The New Business Case for Video Conferencing

Understanding the Real Benefits of Video Conferencing

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Introduction

The business case for video conferencing (VC) is changing. Since the mid-1980s, organizations around the world have depended on video conferencing to help them conduct business in a cost-effective, efficient, and more productive manner. Real world deployments have traditionally focused on the conference room as the implementation, the business meeting as the application, and reduced travel expenses as the benefit. But now all this is changing.

Today’s savvy enterprises have discovered that video conferencing can be used for much more than the standard project or team meeting. In fact, when properly deployed and utilized, video conferencing can help transform the way an organization does business.

This white paper provides insight into the value of video conferencing in today’s business environment, and real-world examples of how organizations – large and small – are leveraging visual collaboration to find new clients, serve existing clients better, and improve their bottom line.

The “Old School” Business Case for Video Conferencing

Traditionally, organizations turned to video conferencing (VC) as a means of avoiding business travel. As a result, the obvious way to justify investments in video conferencing solutions was by calculating the cost savings associated with NOT traveling.

The table below highlights an example of how an organization might calculate the business case – or in this case financial payback – on video conferencing investments. The company highlighted in the chart below has three locations, with product development and marketing teams split between the three sites. In this example, each team sends two of its members to review sessions each quarter.

Now assume that this company purchased one video conferencing system for each of its sites for a total up-front cost of US $36,000. By amortizing that cost over a 3-year period and adding in maintenance expenses (15% of purchase price per year), we arrive at a total cost for the VC systems of $19,200.

<table>
<thead>
<tr>
<th># of Employees Using VC Instead of Travel</th>
<th>8</th>
<th>8</th>
<th>8</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Trips Per Year</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Average Cost / Trip (airfare, hotel)</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>% of Trips Replaced by Video Conferencing</td>
<td>20%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Travel Cost Savings Per Year</td>
<td>$12,800</td>
<td>$25,600</td>
<td>$32,000</td>
<td>$38,400</td>
</tr>
<tr>
<td>Up-Front Cost per Group VC System</td>
<td>$12,000</td>
<td>$12,000</td>
<td>$12,000</td>
<td>$12,000</td>
</tr>
<tr>
<td># of Systems Purchased</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total CapEx for Video Conferencing</td>
<td>$36,000</td>
<td>$36,000</td>
<td>$36,000</td>
<td>$36,000</td>
</tr>
<tr>
<td>Cost / Year (Amortized over 3 years)</td>
<td>$12,000</td>
<td>$12,000</td>
<td>$12,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Annual Maintenance Cost per System</td>
<td>$2,400</td>
<td>$2,400</td>
<td>$2,400</td>
<td>$2,400</td>
</tr>
<tr>
<td>Total Cost for VC Systems Per Year</td>
<td>$19,200</td>
<td>$19,200</td>
<td>$19,200</td>
<td>$19,200</td>
</tr>
<tr>
<td>Payback Period (in Months)</td>
<td>18</td>
<td>9</td>
<td>7.2</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 1: Payback period based on only travel savings
As shown in the table above and figure below, the payback period depends on the percent of business trips replaced by video conferencing and the cost for each trip. In this case, and assuming each trip costs US $1,000, the payback period ranges from 18 months to only 6 months.

![Payback Period (months)](image)

Figure 1: Payback Period as a Function of Average Trip Cost and Replacement Percent

Even on a strictly cash flow basis, the numbers based on only travel savings and only for the quarterly review meetings are encouraging. If the company lays out $36,000 on day one and then reaps only the travel savings minus the maintenance costs, the breakeven for any reasonable usage rate is less than two years as shown in the table below.

<table>
<thead>
<tr>
<th>Up front cost</th>
<th>$36,000</th>
<th>$36,000</th>
<th>$36,000</th>
<th>$36,000</th>
<th>$36,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of trips replaced by video conferencing</td>
<td>20%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
<td>75%</td>
</tr>
<tr>
<td>Cost/trip</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Savings per year after maintenance</td>
<td>$5,600</td>
<td>$18,400</td>
<td>$24,800</td>
<td>$31,200</td>
<td>$40,800</td>
</tr>
<tr>
<td>B/E months</td>
<td>77</td>
<td>23</td>
<td>17</td>
<td>14</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 2: Cash Flow Analysis for Travel Savings

The long-standing good news for the VC industry is that due to the high cost of business travel, the cost-savings justification approach usually provides a strong ROI / payback on VC investments – especially when compared to other technology investments. In some situations, the payback is exceptional.\(^1\)

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\(^1\) While the actual financial benefit realized via the use of video conferencing in lieu of business travel depends on a variety of factors, WR has noted situations in which end-user customers have enjoyed a payback of less than six months on investments in VC technology.
The ability to calculate a defendable and satisfactory hard benefit return on video investments has had an interesting side effect - it has kept many organizations from considering the soft-benefits associated with using video conferencing. For example, when VC is used instead of business travel, employees do not have to waste time packing, traveling to/from the airport, passing through security, waiting in the terminal, or sitting in a plane. In many cases, the time savings benefit outweighs the expense avoidance benefit as shown in the table below.

Here we take the example of a department or a small/medium enterprise and use some typical figures for door-to-door travel time, salary plus overhead costs, and a group of 12 information workers who take just under one trip per month. As shown in the table, the lost productivity cost to the company calculates to just over $63,000 per year. If half of those trips can be replaced by using video conferencing, then the savings in lost productivity alone are over $31,000 per year. This figure does NOT include any savings from reduced airfare, taxis, hotels, and meal costs.

<table>
<thead>
<tr>
<th>Round Trip Travel Time (hours)</th>
<th>7</th>
<th>7</th>
<th>7</th>
<th>7</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Productive Meeting Time (hours)</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Annual Salary</td>
<td>$120,000</td>
<td>$120,000</td>
<td>$120,000</td>
<td>$120,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>Salary + 30% Overhead (benefits, etc.)</td>
<td>$156,000</td>
<td>$156,000</td>
<td>$156,000</td>
<td>$156,000</td>
<td>$156,000</td>
</tr>
<tr>
<td>Employee Cost per Hour</td>
<td>$78</td>
<td>$78</td>
<td>$78</td>
<td>$78</td>
<td>$78</td>
</tr>
<tr>
<td>Cost Per Trip for Travel Time</td>
<td>$585</td>
<td>$585</td>
<td>$585</td>
<td>$585</td>
<td>$585</td>
</tr>
<tr>
<td>Average # of Trips per Year per Worker</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td># of Workers Traveling for Business</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Lost Productivity Payroll Cost per Year</td>
<td>$63,180</td>
<td>$63,180</td>
<td>$63,180</td>
<td>$63,180</td>
<td>$63,180</td>
</tr>
<tr>
<td>% of Trips Replaced by Video Conferencing</td>
<td>20%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
<td>75%</td>
</tr>
<tr>
<td>Productivity Savings by Using VC</td>
<td>$12,636</td>
<td>$25,272</td>
<td>$31,590</td>
<td>$37,908</td>
<td>$47,385</td>
</tr>
</tbody>
</table>

Table 3: Productivity Savings Realized by Replacing Travel with Video Conferencing

The takeaway here is that the old-school method of justifying video conferencing investments through (1) travel expense reduction, and (2) employee time savings continues to work very well – even in today’s business climate. However, as described in the next section, this is just the tip of the iceberg.

**The “New” Business Case for Video Conferencing**

**Survey Results**

In late 2012 / early 2013, Wainhouse Research (WR) and Polycom (the sponsor of this study) jointly created and fielded a WR-branded survey focused on the “real” benefits that end-users realize from their use of video conferencing.

More than 4,700 people around the world responded to this survey, and the results provided great insight into how organizations are using video conferencing today, and how they hope to use it in the future. Notable results from this research effort included the following:
Video Users Tend to Use Video Often
The majority of people who use video conferencing participate in video calls every day or every week.

Video has Expanded Past the Boardroom
VC users are using video on their PCs and notebooks, video-enabled phones, tablets, and smartphones. In fact, more users participate in video calls using PCs and notebooks than in meeting rooms!

Soft Benefits Surpass Hard Benefits
Perhaps the most notable finding of this research effort is that travel reduction is no longer the primary benefit of video conferencing. The top spots now go to increased efficiency / productivity, increased impact of discussions, and expedited decision-making (with travel reduction tied for 3rd place).

End-User Interviews
Customers today are using video conferencing in many ways that were not imaginable just a few years ago. These implementations and use cases are delivering hard and soft benefits far beyond the cost savings associated with business travel and general purpose meetings.

To gain insight into the real-world use cases for VC, WR also conducted a series of interviews with organizations using video conferencing to facilitate everyday business. While the applications themselves are highly diverse, the benefits they provide fall into four broad categories as listed below:

<table>
<thead>
<tr>
<th>Type of Benefit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Building</td>
<td>Using video conferencing to enable or expedite the teaming, partnering, and bonding between internal and external resources.</td>
</tr>
<tr>
<td>Productivity &amp; Efficiency</td>
<td>Using video conferencing to improve the performance of internal resources and reduce the time / cost associated with processing business.</td>
</tr>
<tr>
<td>Customer Outreach</td>
<td>Using video conferencing to communicate with customers, clients, and partners in an efficient, effective, and high impact manner.</td>
</tr>
<tr>
<td>New Services Enablement</td>
<td>Using video conferencing to expand the type of services or reachable target audience for a company’s offerings.</td>
</tr>
</tbody>
</table>
In many cases, VC applications will provide several types of benefits. For example, using video conferencing for a client meeting involves team building, improved efficiency, and customer outreach.

The remainder of this section highlights some real-world use cases for video conferencing and demonstrates that the benefits go far beyond simple cost and time savings.

**Example #1 - Merger & Acquisition**
WR talked to one high tech company that was able to reduce the negotiation phase on a major acquisition from five months to three months, and save tens of thousands of dollars in the process, via the strategic use of video conferencing.

In this case, video conferencing offered a wide range of benefits. For example, the ability to meet face-to-face instead of over the phone enabled the executives get to know and trust each other more quickly. In addition, the use of VC instead of business travel meant that the negotiations were not delayed by the need to coordinate schedules, and the executives did not have to waste time traveling.

Another interesting benefit is that even before the deal was signed, business line managers used the video conferencing systems to meet and bond with their counterparts. Given that the deal had yet to close, these managers would never have received approval to conduct in-person meetings. However, video conferencing let them “virtually meet” at zero cost and without investing significant time. These meetings furthered the negotiation process and subsequently enabled the integration of the companies to proceed more quickly.

In this example, the acquiring company invested ~ US $500k in video conferencing equipment to facilitate these discussions, and the company calculated the payback to be less than six months in cost savings alone.

**Example #2 – Clean Room Environment**
WR spoke with a global pharmaceutical company that has many clean rooms throughout its manufacturing and R&D operations. In order to enter (or exit) the clean room environment, a worker must step through a detailed process including changing clothes and passing through a decontamination inspection process. Each entry or exit takes 20 – 30 minutes to complete, and this process is repeated by dozens of people around the world every single day as they respond to manufacturing issues or attend daily operations meetings.

This company recently installed video conferencing systems within several of its clean room environments at a total cost of US ~ $75,000. As a result, the number of physical entries in video-enabled locations has been cut by 50%. Across the company, this application saves an average of six-to-eight man-hours per day, which is equivalent to ~ $3,500 per week and a payback of less than thirteen weeks!

Equally important, senior people no longer have to waste their time going through the entry / exit process, and the risk of clean room contamination has been significantly reduced.
**Example #3 – The Gift of Quality Education**

In some cases, the benefits of using video conferencing cannot be measured in dollars. WR spoke with a pair of highly motivated public school teachers working in a district of Alaska that is roughly the size of New Hampshire. These educators were challenged with a seemingly impossible task: providing high quality, interactive classes to students of varying ages across massive distances.

To solve this problem, these teachers dusted off a handful of previously purchased but infrequently used video conferencing systems and created the “Classroom without Walls.” When the program began seven years ago, only three classes were taught over video. Today more than 1/3rd of student seat-time in three different schools involves video conferencing.

This program offers a wide range of benefits including:

1) **Teaching Students 21st Century Skills** – according to one teacher, “the majority of jobs these kids will do someday have not been created yet. This program teaches students another way to use technology and opens doors for their future.”

2) **Spreading the Expertise** – there are many one-room schoolhouses within this district, and some of the kids in those schools do not have access to age-appropriate instruction. For example, in one such school there is only one student of high school age. Prior to this program, this student’s education was limited by the small amount of time the local teacher could devote to his instruction. Today, however, this student takes high-school level World History, Language Arts, and Reading classes through video conferencing.

Other benefits of this program include allowing students in different locations to interact and conduct virtual field trips. Given that some of these students have never ventured more than 30 miles from their homes, the opportunity to visit a school in Yemen, meet with a Philadelphia-based expert on Afghanistan, and spend two days visiting a school of music in Manhattan are once-in-a-lifetime experiences.

**Example #4 – Virtual Visits to the Infant Intensive Care Unit**

Having a newborn baby in the intensive care unit (ICU) is one of the most stressful situations a parent can face. Ideally, the parents would want to be with the baby every minute of every day. However, this is simply not possible as it would impact the care given to the child and the other children in the ICU.

A hospital in the United Kingdom introduced a new video service that gives parents 24/7 access to their child. Each crib in the ICU has been fitted with a camera, and parents are given secure access to the video over the Internet. Day or night, the parents can see their baby and monitor the care their baby receives.

According to the hospital, these video visits do not replace in-person visits … nor are they intended to. The goal here is to allow new parents to stay connected to their baby without the hassle of local travel and parking, and the need to comply with hospital visiting hours. And while this program doesn’t directly improve the medical care the baby receives, it reduces the parents’ level of stress.
As a result of the success of this program, the ICU has seen double-digit growth in the number of patients it serves. In addition, the hospital plans to increase the number of video-enabled beds in the near future.

**Example #5 – Management Consulting**

One of the world’s largest management consulting companies, with 275,000 employees in over 100 countries, uses video conferencing to bring together project teams that form, reformulate, and disperse as needed to support clients. As one might expect, this company supports a wide range of clients around the world in various ways, and uses video conferencing in various ways.

One recent success story involved the use of video conferencing to facilitate the process of selling the company’s services to a VIP prospect. A few weeks into the sales process, the account manager determined that a meeting between the client contact and an internal subject matter expert (SME) was in order.

Traditionally, the company would have flown the SME to the client site for a one-hour lunch meeting at a cost of time and travel expenses (flight, hotel, food, etc.). In this case, however, they conducted a virtual lunch meeting. A few of the local sales representatives took the client to a local restaurant, placed a 4G-enabled laptop on the table, and connected to the SME over video. For the next hour, all of the meeting participants – including the SME – ate lunch and talked. This creative approach not only saved time and money, but also showed the client that he can have face-to-face access to subject matter experts anytime he wants. The end result is a strengthened relationship with the customer.

**Example #6 – VC-Based Drug Trials**

WR spoke with a leading-edge company that conducts clinical trials as a part of the approval process for new drugs. The goal of this company is to provide its clients, who are mostly global pharmaceuticals, with unbiased and reliable research data as quickly and cost-effectively as possible. In this industry, consistency and accuracy means everything.

To participate in a clinical trial, patients must agree to follow the treatment protocol (e.g. take the medications as prescribed) and report to an approved clinic or hospital for regular evaluations. To ensure reliable results, trials typically include only a small number of carefully screened clinics with extremely well trained staff. Unfortunately, having only a handful of clinics to choose from is often inconvenient for the trial participants. In some cases, patients even relocate for months at a time just to participate in a trial.

A few years ago, this company video-enabled its clinical trial program and installed video systems in clinics and hospitals around the world. The company then adjusted its procedures such that one of its internal experts is virtually present during all patient evaluations. These experts not only observe the session, but provide real-time guidance to ensure that all trial guidelines are followed.
The benefits of this program are numerous and include:

- Increased convenience for patients by giving them more clinics to choose from
- More consistent results by ensuring that all evaluations are conducted the same way
- Decreased cost as fewer field staff need to be trained

But most important of all, the use of video conferencing helps eliminate errors, which in turn expedites the completion of trials and the availability of important drugs to patients who need them.

**Example #7 – Being in the Right Place at the Right Time**

In real estate, everything is about location, location, location. The same holds true for some businesses. WR interviewed the CEO of a software development company who faced an interesting challenge ... he was unable to gain access to many government projects.

The US government has a variety of special programs intended to support certain types of businesses including minority-owned companies and those that operate in under-served areas. Unfortunately for this CEO, his Washington DC-based firm did not qualify for any of these programs.

In 2008, this enterprising CEO decided to open a second office in Maui, Hawaii. Despite its well-deserved reputation as a beautiful vacation destination, Maui also qualifies as a Historically Underutilized Business Zone (or HUBZone). This HUBZone qualification provides small businesses in urban and rural communities with preferential access to federal procurement opportunities.

From day one, these two offices were connected over video. Both locations are equipped with group video systems, and virtually all of the company’s employees are video-enabled on their PCs, notebooks, and mobile devices. All of the company's meetings are conducted over video, and most of its client meetings include one or more remote folks on video.

According to the CEO, “We do agile software development. Fast. Rapid. Daily. Real time. Without video conferencing, we couldn’t deliver the solutions within the required timelines and budgets.”

In this example, the use of video conferencing allowed this company to expand its footprint, gain access to more government contracts, and boost the economy of an underprivileged area, all without losing control of its development process. And the ability to invite clients and prospects to the office in sunny Maui certainly doesn’t hurt.
Conclusion

Few would have anticipated five years ago that consumers would use their cell phones to purchase movie tickets, or that Internet access would enable a person to tour a house for sale in the next town, play scrabble in real time with remote friends, or use a smart phone to compare prices from many sources while shopping. The cell phone isn't just for talking anymore. Similarly, video conferencing is no longer just for business travel replacement.

Savvy business leaders are realizing that the use case for video conferencing is expanding, and that visual communications is a cost effective and dynamic tool for:

- Team building: bringing together team members across distances to collaborate on projects and to share knowledge and ideas
- Productivity and efficiency gains: allowing workers to communicate without the lost time and increased expenses of cross-country, cross-city, or cross-campus travel and to make more informed decisions faster by bringing appropriate expertise into the process as needed
- Customer outreach: developing more intimate relations with customers, prospects, and suppliers; solidifying long term relationships; and ultimately driving top line revenues
- New services enablement: delivering medical, educational, and other face-to-face-based services when external factors make physical interaction inconvenient, not cost-effective, or impossible.

Pulling all of these factors together requires a mix of, 1) imagination, 2) knowledge of your company's business processes and sales strategy, and 3) an understanding the video conferencing products, services, and technologies that are available today.

Today more than ever, the strategic use of video conferencing can help organizations reduce cost, increase sales, decrease customer churn, attract new clients, and change the way they deliver their products and services. These real-world benefits and business opportunities are far too valuable to ignore.
About Wainhouse Research
Wainhouse Research, www.wainhouse.com, is an independent market research firm that focuses on critical issues in the Unified Communications and rich media conferencing fields, including applications like distance education and e-Learning. The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings. Wainhouse Research publishes a variety of reports that cover all aspects of rich media conferencing, and the free newsletter, The Wainhouse Research Bulletin.

About the Author(s)
Ira M. Weinstein is a Senior Analyst and Partner at Wainhouse Research and a 20+ year veteran of the conferencing, collaboration, and audio-visual industries. Ira’s time is divided between core research, content creation, and providing strategic advisory / consulting services to manufacturers, service providers, channel partners, end-users, and members of the financial community. Ira has published hundreds of articles and reports on the AV, collaboration, and UC industries, and is a frequent speaker at industry events. His prior experience includes senior positions with conferencing and AV vendors, distributors, and resellers. In addition, Ira ran the global conferencing department for a Fortune 50 investment bank. Mr. Weinstein holds a B.S. in Electrical Engineering from Lehigh University and can be reached at iweinstein@wainhouse.com.

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