

COGNIZANT

Telepresence: Almost As Good as Being There



Cognizant

BE VIRTUAL



Read on, and learn:

1. How we identified and deployed telepresence.
2. How we use the technology today.
3. The benefits we have achieved.
4. What we have learned on the journey.
5. How we see the use of telepresence evolving.

Executive Summary

Cognizant began as a global company in 1994 and has experienced industry-leading growth in the global services marketplace ever since. Our success is centered on a tight industry focus and a client-first mindset in which we collaborate with customers to make their businesses stronger. With an increasingly distributed workforce and clients on every continent, we are continually extending our infrastructure and refining our operational processes to elevate the quality, timeliness and relevance of our services. These investments also enable a fulfilling and fruitful work experience for associates, regardless of where they toil -- in company locations, at home or in client facilities. Telepresence is the latest example of how we are enabling our workforce to be productive at virtually any time or place to fulfill our mission as an “anywhere” company.

Our embrace of telepresence began in late 2009 for internal senior management meetings. Quickly, we extended its use to meetings with clients and external analysts, as well as to support internal knowledge and project management activities.

Already the benefits are substantial: smoother internal meetings with better mutual understanding and improved decision-making; more effective and productive client meetings, which can include our experts anywhere in the world at short notice; substantially lower travel costs with a smaller carbon footprint; and a better work/life balance for our associates.

Just months into deployment, telepresence is helping us outmaneuver competitors by strengthening our relationships with our clients and creating a more connected Cognizant. It is also enabling us to realize “the future of work” today; that is, using IT innovatively to optimize how employees collaborate internally and with our clients over long distances and across time zones. ([Watch](#) our latest video to see how.)

How We Got Here

Cognizant began life as the captive offshore IT services provider of The Dun & Bradstreet Corp. and was spun off as an independent organization in 1996. Since then, our portfolio of services has expanded beyond IT into business and knowledge process outsourcing (BPO) and consulting. Moreover, our global delivery network has grown beyond India to locations throughout North America, Europe, Asia-Pacific and beyond, with increasing levels of technical complexity and business criticality.

This global footprint means hundreds of meetings every week among associates working from widely dispersed locations. Our senior leaders are spread across Asia, Europe and the Americas. Project teams are increasingly virtualized, with many individuals -- both our associates and client staff -- working on the same or closely related tasks from different sites. Clients and the executives who manage engagements are often based far apart, sometimes oceans away from each other.

To remove distance as a barrier to productivity and quality of service, we created industry-leading tools for remote knowledge sharing and collaboration. Among them is Cognizant 2.0 (C2), a Web 2.0 global platform that enables our highly distributed and virtual delivery teams to work more productively by sharing best practices, business and technology insights and knowledge process artifacts in real time. In a November 2009 profile, IT industry researcher International Data Corp. called C2 a "game changer," noting that it "greatly benefits Cognizant's position in the global services space."¹

Our goal was to leverage telepresence to further increase productivity, reduce the travel burden on clients and associates and shrink our carbon footprint.

Though C2 enables tighter collaboration across our global delivery network, associates at all levels still travel extensively to work together on projects at client and company facilities, worldwide. With recent advances in remote meeting technology (infrastructure providing high-quality video and audio conferencing) and building on C2's productivity advantages, we began in late 2009 to deploy telepresence. Telepresence is the name generally given to a set of audio and videoconferencing technologies delivering the impression that meeting participants are in the same room. Our goal was to leverage telepresence to further increase productivity, reduce the travel burden on clients and associates and shrink our carbon footprint.

Search & Deployment

We looked at several telepresence systems before choosing Cisco's Tandberg platform. With Tandberg, we could establish a broad array of possible "endpoints" -- that is, terminals incorporating a screen, camera, microphone, loudspeaker or some combination of these. These range from "full-immersion" endpoints (with large enough image reproduction and high enough video quality to make meeting participants feel as if they are in the same room), to high-definition webcams for laptops that nearly approximates the experience.

We originally planned to equip 20 major offices with full-immersion, three-screen systems for internal meetings. But as we rolled out the system and monitored the different endpoints, we quickly learned that the full-immersion terminals were less frequently used than a single-screen setup in a conference room (T-1) or on a desktop (1700 MXP). So, we shifted gears to scale telepresence swiftly across our global footprint with the smaller devices.

So far, we have equipped the desktops of our entire senior management team, especially in home offices, and placed one large, single-screen conference room units in every major facility worldwide. We have also installed T-1s at several major clients.

As we have rolled out the technology, our employees and clients have adopted it in a wide array of business situations. The following are some of the ways in which we are using telepresence. ([See how](#) we took the telepresence plunge.)

Internal Executive and Leadership Meetings

We first deployed devices to accommodate regularly scheduled and ad hoc meetings of our senior leadership team. The advantage of starting with this group was its small size, and it could drive top-down adoption and steer the rollout as we acquired firsthand experience. Also, we were fairly certain we could get immediate benefits facilitating better meetings of this globally distributed team.

Gordon Coburn, Cognizant's chief financial and operating officer, remarks that "telepresence has become the standard for how we do senior management calls." ([See how](#) we use telepresence to boost productivity with internal meetings.)

Client Meetings

In his recent book, *The New Polymath*, IT services industry veteran Vinnie Mirchandani explores the Renaissance-like, multidisciplinary mastery that business leaders and their organizations need to excel in today's global economy.² Mirchandani observes that "many SIs are implementing telepresence for internal communications but have not shown much initiative in using it on client projects and cutting back on project travel." That's not so at Cognizant.

Once telepresence was working smoothly for internal management meetings, we rolled out the technology to a handful of clients. They were generally skeptical at first, especially if they had previously used traditional videoconferencing, which was characterized by high cost, frequently dropped calls and video and audio quality that ranged from poor to mediocre. But they have fully embraced telepresence, which delivers a vastly superior user experience. They have found that telepresence meetings are at least as good as in-person get-togethers.

Client Delivery

At the same time, we explored ways to bring telepresence into client delivery work. The first two settings in which we are using it are knowledge transition and training.

Transition is the transfer of a client's operation (e.g., software maintenance or call center support) to our people and infrastructure. In the past, this typically required our specialists to be at a client site for several weeks. The start date was often determined by logistics, especially visa procurement. But with telepresence, we can start the transition with less delay, involve more specialists and do it at lower cost than before.

Those aren't the only benefits. When we bring a client's process in-house, we often need to conduct extensive training. This typically requires a trainer to travel, with all the same visa and logistics issues. With telepresence, we can also train people with less delay and at lower cost than before. ([See how](#) we leverage telepresence in client settings.)

Other Applications

Telepresence has improved the way we work in many other ways, among them, how we interact with the industry analysts who cover our company and our competitors. We recently ran a four-hour analyst workshop with people in three locations without anyone having to travel. We were able to include India, which we otherwise would not have been able to do. With more experts on the call, we were able to furnish more timely and better information and answers to their questions.

We now interview job candidates using telepresence. It makes coordinating logistics much easier because we don't need to have all the interviewers in one place on the same day. In addition, we can make sure that a candidate sees everyone they should. Also, candidates are impressed with the leading-edge technology that few, if any, have ever used before.

We also used telepresence for almost every meeting in the last budgeting cycle. As Coburn explains, "It made a tremendous difference; it probably shortened the budget cycle by 25%, because there was far less confusion." (See [how telepresence is expanding across our global footprint.](#))

Clients see faster project initiation; more of the right people in meetings more of the time; higher responsiveness during the course of delivery; and lower costs of servicing the account, especially for travel.

Plentiful Returns

The benefits of telepresence have been greater and more quickly realized than we anticipated. Clients see faster project initiation; more of the right people in meetings more of the time; higher responsiveness during the course of delivery (because we can much more readily accommodate requests for meetings); and lower costs of servicing the account, especially for travel. This gives us greater connectedness with clients and helps strengthen client relationships.

Internally, we are seeing enormous benefits already. For example, we have realized dramatic reductions in travel costs, as about half our internal meetings that would have required travel are now done through telepresence. We are just starting to see a reduction in client travel costs. And both of these contribute to a significant reduction in indirect carbon emissions. Our indirect emissions associated with business travel decreased from 35,964 metric tonnes of CO₂e in 2008, to 27,738 in 2009, or a 23% reduction, even as we grew the business by 16% over that time period. Though some of this was due to pressure we had already put on travel costs, telepresence was instrumental in driving these significant results. Not only does the technology keep us off planes, but it also keeps us out of cars, driving to the airport and driving between cities, both in the U.S. and India.

But it is not just about cost, as Coburn explains: "Instead of people spending hours on airplanes, they can be productive. Also, where telepresence is supplanting audio conference calls, those meetings are coming to better decisions, faster." Additionally, we are much better able to include people in meetings where the benefits of their participating were previously outweighed by the costs of getting them there. This promotes involvement and a connectedness to the leadership team, which makes for a more cohesive company and culture.

In fact, adding a high-quality visual dimension to traditional in-person meetings leads over time to stronger relationships. In social psychology, this is known as the law of propinquity; that is, greater physical or psychological proximity between people tends to lead to stronger bonds.³ On a team -- whether a project team or an executive team -- stronger bonds between the players leads to greater effective-

ness and focus and, perhaps most importantly, fewer distractions. And to quote the famous Zen Buddhist Monk, Thich Nhat Hahn, "The most precious gift we can offer others is our presence."

Finally, our people have seen significant improvements to their work/life balance. (See [more](#) on how telepresence allows our associates to achieve personal and professional nirvana)

Applied Learnings

The single biggest discovery for us was that full-immersion rooms (six seats locally and six in another location) are of limited use. They are the most impressive manifestation of full-immersion telepresence. They look fabulous. But they are expensive and somewhat inflexible. They still require people to travel to them, in a limited format of six people at each of two locations. This is a particular challenge in Chennai, the hub of our Indian operations, where it can take two hours to get across town from one facility to another. Creating flexible endpoints was important for adoption; if people can quickly walk to a conference room with a single large-screen setup (for one to several people) or get online from their office or laptop, they are much more likely to use it.

The first thing we learned was that the benefits of HD video and telepresence depend on two things: the complexity of the discussion and the importance of a relationship between the participants. If the subject matter is simple and the exchange is transactional, then video offers little benefit over a telephone or conference call. If the subject matter is complex, such as in a budget meeting with spreadsheets and other data, then HD video is much better than a conference call. HD video is also the better medium for a meeting that is straightforward or routine, but in which relationship is important, such as a candidate interview or a personal call home. If a meeting is both complex and involves important relationships (for example, an executive meeting or a client account meeting), then telepresence delivers significantly better results than HD video (see Figure 1).

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Where Telepresence Shines

The need for better communications is driven by complexity and relationship.

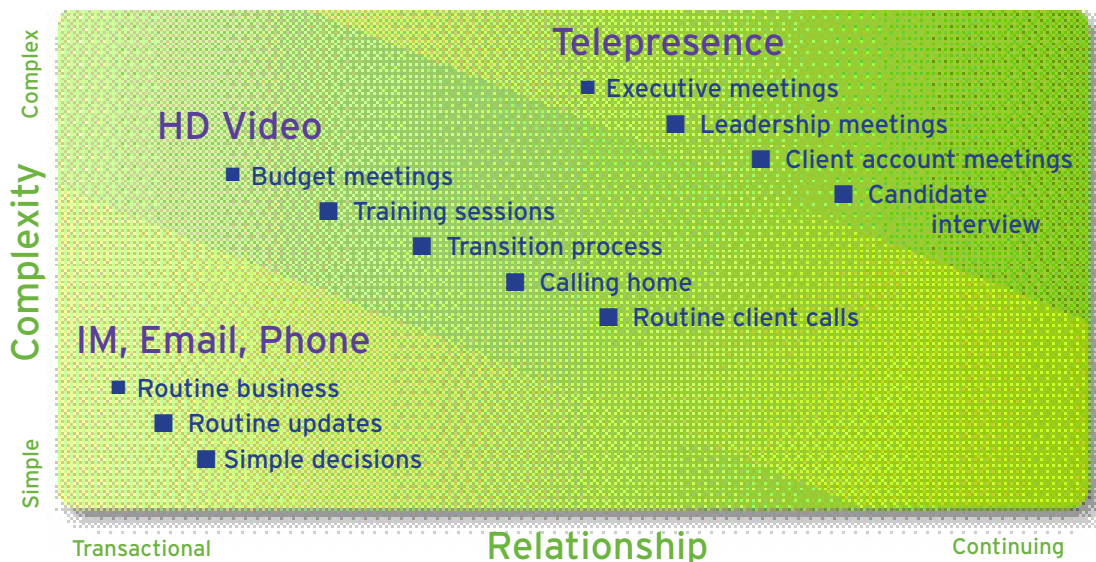


FIGURE 1

Another important lesson learned is that by starting and progressing at a moderate pace, we were able to make course corrections on the fly.

Note that in any case, telepresence is better than HD video, but the benefits for a budget meeting, for instance, would not normally outweigh the cost of going to the facility, which is fixed. The same applies to in-person vs. telepresence for an executive meeting; in-person is better, but the benefits typically do not outweigh the cost of travel.

Another important lesson learned is that by starting and progressing at a moderate pace, we were able to make course corrections on the fly. Lastly, early experiences shape future use. For instance, to ensure that everyone had a positive experience, we simultaneously launched telepresence with a dedicated 24-hour help desk to handle bridge setup and other logistics, as well as troubleshooting activities, via phone and instant messaging.

Months into our launch, associates are knocking down the door to get telepresence access. It has been enthusiastically adopted by nearly every associate, from our senior management team and business unit leadership, down to client partners, delivery managers and operations personnel. Usage has risen rapidly to over 400 hours/week since late 2009 ([Watch](#) how we have applied our learnings.).

Telepresence by Device

Exponential growth is driven by desktop applications.

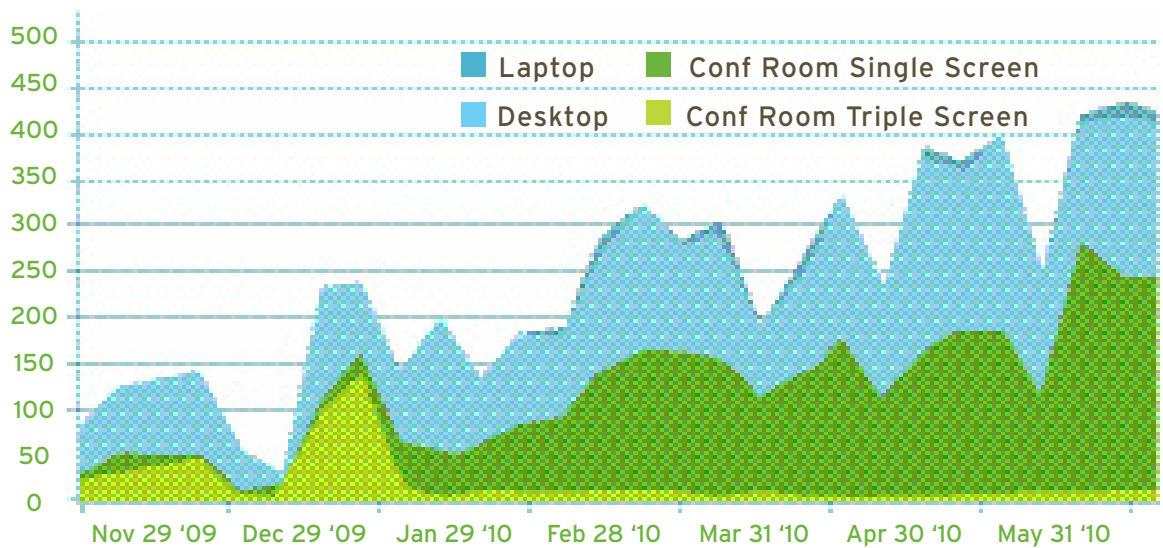


FIGURE 2

The Future

We have used telepresence to improve collaboration and accelerate the quality and velocity of our work. But we are sure there is a lot of potential yet to be tapped. In execution and delivery, for instance, there are task-oriented meetings that do not yet use telepresence because it is hard to accommodate paper, flipcharts and a fluid work setting (although the ability to integrate WebEx presentations is making this less of an issue). But we expect that delivery teams' inherent creativity will solve these problems and uncover more opportunities.

Our venture into telepresence is already a success -- with greater benefits on the way. There is such a wealth of opportunities for future cost savings and service

enhancements that there is no doubt we will be expanding and extending its applications over the long term, particularly as we knit it into our global delivery network.

But the biggest benefits of all are less obvious and revolve around customer intimacy, our “global” DNA and the future of work. Staying close to our clients and responding to their needs are central to our culture. Telepresence lets us meet with them more often and more effectively, helping us better understand and respond to their needs.

Our continued success depends on being able to coordinate the best of the world’s resources to solve our clients’ challenges, wherever they are located. Telepresence helps us take the anywhere, anytime organization to the next level, giving us the means, for instance, to bring an expert into the room from the other side of the world at short notice.

In a business environment in which knowledge flows more freely, the ability to innovate and react rapidly is a crucial competitive advantage. A study we commissioned this year⁴ shows that companies already garnering results from a more collaborative work environment stand out from their peers in how they approach technology. They are more likely to adopt a virtual environment early and are at the forefront in testing and adopting new tools.

Work in the future will involve ever more virtual collaboration. With Cognizant 2.0, we have an integrated framework that allows our associates and clients to share knowledge through a single platform that leverages social media tools and techniques (blogs, wikis, instant messaging and semantic tagging of knowledge assets to enable more effective search). With telepresence, we can provide the human dimension via high-resolution video to complement how Cognizant 2.0 helps us work more productively, both internally and with clients, and be the global services company that is living the future of work today. ([See how](#) telepresence complements Cognizant 2.0.)

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FOOTNOTES

1 Mayur Sahni, “Cognizant 2.0: Leveraging Web 2.0 Technologies for Driving Innovation in Offshore Delivery,” International Data Corp., November 2009.

2 Vinnie Mirchandani, **The New Polymath**, Wiley, June 2010.

3 Gary M. Olson and Judith S. Olson, “**Distance Matters, Human-Computer Interaction, 2000**,” Volume 15, pp. 139-178, Lawrence Erlbaum Associates, Inc.

4 “Next-Generation CIOs: Change Agents for the Global Virtual Workplace,” an Economist Intelligence Unit research program sponsored by Cognizant, October 2010.

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