Teliris Telepresence

Jill Weddle
University Of North Texas
CECS 5400
Abstract

This paper discusses the communications capabilities and requirements of the Teliris telepresence system. This paper describes the Teliris telepresence system, who uses the Teliris telepresence system, and how the Teliris telepresence system works. The Teliris telepresence system is important because it allows users to collaborate with video and audio, improves the individual emotional experience, and eliminates distance as a barrier to productive experiential communication. This benefits education by supporting distance learning at multiple sites, eliminating travel time and costs, and promoting instructor access.
Introduction

The Teliris telepresence system allows users to collaborate using high-definition video, audio, and collaboration tools. This creates the feeling of being in the same room and allows for exchange of communication between multiple individuals, regardless of the distance between them. In the education setting, classes can be held at one location with participants in several different locations. In the business setting, companies can collaborate from around the world. In both cases, telepresence users are reducing their carbon footprint. Telepresence is a very efficient way to deliver information while cutting down on travel time and costs as well as physical supplies. It also allows students and teachers to work together even when they aren’t able to physically be in the same place.

How Telepresence Works

In order for a telepresence system to reach maximum functionality, several technologies must be employed. Teliris offers high-definition video, large display screens, multiple cameras, high-quality sound, and the bandwidth to support all of these functionalities. A person, or group of people, in one part of the world can connect with another person or group of people on the other side of the world. Telepresence differs from video conferencing two main ways. First, ultra high definition video (1080p) is utilized. Secondly, large display screens give a true-to-life image of everyone in the meeting. This allows facial expressions, gestures, and eye contact to be interpreted easily. The Teliris team will arrange the conference rooms in a similar set-up with identical furniture, which gives participants the feeling of sitting in the same room. In order to offer services to anyone around the world, Teliris integrates the internet as well as QoS-based networks and customer-owned networks in order to provide interoperability with other video collaboration endpoints.
Teliris Telepresence Options (What It Is)

All of the telepresence products offered by Teliris include high definition video quality (up to 1800p) and AAC-LC audio up to 22 kHz, along with noise cancellation up to 15 dB. The customization of the various products offered by Teliris allows their telepresence systems to be used in many different environments.

The Teliris Virtualive system offers three to eight 65-inch display screens per room, accommodating up to twenty-eight participants. The cameras across the top of each screen allows for accurate eye contact between participants, providing a true-to-life teleconferencing experience. The price for this product is usually around $6,000 per month, which includes 24-hour unlimited support.

The Teliris Express system is a smaller, cost-effective solution for companies who have limited space in their existing conference rooms. The flexible arrangement with one, two, or three displays, each with a camera, can accommodate a wide range of needs for up to six participants per room.

Teliris also offers products for personal telepresence use. The NanoPersonal Telepresence system includes a 22-inch display that broadcasts HD video at thirty frames per second.

Who Uses It

A range of collaboration products is also offered for those who want to share documents and projects. The InterACT Touchtable allows participants to share and move video, text, and audio files in real time via touch screen, while the DocCam can be mounted on the ceiling to allow users to see what is being written on a piece of paper. Another collaboration tool called
FuzeMeeting is a development between FuzeBox and Teliris that includes whiteboard and annotation capabilities.

Implications for Education

Telepresence allows student access to teachers and experiences they couldn’t otherwise have. For example, schools may be unable to locate foreign language teachers. Telepresence makes it possible for teachers to share their expertise from any location, allowing students to experience cultures that they may never be able to experience in real life. Being exposed to the native French accent may be more beneficial for students than learning from someone who speaks French as a second language.

The ability to reduce travel costs for instructors means increasing the amount of students they can reach. Some junior colleges provide dual credit to high school students at multiple campuses by utilizing telepresence. The life-like meeting spaces provided by companies like Teliris allow for a sense of community that is often missing from distance education courses that only offer asynchronous communication.

Although there is much emphasis placed on fidelity and quality of telepresence technologies, Fowler and Mayes (1997) suggest that the most important aspect of distance education be the conceptual framework of the material. In fact, their findings suggested that implementing high tech systems in education might even reduce learning effectiveness in some cases.

Conclusion

Telepresence is an efficient way to make distance education and collaboration a personal, beneficial experience. The constantly-evolving technologies surrounding telepresence indicate
forward movement in telepresence as a whole. Teliris has kept abreast of the latest video, audio, and collaborative tools, bringing them together to create a life-like meeting environment.
References


