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Video in the Cisco Enterprise: Calculating the Return on Investment

What You Will Learn

Cisco has measured its own return on investment (ROI) from integrating video into a wide variety of business processes, from customer engagement to safety and security. This white paper, intended for organizations considering new use cases for video, presents the ROI from major video use cases at Cisco:

- Customer engagement: From 2007 through 2009, sales teams using Cisco TelePresence[®] conferencing accelerated the average sales cycle by 9.7 percent.¹ On one North American sales team, account managers who used video to interact with Cisco product specialists booked 30 percent higher sales than those who did not use video.
- Internal events: Per-person costs for the annual global sales event decreased by 90 percent after Cisco shifted the format to video.
- **Customer events:** Capturing video of Cisco[®] Live sessions with a Cisco TelePresence solution lowered costs by 70 percent compared to using an outside webcast production company.
- Organizational communications: Employee satisfaction increased from 3.4 to 4.4 on a 5-point scale when Cisco began holding its quarterly meetings in a virtual auditorium, with live video and audio.
- Physical safety and security: Using IP video surveillance solutions enables the safety and security team to retrieve video over the network from more than 500 global sites, lowering staff costs associated with incident investigation and alarm response.

Customer Engagement

Of all the ways Cisco uses video, the largest business effect is on customer engagement, which spans marketing activities such as producing video data sheets and webcasts; sales activities such as executive briefings and consultations with product specialists; and postsales activities such as customer support. Using video to engage with customers is accelerating the sales process, reducing travel requirements and increasing customer satisfaction.

VIDEO: EMPOWERING EMPLOYEES TO ENGAGE AND INNOVATE

- Video accounts for 21 percent of all traffic flowing over the Cisco network, and more than 50 percent over parts of the network during peak meeting times.
- Cisco has deployed more than 15,000 Cisco TelePresence systems worldwide for internal meetings, customer interaction, job candidate interviews, and more.
- More than 50 Cisco TV sessions a month keep tens of thousands of employees up-todate on Cisco news.
- Employees view more than 85,000 videos on demand each month, many of them for training.
- More than 6000 video surveillance cameras help physical security staff keep employees and buildings safe.
- More than 30,000 employees use web cameras to add video to their voice conversations.

¹ Cisco IBSG Economics Practice, 2011

Marketing

Video is a valuable marketing asset for Cisco. People who view videos on Cisco.com:

- View 44 percent more pages
- Are twice as likely to engage with high-value conversion activities
- Are 41 percent more likely to return to Cisco.com
- · Are five times more likely to click-through on a blog post containing a video
- · Are twice as likely to click-through on email containing a video

Research suggests that when someone watches a recommended video, brand recall increases by 7 percent and enjoyment increases 14 percent.

Cisco publishes all videos on at least one page on Cisco.com as well as the Cisco YouTube channel. The YouTube channel received more than 1 million views in the fourth quarter in 2012 alone. Employees are encouraged to limit video length to 90 seconds on YouTube, and to less than 2 to 3 minutes on Cisco.com.

Live video events on Cisco.com also attract thousands of attendees, with typical ratings of 4.65 on a 5-point scale. Among the most popular are Executive Viewpoints thought-leadership videos, which garner click-through rates as high as 17 percent.

Sales Process: 9.7 Percent Faster Sales Cycles, 30 Percent More Sales

From 2007 through 2009, sales teams using Cisco TelePresence conferencing accelerated the average sales cycle by 9.7 percent, beating the initial estimate for a 2 percent increase.² For large sales that require approval of nonstandard terms and conditions, the faster sales cycle translates to revenue realization 30 to 32 days sooner. The main reason for the accelerated sales cycle is that salespeople can gather multiple subject-matter experts at the same time to answer outstanding questions delaying the sale.

"When customers ask a question on the phone, you don't always know why they are asking. Sometimes you explain what *you* want them to know instead of what *they* want to know. With Cisco TelePresence, you can see as well as you could in person if the customer is impatient, bored, or waiting for a chance to interrupt."

-Suresha Bhat, Director, Cisco IT

The Cisco Americas Enterprise Architecture sales team has reported similar results after comparing sales for individual account managers based on whether they use video to engage with customers. On average, the account managers using video booked 30 percent more sales annually than those who did not. Most of these Cisco TelePresence sessions are with internal product specialists who can answer questions to expedite sales.

To make it easy for account managers to initiate high-definition (HD) video sessions with customers, partners, and product specialists, Cisco launched a web portal called Interactive Sales Expertise Enablement (I-SEE) in June 2012. By visiting the I-SEE web portal, account managers can prepare any video endpoint in the customer's conference room, from any vendor, in less than 5 minutes. From then on, either the account manager or the

² Cisco IBSG Economics Practice, 2011

customer can simply click to join a HD video session with a Cisco expert, helping to accelerate sales and strengthen the relationship.

The sales operations team estimates that I-SEE is saving 15 percent on travel, based on \$1500 per plane trip and \$30 in mileage for local meetings. In addition, since I-SEE was introduced, Cisco product sales specialists have doubled their average number of daily meetings from two to four by avoiding travel. In particular, they no longer need to attend customer meetings just in case the discussion becomes technical, because if it does, the account manager can bring them in through HD video.

Executive and Customer Briefings

During the sales cycle, Cisco account managers often arrange briefings at Cisco's Executive Briefing Center in San Jose, California, or one of more than 21 global Cisco Customer Briefing Centers. In fiscal year 2012, Cisco conducted 15,849 customer briefings, which included Cisco product specialists, industry specialists, and executives from multiple locations.

Previously, customers and Cisco participants generally had to fly to the briefing center locations, requiring complicated scheduling and led to high travel time, costs, and carbon emissions. In fiscal year 2012, 30 percent of briefings included at least one person who joined using Cisco TelePresence conferencing. In some cases the business value is travel reduction. In others the value is including Cisco experts or customers who might not otherwise have been able to participate. Customer satisfaction scores are identical, 4.77 on a 5-point scale, whether customers and Cisco experts travel or join by Cisco TelePresence conferencing.

"It usually doesn't make sense for an internal expert to take a 12-hour trip for a 1-hour customer meeting at an EBC. Today, one out of three experts joins executive briefings via Cisco TelePresence, and can be just as present and engaged as if they were in the room."

-Mark Sherwood, Senior Director of Emerging Technology, Cisco IT

Customer Support

Postsales, Cisco Technical Assistance Center (TAC) engineers increasingly use Cisco TelePresence conferencing or Cisco WebEx[®] Meetings with HD video to interact with customers about urgent concerns. Engineers have reported that customers tend to be reassured when they can see that the engineer on the other end of the line is paying attention and taking the concern seriously.

Internal Events: Lower Costs, Wider Audience

Rather than restricting events to those who can attend in person, Cisco now captures, transforms, and shares video for employees to view live or on demand, on any endpoint, with Cisco TelePresence, Cisco WebEx, or Cisco Show and Share[®] applications.

Examples of events broadcast by video include the annual Global Sales Experience (GSX) sales meeting, Strategic Leadership Experience (SLX), Cisco Partner Summit, Cisco Live customer events, and product-launch webcasts. Global Sales Experience (GSX): Per-Person Costs Lowered by 90 Percent

Cisco's annual global sales meeting, GSX, is the company's largest internal event. The last time the event was held in person, approximately 13,000 attendees flew to the U.S. meeting location. The event cost US\$70 million, including an average of \$4300 per attendee for travel, hotel, and food.

Now Cisco produces GSX as an online video event. Employees can log in from anywhere, using any device, to view sessions live or on demand. The ROI from moving GSX to a video event includes:

- Per-person costs dropped 90 percent, from \$4300 to \$430.
- More Cisco personnel can participate because attendance is no longer restricted by hotel availability or to participants' ability to travel. In 2012, 16,000 people attended, a 19 percent increase for a negligibly higher cost.
- Extending event sessions to people outside of the direct sales organization strengthens alignment within the different organizations and business units.

"Producing the annual sales meeting as a video event makes it financially practical for people in support functions to learn about sales strategy firsthand, at the same time as field sales teams. This helps to get alignment across the company."

-Mark Sherwood, Senior Director of Emerging Technology, Cisco IT

Enhanced User Experience for Event Attendees

Transforming the annual SLX event to a video event by using Cisco TelePresence conferences, Cisco WebEx Meetings, and Cisco WebEx Event Center lowered costs and improved the attendee experience. SLX is a highly interactive event attended by approximately 2900 global Cisco executives each year. Meeting organizers use Cisco WebEx meeting applications for group chats, 1:1 chats, breakout sessions, and live polls.

The original goal for conducting SLX as an interactive video event was to provide an experience equivalent to the in-person experience for a fraction of the cost. The focus has since shifted to improving the user experience for strategic planning. In fact, many executives state that they now prefer participating online over traveling to the event. They appreciate travel avoidance as well as the convenience of interacting with colleagues using Cisco Jabber[™] for instant messaging or video rather than coordinating calendars to meet in person.

Event organizers attribute the success of SLX to a hybrid format that combines in-person and online. The first year, presenters lost some of their energy when event organizers captured video in a studio without an in-person audience. The following year, Cisco brought audiences to the studio using Cisco TelePresence endpoints in several locations. Presentations became just as lively as they had been when all participants were physically present.

Customer Events: 70 Percent Lower Video Costs for Cisco Live

Cisco Live events, attended annually by tens of thousands of people around the world, offer education, training, and professional networking opportunities to Cisco customers and partners. Travel costs and busy schedules prevent some people from attending Cisco Live events in person. In response, in 2009 Cisco launched <u>Cisco Live</u> <u>365</u> (previously Cisco Live Virtual), an online community where people can watch events live or on demand.

For the first 2 years, the Cisco Live production team engaged a production company to record audio of selected sessions and synchronize the audio with the presenter's slides. High costs included production crews for each room, travel expenses, shipping equipment, providing laptops for each room, and postproduction services.

For Cisco Live 2011, held in Las Vegas, the production team automated video capture of 45 sessions in four rooms, using Cisco TelePresence and Enterprise Video Content solutions. The next year, for Cisco Live 2012 in San Diego, California, the production team deployed Cisco TelePresence Codecs in 36 of the 50 rooms on site, capturing 250 sessions with video and PowerPoint slides over the 4-day event. To date, more than 30,000 virtual attendees have viewed at least one video session.

The 2012 event costs were 70 percent lower than 2010 costs, largely because just four content editors could monitor, edit, and upload content from the 250 sessions (Figure 1). Before the conference, the editors entered the session names, rooms, and start and stop times into Cisco TelePresence Management Server. A few minutes before each session was scheduled to begin, Cisco TelePresence Content Server instructed the in-room codec to begin recording. The content editor performed postproduction editing and transcoding using a simple interface, and then uploaded the final files for viewing on Cisco Live 365.



Figure 1. Video-Capture Headquarters for Cisco Live 2012

The ROI of sharing video content from Cisco Live 2012 includes:

- Wider audience: Thousands of customers and partners who could not attend Cisco Live viewed at least one of the 250 sessions recorded with Cisco TelePresence Content Server during the event.
- Seventy-percent cost reduction: Cisco needed just four content editors to capture, transform, and share video from 250 sessions. In contrast, the webcast vendor would have needed more than 20 technicians to capture audio and slides only.
- Faster availability of video: The ease of transcoding enabled the Cisco Live 365 team to publish sessions online the morning after the session. In prior years, the webcast vendor needed about a week.

Organizational Communications

To maintain a common culture across its global enterprise, Cisco conducts quarterly meetings for all employees, at San Jose headquarters. Previously, headquarters employees were encouraged to attend the meetings in person, while tens of thousands of employees in other locations were encouraged to watch the live video stream from their desktops. But without a way to actively participate, remote employees felt disengaged.

Now all global employees are able to join a virtual auditorium for quarterly meetings. Some headquarters employees still attend the sessions in person, helping energize the presenters. Other employees view the live broadcast on their desktops, using an IPTV service called Cisco TV, and can pose questions in a chat window and take live polls. Still others gather in Cisco TelePresence rooms, where they are invited to ask questions after the presentation.

Asked to rate the value of the quarterly meetings on a 5-point scale, remote participants now give it a 4.4, up from 3.4 when they watched at their desktops without the ability to interact through chat and polls.

An unanticipated benefit of using Cisco TelePresence and Cisco TV solutions is that Cisco can hold the events anywhere without inconveniencing employees or increasing costs. In July 2012, for example, Cisco held the event in London during the 2012 Olympics Games.

Executive Communications

Rather than sending email messages with major announcements and updates, Cisco executives and directors increasingly prefer to record and share videos (Figure 2). In Cisco's fiscal year 2010, 38 percent of videos on the portal provided organizational communications, while 24 percent explained product updates.



Figure 2. Growing Use of Cisco Show and Share Broadcasts for Internal Communications

The process of capturing, transforming, and sharing the video is simple, encouraging adoption by executives:

- **Capture:** Executives capture video with either the built-in camera on a laptop or tablet or, for studio-quality video, Cisco TelePresence Recording Studio.
- **Transform:** With a few clicks, the Cisco Media Experience Engine (MXE) transforms the video for optimal viewing on different endpoints, optionally adds a watermark or title graphic, and then publishes the video on a Cisco Show and Share portal.
- **Share:** Employees visit the portal using any device to view the video. The executive or an assistant can also do simple editing, add slides synched to the video, and divide the video into chapters.

The main ROI from using video for executive communications is increased engagement because employees can see facial expressions conveying urgency or emotions, for example. Employees can post comments in the portal, opening a direct communications channel between the executives and employees in any location. They also appreciate the personal connections that video fosters.

Video Meetings

Cisco meetings range from 1:1 performance reviews to regular team status updates to board meetings. In the past, high costs included travel expense, lost productivity during travel, delayed decision making while participants cleared their schedules to travel, and carbon emissions.

Now employees and board members generally join meetings with Cisco TelePresence systems, on endpoints ranging from mobile devices to desktop systems to immersive systems in Cisco TelePresence rooms.

From 2006 to 2012, Cisco employees conducted 1.37 million immersive Cisco TelePresence meetings. Of those, 22 percent, or 302,400, resulted in avoided travel. ROI includes:³

- \$1.21 billion in travel cost avoidance
- \$454 million in productivity gains from reclaimed travel time
- 653,000 fewer metric tonnes of emissions

When Cisco IT first implemented Cisco TelePresence rooms, the goal was for 40 percent usage, or 4 hours daily. Almost immediately, usage exceeded 45 percent for more than two-thirds of sites. Today, room usage averages 69 percent, and in some regions approaches 100 percent or more, up to 12 hours a day. As a result, Cisco paid back the initial investment in Cisco TelePresence endpoints in 9 months, much faster than the 3 years originally expected (Table 1).

Table 1.	ROI for Video Meetings
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Three-Year Business Value Factors	Planned (170 Endpoints)	Actual (500 Endpoints)	Business Benefit
Increased sales closure rates	\$127.2M	\$156M	Sales closure rates increased by 2% because customers could interact with Cisco subject-matter experts and sales leaders through virtual briefings.
Reduced sales cycle time	\$67.7M	\$90M	The average sales cycle was shortened by 9.7% (30 days out of 310) because access to subject-matter experts and business decision makers was easier.
Travel avoidance	\$61.2M	\$264M	By a conservative estimate, 5.5% of meeting participants avoided a trip.

³ Cisco IBSG Economics Practice, 2011

Three-Year Business Value Factors	Planned (170 Endpoints)	Actual (500 Endpoints)	Business Benefit
Productivity gains from reduced travel	\$42.1M	\$99M	Employees saved 4 hours on each trip avoided. Savings are calculated based on average fully burdened salaries, including benefits.
Services cost avoidance	\$21.2M	-	Cost avoidance includes fewer cases escalated for Cisco TAC and more efficient training.
Total deployment costs	–\$79.3M	-\$280M	This amount was the investment, including hardware, facilities readiness, infrastructure upgrades, installation, network bandwidth, and support.
Total	\$240.2M	\$329M	The investment paid for itself in 9 months.

Increasing the Value of Meetings by Preserving the Content and Making It Searchable

In addition to lowering the costs of meetings, Cisco TelePresence and Cisco WebEx applications also preserve meeting content, which previously lived on only in the minds of attendees. Meeting organizers can simply click a button to record all audio, video, and public chat. Cisco Pulse[®] Video Analytics automatically tags video content by speaker and keywords, making the video searchable.

From March 2010 through September 2012, Cisco conducted more than 14,000 training sessions using Cisco TelePresence endpoints. Estimated ROI during this period includes:⁴

- **Travel avoidance of \$57 million:** This estimate is based on average cost per trip of \$1000, and average of four meeting participants who avoided travel.
- Regained productivity savings of \$21 million: This estimate is based on four trainees with an average fully burdened hourly salary of \$93.75 saving four unproductive hours, including time driving to and from the airport and standing in lines for security, rental cars, and hotel.
- Reduction of 30,840 metric tonnes in greenhouse gas emissions: This estimate is based on an average of four people avoiding an average round-trip distance of 3 miles, with each round trip producing 0.18 tonnes of carbon emissions. The reduction is the equivalent of 5607 fewer cars on the road for one year, assuming average miles per gallon.
- Equivalent of 30 trainers working full time: Over 18 months, trainers saved 62,180 hours in unproductive travel time. Instead of traveling to classroom training, employees take training sessions recorded using the Cisco TelePresence Recording Studio solution and automatically published on a Cisco Show and Share portal.

⁴ Cisco IBSG Economics Practice

Safety and Security

The Cisco Safety and Security team uses IP video surveillance to operate more efficiently and increase situational awareness, helping protect people and assets throughout the global enterprise (Figure 3). Approximately 6000 video surveillance cameras from Cisco and other vendors are deployed in more than 500 sites. The effect on network bandwidth is nominal because security officers retrieve video only to monitor or investigate incidents.



Figure 3. Video Surveillance at Cisco Operations Center

The most important benefit of IP-based video surveillance for Cisco is that it helps to fulfill the company's corporate social responsibility to protect employees, customers, and partners visiting Cisco offices; surrounding communities; and the Cisco brand. Other major benefits of IP-based video surveillance include:

- More efficient incident investigation: Previously, video was stored on tapes at each building. Officers had to retrieve the tapes to investigate reports of missing laptops or lab equipment, parking lot incidents, lost badges, and so on. Now officers can review video from any global office over the network, a process that is 70 to 80 percent faster than rewinding and fast forwarding tapes. Video analytics such as motion detection or missing-object detection make it even faster to locate the relevant video. When an employee reports a lost or stolen badge, officers can retrieve video from the last time the badge was used to confirm it was used by the owner of the badge.
- Ability to centrally monitor remote sites: Safety officers can also view live video over the network, primarily to protect people and property during weather-related disasters or when crowds assemble.
- Lower false-alarm response costs: It is generally accepted that more than 90 percent of alarms are false, the result of faulty detection sensors, environmental conditions, and user error. The Cisco Safety and Security team now processes about 60 percent of incoming alarms by viewing video feeds to identify whether the alarm is valid or simply the result of an employee holding a door for a delivery, for example.

"We estimate that globally, IP video surveillance saves us about seven hours per day in alarm investigation and processing time, and about ten hours of labor per day by reducing the number of times we send response personnel to false alarms. Over the course of a year this results in more than \$145,000 in direct savings or cost avoidance."

-Deon Chatterton, Senior Manager of Security Technology and Services, Cisco

• Deterrence: IP video surveillance cameras serve as a deterrent to theft, vandalism, and false injury claims, reducing losses for Cisco.

The video surveillance infrastructure provides other benefits not directly related to physical safety and security. For example, managers can review video from loading dock areas to help ensure employees are following safety guidelines. And Cisco employees can visit a secure website to reassure themselves that their children are playing happily in Cisco daycare centers, improving job satisfaction. Parents are given access to video feeds only from the rooms where their children are playing.

The Cisco Physical Safety and Security team has recently taken steps to reduce costs of storing surveillance video. One tactic was shifting from network-attached storage (NAS) to Cisco's internal storage cloud, called S-Cloud, lowering storage costs by 76 percent. Another was migrating to native-IP video surveillance cameras to reduce cabling costs by 10 percent. The team is investing the savings in more technology to improve video quality, further improving situation management and incident investigation.

Conclusion

Cisco has benefitted many times over from its investment in a Cisco Medianet Architecture and video endpoints. The reason is that the same infrastructure lowers costs or improves the experience for many business processes, including customer engagement, events, training, corporate communications, and safety and security. Table 2 summarizes ROI.

Table 2.	ROI Summary for Video in the Cisco Enterprise
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Quantifiable Benefits	Qualitative Benefits
Travel avoidance	Improved work-life balance by reducing travel requirements
Productivity gains	Increased customer satisfaction from more frequent engagement with an in-person experience
Revenue acceleration from shorter sales cycles	
Fewer resources required to investigate false alarms	Improved employee satisfaction through viewing daycare area

For More Information

To learn more about the following technologies, visit their respective websites:

- Cisco Video: www.cisco.com/go/video
- Cisco initiatives for medianet: www.cisco.com/go/medianet
- Cisco Collaboration solutions: www.cisco.com/go/collaboration
- Cisco TelePresence conferencing: <u>www.cisco.com/go/telepresence</u>
- Cisco WebEx meeting applications: <u>www.cisco.com/go/webex</u>
- Cisco Video Surveillance: <u>www.cisco.com/go/physec</u>
- Cisco Show and Share video sharing application: <u>www.cisco.com/go/showandshare</u>
- Cisco Media Experience Engine: <u>www.cisco.com/go/mxe</u>

To read additional thought leadership documents from the Cisco IBSG Economics Practice, visit: www.cisco.com/web/about/ac79/re/re.html - ~tab~feat-content,acc~resource-center.

To find out how your organization can obtain an ROI analysis, visit: www.cisco.com/en/US/products/hw/video/services.html.



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