As travel costs soar, the demand for telepresence is rising, say **Shivani Mody** & **Sujit John**

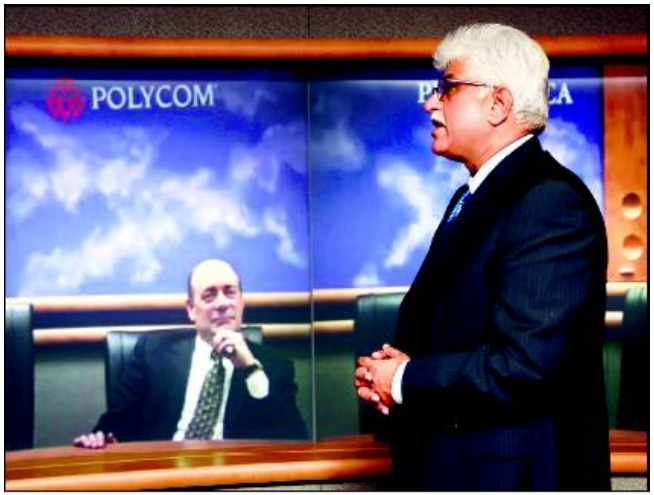
Your partner's just a button touch away

In the immediate aftermath of 9/11, as the fear of flying pushed many airlines around the world to ground their planes, the term video conferencing became a popular part of business vocabulary. But the economic boom that followed later, restored flying and personal contact once again as the preferred mode of business interaction.

Now once again, with rising fuel prices making air travel prohibitive and the economic downturn compelling sharp cost cuts, video conferencing is returning to centrestage. But the levels of technology this time are far superior to what one saw in the early years of this decade. What we see now though is that these technologies — popularly referred to as telepresence or realpresence technologies (because of the almost life-like images they produce) — are fast becoming mainstream.

Last week, Tata Communications announced an initiative under which it will provide Cisco's telepresence solution within hotels of the Taj Group, as also in the offices of the Confederation of Indian Industry (CII). This involves setting up of private and public rooms with high-definition video-conferencing facilities, available to use on an hourly basis. The plan is to extend it even to overseas locations of their offices/hotels in Boston (US) and London by September 2008, and later New York.

Polycom, one of the world's biggest telepresence solutions providers and which provides the backend infrastructure and software for the video conferencing facilities in Reliance WebWorlds, is now working with others like Bharti Airtel and BSNL to set up telepresence facilities, and also to enable video conferencing on mobile phones — something that is expected to become mainstream once the 3G policy announced last week becomes effective (3G provides the necessary bandwidth that video flows require).



NEVER AWAY: Rakesh Mittal, MD of Bharti Airtel, in Delhi, talks to Robert Hagerty, CEO of Polycom, in San Francisco, on a telepresence system

In short, telepresence is not only likely soon to become an integral part of the way big corporates conduct their communications, it is also expected to become accessible to smaller enterprises and individuals, given the public rooms and pay-per-use models that are emerging. And that explains why one can today even see Cisco ads on TV, showing family members gathering in a room to watch a relative getting married in a distant place.

Multiple applications

"In India, we have many festivals and cultural events, and each time we feel the need to see our near and dear ones. So public realpresence rooms will become big business," says Yugal Sharma, regional director of Polycom India. He says Reliance WebWorlds' video facilities see extensive use during festivals like Karva Chauth and Rakshabandhan.

But the bigger telepresence solutions that involve large, multiple, high-definition TV screens are still expensive. The public rooms set up by Tata are available for $500 or Rs 20,000 per hour, beyond the reach of most individuals. But analysts expect these costs will come down significantly as volumes grow.

Till then, high-def telepresence is likely to be the preserve of corporates. For companies, it means, more than anything else, reduced costs of travel. And not just air travel. Cisco, which has deployed the technology in many of its own offices, found that the maximum usage of telepresence took place between an office in London city and an office located 60 km away from the city. "On further inquiry we found that it took over two hours to get to the London city office and the easiest transport mode was a crowded train ride. So people preferred telepresence," says Ajay Goel, senior VP in Cisco India.

Goel says that Cisco has had 1,00,000 meetings with its customers, as also internally, using the telepresence solution. "Only in our travel costs we have saved $70 million annually," he says.

Sharma says when Maruti was launching its Zen Estilo, many of the distributors and dealers for the car around the country walked to their nearest Reliance WebWorlds for the required training.

"When you are meeting somebody for the first time or when you are talking about a deal for the first time, a face-to-face meeting may be important. But subsequent meetings can be done over a telepresence system," says Praveen Kumar, VP for services in Nortel, Polycom's primary partner to monitor and manage its telepresence networks for clients, ensuring uninterrupted service, ensuring the layouts are good, and that nobody intrudes into a conference.

Going Green

Green concerns are also becoming a big driver for telepresence. Aircrafts are amongst the biggest polluters in the world. Every reduction in air travel amounts to a reduction in a company's carbon footprint. And with CEOs and CIOs under pressure to show their green credentials, such reductions are becoming increasingly important for them.

Telecom major Vodafone is seen to have saved nearly 13,500 flights and reduced 5,000 tons of carbon emissions following the implementation of telepresence systems. "A multinational might have to arrange travel for managers from Australia, Beijing, Singapore and Delhi to its US office. This often involves 100,000 miles of travel and 50 tons of carbon emissions in one meeting, 220 unproductive hours of luggage retrieval, travel time to the airport and then reaching the offices.

Some companies have even reported 30% reduction in costs with telepresence," says Jeanne Lim, marketing director (APAC) for Tandberg, another major telepresence solutions provider.

Spreading Wide

The technology is also finding varied applications. With Indian companies doing a lot of animation work for Hollywood movies, directors in the US are using telepresence mechanisms to see live animation work, get updates and, most importantly, to see the body language of their Indian vendors. Body language is seen to form about 60% of communication, and telepresence helps directors to see whether their Indian counterparts actually understood their requirements.

Tata Communications is also contemplating deploying telepresence solutions in smaller towns in India. "Working with their sister concern, Tata Teleservices Maharashtra , we want to reach out to the rural regions of Maharashtra," says Peter Quinlan, director for managed telepresence services, Tata Communications. Connecting healthcare facilities, connecting single branches in rural areas to the main city bank and educational facilities are some of the services that can potentially be applied.

Currently, implementing a good quality solution will cost between $80,000 and $300,000 depending on how the room is set up and the extent of bandwidth. But S Viswanathan, chairman of CII Karnataka, believes the hosted model would be a viable alternative for its members, and especially for a lot of small and medium enterprises.

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WHAT IS A TELEPRESENCE SYSTEM?

A modern telepresence system has a single or multiple high definition plasma screens, where you would be able to view life size images of those in distant locations you are communicating with. It can be almost made to look like a conference that everybody is having in a single room in one location.

The touch of a single button on an internet protocol (IP) phone could be enough to get all connections going. Other things required are broadcast-quality cameras, ultra sensitive mikes, and customised lighting. If all conference rooms are set similarly — colours, furniture, systems etc — you can give a better impression of everybody being in in the same room.

What has enabled telepresence is increased bandwidth, technologies to better control the network, high definition video and new compression technologies (to compress heavy video images).

Some players have proprietary telepresence technologies. But others solutions' are based on open standards and can therefore connect to anything, be it another telepresence room, a laptop or a mobile phone. Open standards also means two companies can use it to communicate with each other, and it can switch protocols, thereby allowing systems using different technologies to communicate.

"We use the H323, which is a standard video conferencing protocol. For the network we use the public internet. There are also service providers for dedicated networks for telepresence," says Jeanne Lim of Tandberg.