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## Abstract

Even though the popularity and usage of teleconferencing is evident primarily outside the lodging industry, lodging operators cannot choose to ifnore the role teleconferencing will play in meeting the changing needs of guests. The authors discuss the factors that spurred the growth of teleconferencing, the opportunities and threats faced by lodging operators, and suggestions for taking advantage of the technology.

## Keywords

Technology, Teleconferencing, Hotel, Lodging, Travel & Tourism

## Teleconferencing Technology: Recent Developments and Implications for Hotel Industry

by Amrik Singh and Kye-Sung Chon

Even though the popularity and usage of teleconferencing is evident primarily outside the lodging industry, lodging operators cannot choose to ignore the role teleconferencing will play in meeting the changing needs of guests. The authors discuss the factors that spurred the growth of teleconferencing, the opportunities and threats faced by lodging operators, and suggestions for taking advantage of the technology.

The challenge facing the lodging industry in the future will be to use technology to its competitive advantage. Increasingly, technology will be used to generate cost savings, enable better decision-making, enhance guest services, increase operating efficiency, and improve performance. However, the lodging industry has traditionally been slow in adapting or leading the use of technology to increase productivity.<sup>1</sup>

The reluctance of the lodging industry to adopt technology is attributed to the lack of resources, timing, and availability of technology to address the perceived need.<sup>2</sup> A study conducted by Arthur Andersen on the use of technology for the American Hotel and Motel Association in 1989 revealed four major barriers facing the lodging industry. First, a lack of management understanding about technology was the critical reason for the lodging industry's lag behind other service industries in using technology as a "strategic weapon." Second, buyers of technology considered technology as a cost of doing business rather than an investment, and expressed uncertainty about its overall cost effectiveness. Third, management's resistance to change was slowing down the adoption of new technologies. Finally, the report stated that vendor solutions often came before lodging needs were identified. As a result, lodging operators found products not meeting their requirements and further encountered difficulties in reaping the benefits from their investments.<sup>3</sup>

FIU Hospitality Review, Volume 11, Number 2, 1983 Contents © 1993 by FIU Hospitality Review. The reproduction of any artwork, editorial or other material is expressly prohibited without written permission from the publisher. Nevertheless, technology is expected to play an ever-increasing role in the lodging industry. One such technology that demands the immediate attention of the industry is the increasing popularity of teleconferencing as an alternative to travel. With the barriers of affordability and complexity of teleconferencing coming down at an astonishing rate, lodging operators must consider utilizing this technology to increase guests' satisfaction and improve their productivity.

Teleconferencing is the use of telecommunication systems by groups of three or more people at two or more locations for the purpose of conferring with one another. Lazer defined it as a "structured, private, interactive, electronic and scheduled meeting between two or more persons in separate locations."<sup>4</sup> The word "teleconference" is often used interchangeably with "videoconference"; the latter always involves video and audio transmission, while a teleconference can be a simple conference call on a standard telephone.<sup>5</sup> There are five types of teleconferencing media available: audio, audiographic, computer, broadcast (one way video/two way audio), and full motion video (two-way audio/video). The different types of available media can be used alone, in conjunction with one another, or in an infinite number of combinations for various needs.

The early beginnings of teleconferencing in the lodging industry can be traced back to 1979 when Holiday Inns became the first hotel chain to create its own communications network through a company affiliate called HI-NET. The system was used to provide movies, sporting events, and entertainment in guest rooms. Based on the initial success of the system, Holiday Inns expanded the service to include videoconferencing. Although audio conferencing makes up the biggest segment of total revenues, two-way videoconferencing is the fastest growing segment in the teleconferencing industry's business. Much of the focus on teleconferencing today is primarily on the use of videoconferencing technology.

### **Teleconference Costs Have Declined**

The teleconferencing industry's growth has been fueled by costsaving improvements in technology, and a combination of political and economic factors. Transmission costs are declining rapidly but may vary significantly, depending on the set-up, the geographic points to be connected, the time of day, and the quality of image desired.<sup>6</sup> For example, the highest quality presentation between two U.S. locations using U.S. Sprint's or AT&T's fiber-optic telephone line networks can cost anywhere from \$175 to \$350 per hour, depending on the distance between sites.<sup>7</sup> Technological advances have also reduced the cost of equipment. For example, the cost of a typical videoconferencing system fell from \$200,000 in 1986 to \$60,000 in 1989. In 1991, the cost declined to about \$40,000 and predictions are for the price to be around \$15,000 by 1993.<sup>8</sup>

The teleconferencing business got a tremendous boost from the Gulf War in 1991 when it was used as an alternative to business travel. Coupled with the onslaught of the economic recession, corporate belt tightening forced many companies to further cut back on business travel. Rising costs of travel also fueled the surge in teleconferencing. For example, the cost of travel in the U.S. increased 8.3 percent in 1990 from 1989 and 1.3 percent from 1990 to 1991. During the same period, business travel declined 10 percent in 1990 and more than 8 percent in 1991.<sup>9</sup> Other factors spurring the growth of the teleconferencing industry include the increasing competition for a larger share of the meetings market, improved quality and portability of the equipment, maturity of suppliers/vendors into full-service companies, and the globalization of the U.S. economy.

A dramatic fall in prices is perhaps the prime reason for the increasing popularity of teleconferencing. According to the International Teleconferencing Association, total industry revenues in 1984, which were slightly under \$250 million, were estimated to have reached \$1 billion in 1990, up from \$814 million in 1989.<sup>10</sup> Frost & Sullivan, a New York research firm, predicts the videoconferencing market, estimated at \$894 million in 1990, will reach \$8.3 billion by 1995. In 1990, equipment sales accounted for about \$248 million in revenues, while transmission costs generated about \$646 million.<sup>11</sup> The cost of developing and installing a videoconferencing system has declined over 400 percent during the past two years, and video systems are now made user-friendly and economical for use by all company employees.<sup>12</sup> As a result, teleconferencing in the process of maturing is a much more affordable and acceptable technology.

## **Technology Provides Alternatives for Meetings**

The significant advances made in the availability of teleconferencing services can provide hotels with a more persuasive communications and sales tool. The technology has found a niche in the small, quickly arranged meetings with companies reaping the rewards in the form of costs savings and increased productivity.<sup>13</sup> Although videoconferencing will never replace business travel, it does provide a low-cost, high productivity alternative to money and time spent on travel. According to Gamble, the gains in productivity and efficiency for businesses can be obtained if hotel and catering organizations recognize and exploit the advantages offered by technology.<sup>14</sup>

In reporting on its 1987 survey of technology on the lodging industry, Chervenak, Keane and Co. noted that videoconferencing was not revolutionizing the meetings market, and hotels with videoconferencing facilities did not automatically have a line of meeting planners waiting to book group meetings. Effective, forceful marketing was still necessary to promote such services.<sup>15</sup> Videoconferencing will become a routine part of meetings, a convenient alternative to some meetings, and a possible substitute for others, especially international meetings, which tend to be more expensive. For example, Worldtex Corporation, a South Miami company in the time-share vacation business, held a video board meeting with members in Miami and London. The cost of the conference was approximately \$1,900, but the savings in travel costs was \$10,000.<sup>16</sup> However, videoconferencing does remain a limited tool because traditional face-to-face meetings are indispensable for networking, team-building, and brainstorming.

In spite of its limitations, the technology has improved to a point where videoconferencing is the much sought after low-cost, high-tech alternative in today's competitive meeting market. Hotels with conference facilities must seek out new markets to discover new sources of revenue. Users will not only be paying fees for using the hotel's rooms and facilities, but also for food and beverage services, thus enhancing revenues.<sup>17</sup>

Videoconferencing will provide hotels with a competitive edge in attracting a growing meetings market by offering the service to businesses, government agencies, association, or institutions that need an alternative for conducting face-to-face business meetings in multiple locations. As the technology becomes more sophisticated, the dependance of the meeting planner and convention service manager on that technology will grow. If the service manager cannot meet the growing demands for teleconference services, the hotel will lose the client to the competition. Competition will not allow the individual convention service manager to survive with a "take it or leave it" attitude.<sup>18</sup>

#### Hotels Must Be Involved

With public videoconferencing centers and businesses taking an active role in the revival of teleconferencing, hoteliers need to take a close look at their potential role. If they simply watch from the outside, the spread of videoconferencing will have only a negative effect on the lodging industry by reducing some business travel. Rather than being a threat to the hotel industry, teleconferencing offers opportunities for the innovative sales and marketing team that is ready to gain a competitive advantage. A hotel environment is most suitable for videoconferencing because hotels are well equipped to offer the services and amenities that clients demand. Hotels can offer creative food and beverage service, 24-hour-a-day service, parking, power and other services to handle almost all the requirements of a meeting, unlike businesses that only have the space and equipment. The most important benefit a hotel can offer is a wide variety of meeting room sizes and configurations. Providing teleconferencing services would thus be a natural extension to the existing services that a hotel already provides.

Teleconferencing services are adaptable to both small and large groups for seminars, conferences, training sessions, and new product demonstrations. Hotels can market teleconferencing to executives and small groups located in different cities who need to communicate or meet frequently. Hotel chains with teleconferencing capabilities have the advantage of being able to target this group because hotels provide a pleasant environment and, technologically, are not intimidating. According to Naisbitt, hotels are one of the few locations able to provide "high tech and high touch."<sup>19</sup>

The real benefit of the system is a more efficient use of a manager's time and including more people in the decision-making process. In addition to saving time and travel costs, teleconferencing leads to enhanced safety, better organized meetings, and faster product development.<sup>20</sup> Creative hotel marketers will use teleconferencing to their competitive advantage, while those who resist it will do so to their competitive disadvantage.

If the widespread acceptance of and increased demand for teleconferencing facilities continues an upward trend, the hospitality industry should prepare to compete for the teleconferencing dollar against such public services as AT&T, MCI, and U.S. Sprint, as well as the increasing number of private centers operated by independent entrepreneurs and public companies. There were an estimated 3,000 public and private rooms in the U.S. in 1991, with a further increase expected in 1992.<sup>21</sup> However, most existing private teleconferencing centers lack the extensive public space and food and beverage facilities or overnight accommodations.

## **Teleconferencing Will Increase Business**

Lodging establishments on the other hand already have all the essential elements plus a sales staff to market them. Hotels could capitalize on this competitive edge and emphasize it when approaching clients. The decision to offer videoconferencing services should be market driven and not technology driven. The marketing department is thus well equipped to identify nearby businesses that have been renting videoconferencing equipment or utilizing the services from public centers. The marketing department can then market its services to those companies by offering attractive deals or packages to lure the business. Teleconferencing technology, nonetheless, will increase a hotel's business because many more people will be involved in the meeting business than in the past.

The U.S. meetings market is the fastest-growing segment of the hospitality industry. With an annual growth rate of 27 percent in meeting expenditures, those properties that provide quality food service and rooms, ample meeting space, support and equipment such as teleconferencing, and negotiable rates will undoubtedly have the best opportunity of capturing a larger share of meetings planned in their respective regions.<sup>22</sup> By providing additional services to guests and streamlining in-house training and administrative activities, hoteliers can make economical use of teleconferencing equipment. They can also offer guests the ability to view special entertainment events on weekends and other slack periods, thus encouraging people to stay at their properties. In addition, patrons introduced to a hotel through teleconferencing could become a source of repeat business and referrals.

The lodging industry must accept teleconferencing for what it is and what it can do as a new way of communicating and conducting business. A lack of understanding, owing to its complexity, is still the biggest handicap facing the growth of teleconferencing. Top management in hotels must educate not only themselves, but also their personnel, meeting planners, and customers if teleconferencing is to succeed.

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