming, making it difficult to find others when needed. Delays are frequent and information is not shared among schools. Respondents cited as benefits of being able to find and connect with teachers and staff at all times regardless of location: reduction of manual efforts to find others (86%); improved district communications with schools (73%); better security (73%).

Figure 51: Which of the following benefits, if any, would your school experience if communication systems could find and connect with staff member and teachers at all times regardless of physical location? (Select all that apply)



Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

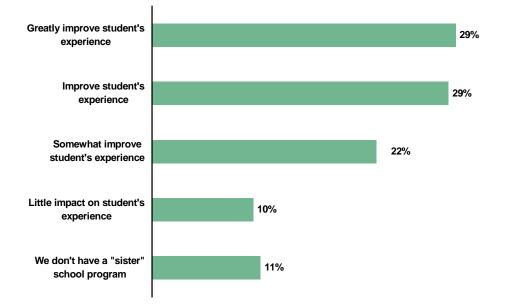
Web And Video Conferencing Expand Educational Experiences

With interactive Web and video conferencing, schools have an opportunity to expand students' awareness of other places and enrich curricula by enabling remote experts to share their knowledge with a broader audience. Additionally, UC Web and video conferencing supports remote learning and offers school districts a cost effective alternative to centralized teacher training.

Video Exchanges Enrich "Sister" School Programs For 80% Of School Districts

Sister school programs enable students to reach out and talk to other students in different cities or countries. For many schools, this consists of letters sent by students to fellow students in remote locations. Asked how live video exchanges between "sister" schools would affect students' experiences, 80% of respondents indicated the student experience would be improved.

Figure 52: If your schools could communicate with "sister" schools in other locations or countries through live video exchanges, how would the the student experience be affected?*

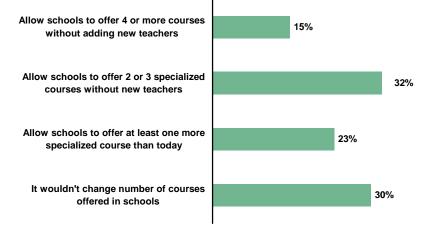


Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Advance Conferencing With Experts Supports Richer Curriculum At 70% Of Schools

Many schools limit students' curriculum choices due to lack of subject matter experts and the additional expense of hiring more teachers. Respondents were asked if classes with qualified teachers could be offered through distance learning using advanced Web conferencing and video capabilities, would their schools be able to offer more courses. Seventy percent of respondents indicated that from one to four or more courses could be offered without adding new teachers.

Figure 53: If classes with qualified remote teachers could be offered through distance learning using advanced Web conferencing and video capabilities, would schools be able to offer more, or advanced or specialized, courses?

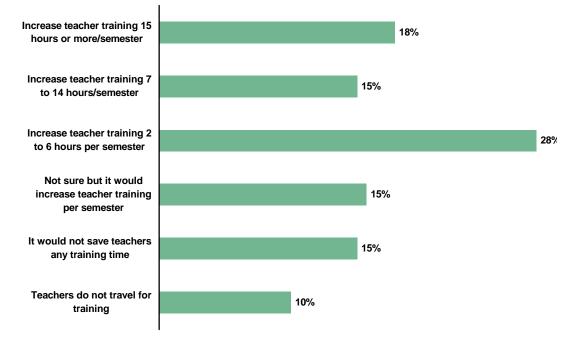


Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Web And Video Conferencing Enable Districts To Expand Teacher Training For 76% Of School Districts

When districts offer teacher training at local schools rather than require teachers to drive to distant locations, teacher training becomes more accessible and invites higher teacher participation. Asked if teachers could receive required training at their own schools through interactive Web and video rather than have to travel, 76% of respondents indicated that teacher training would increase, 61% that it would increase from 2 to more than 15 hours per semester.

Figure 54: If teachers could receive required training at their own schools through interactive Web and video sessions rather than have to travel to centralized locations, how would training time be affected?*



Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Getting Messages Through To Teachers Is Not Easy

Teachers receive messages from a variety of sources, and many do not have easy access to their messages during class hours. Not all teachers have classroom email access, and many hand written messages and messages left on voice mail do not get delivered. This often leaves teachers unaware of important student information sent by parents.

Email Used More Than Other Message Types By 86% Of Teachers

Respondents were asked to indicate how teachers receive their messages today and indicate all forms of messages received. Eighty-six percent of teachers receive messages by email, 35% by paper mail, 28% by voicemail, and 25% by fax. Write-in responses included intercom, instant messaging, and notice boards.

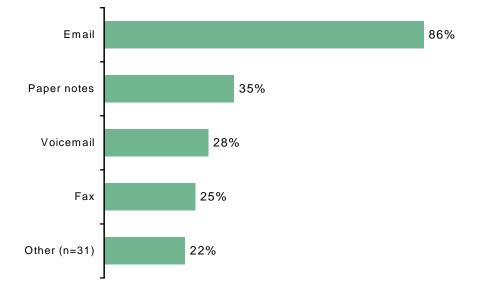
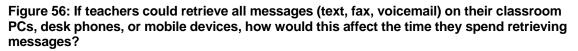


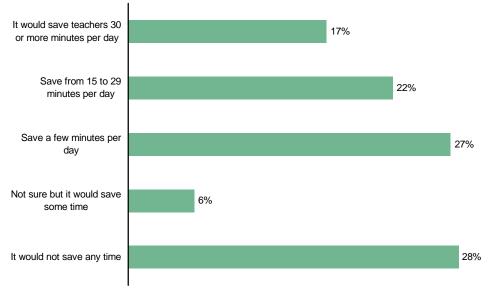
Figure 55: What is the most common way for teachers to receive messages today? (Select all that apply)

Convenient Message Retrieval Saves Valuable Time For 72% Of Teachers

Many teachers need to go to the teacher's lounge or office to retrieve messages. Because teachers have limited time for breaks, message retrieval is often sporadic and delayed. Respondents were asked if teachers could retrieve all messages (voice, fax, email) on their classroom PCs, desk phones, or mobile devices, how would this affect the time they spend retrieving messages. Seventy-two percent of respondents said that it would save time, 66% that it would save from several to more than 30 minutes per day.

Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco



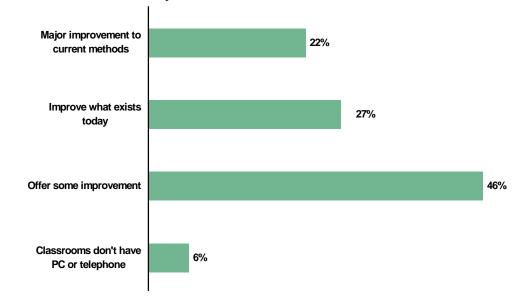


Base: 143 senior administrators in the education sector Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Classroom Electronic Access To Messages Offers Greater Security For 95% Of School Districts

Teachers often are not informed of updates to emergency situations and must wait for a public address system announcement that a crisis situation is over. This sort of lack of information is often stressful to teachers. Asked if teachers could be informed of any emergency situation and receive continuous electronic updates on their classroom PC or telephone how classroom communications would change, 95% of respondents indicated it would be improved.

Figure 57: If teachers could be informed of emergency situations and receive continuous electronic updates on their classroom PCs or telephones, how would classroom communications and safety be affected?*



Base: 143 senior administrators in the education sector *Percentages do not total 100 due to rounding Source: A commissioned study conducted by Forrester Consulting on behalf of Cisco

Educational Summary

Most school districts face communications challenges including communication from district offices to schools, internal school communication, and school to parent communication. The need to communicate on an immediate basis is important for improving school security and responding quickly to critical situations. Unified communications provides schools with the following benefits:

- Reduce time spent on intra-district travel and communication. UC can reduce the amount of time many school administrators spend traveling among school sites by providing alternative means of communicating with remote school sites, and trying to locate others by making it possible to know their availability prior to trying to contact them.
- **Improve response to emergency situations.** UC provides advanced capabilities for locating others quickly, alerting faculty and teachers of potential problems, and notifying parents of emergency situations.
- Expand ability to collaborate with peers and experts. UC affords schools the opportunity to expand their curricula by sharing experts more easily using advanced Web and video conferencing and collaboration. Teachers can also participate in more training sessions without traveling to remote sites.
- **Optimize teachers' productivity.** Having more convenient access to communications from parents and district administrators gives teachers more time to teach because they don't have to spend as much time trying to track down co-workers and retrieve messages.

Overall Summary

UC provides organizations value that can be quantified and yield tangible benefits in various business processes. Although each has is own unique requirements, the need to communicate effectively and reduce delays spans all industries. UC benefits are found across many business activities, and include the following applications:

- Reach subject matter experts and decision-makers quickly. UC enables employees to determine the availability of experts and decision-makers and reach them quickly over any device regardless of location.
- **Improve team collaboration**. Project teams can initiate interactive audio, video, and Web conferencing quickly by viewing team members' status and pointing and clicking on their names to launch a conference call.
- **Support remote workers more effectively**. Remote workers have full business telephone features from their mobile devices including presence capabilities that enable them to use the same business applications as employees working from centralized office locations.
- **Speed up problem resolution.** With the ability to contact others quickly and share information collaboratively regardless of location, problems can be resolved in less time, minimizing their consequences.
- Facilitate training sessions without travel. Interactive web collaboration enables employers to offer training courses at local sites, eliminating costly business travel.
- **Consolidate application management.** UC enables organizations to consolidate the administration and management of applications and centralize their support.
- **Improve emergency response time.** The ability to reach others quickly across any device with single number access enables organizations to quickly notify individuals or large groups of people of critical situations that require their attention.

Appendix A: Endnotes

¹ Forrester Consulting, an independent and objective third-party research firm, interviewed 140 senior retail banking managers to better understand how UC would affect their operations, and to identify specific areas in which unified communications could reduce and contain costs, improve customer responsiveness, and promote employee productivity. To understand the potential benefits of UC to retail banking processes and the effect UC would have on customers were the primary objectives of this survey.

² Forrester Consulting, an independent and objective third-party research firm, interviewed 146 top managers in product development and operations in the manufacturing sector to evaluate how UC capabilities affect their product development and production environments. This survey asked respondents questions about communications processes and issues within the manufacturing industry that affect companies' ability to meet their business and productivity goals. Survey questions focused on situations in which manufacturers need to contact others quickly, reduce project delays, notify others in emergencies, and meet customer commitments in a timely manner.

³ Forrester Consulting, an independent and objective third-party research firm, surveyed 143 key decision makers in K-12 education to determine how UC could affect their current environment. The survey looked at communication processes and issues at district offices, between district offices and schools, and in classrooms. Additionally, it considered security and emergency response capabilities within districts, outbound communication requirements, and training needs of faculty members.