## Chapter 7

# Acceptance and Appropriation of Videoconferencing for E-Training: An Empirical Investigation

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#### **ABSTRACT**

The purpose of this paper is to explore the acceptance and the appropriation of videoconferencing-mediated training during real training situations in a French company. The authors compare the acceptance and appropriation by 60 employees of two videoconferencing-mediated training systems: the virtual class (desktop videoconferencing) and the remote class (where learners are gathered together in the same room while the trainer is located at distance). In considering the acceptance of these videoconferencing-mediated training systems, a link was confirmed between perceived usefulness and the intention to use, but no relationship was established between the levels of acceptance and the required effort. The intention to use videoconferencing was associated with the expected benefits and not with the expected effort. Regarding appropriation, learners did not report a perception of technological distance. Moreover, this paper shows that learners and the trainer preferred the virtual class rather than the more classical remote class. The authors' findings contradict the media richness theory, according to which the remote class, which is the "richer" medium in their research, should have been preferred.

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#### INTRODUCTION

The increase in use of the Internet and information technologies has introduced new possibilities in the field of training, especially for remote training. In this context, videoconferencing seems to be a promising tool as it enables work in different locations while preserving the possibility of real time interaction between teachers and trainees. It is, therefore, important to study learners' perceptions and the first uses of this technology.

Specifically, this article focuses on the use of videoconferencing for training within a large organization, which is in the early stages of implementation of this new tool. The main topic of this chapter is the measurement of acceptance and appropriation of videoconferencing as a tool for professional training within a large French company. In this company, training is considered to be a very important and strategic part of HRM. The aim of professional training is to improve employees' skills in the context of rapidly changing jobs and recruitment of new employees.

Videoconferencing may be considered as a way of reducing travelling and the time required for the organization of training sessions, and of modernizing the company image for employees. At the same time it provides interactions between the learners and the trainer similar to face-to-face training situations.

Consequently, videoconferencing may become a useful tool of Electronic Human Resources Management. However, HR Managers in the company hesitated in implementing videoconferencing for training. They thought that employees (both learners and trainer) would reject it; for this reason, they wanted to explore employees' perceptions, attitudes and behaviors related to this new tool.

If HR Managers were to implement videoconferencing for training, they would need to know which was the more efficient type of videoconferencing that was preferred by employees. Actually, different types of videoconferencing technologies allow different types of training (in a small group or in a large group, using transmissive or collaborative pedagogy). Virtual class (desktop videoconferencing) and remote class (where distant learners are gathered together in the same room, as in traditional classes, while the trainer is located at distance) are the main types of videoconferencing for training. We will measure the acceptance (learners' and trainer's perceptions and attitudes) and the appropriation (users' behaviors) of both types of classes. This question has not yet been developed in the literature. However, the effects of ITs on learning, and the effect of videoconferencing on interaction, have been explored. In the following section, studies on these two topics are reviewed.

#### LITERATURE REVIEW

### Information Technologies and Learning Performance

Several papers focus on the relationship between IT and learning. Their main question is, can an IT improve learning performance, and if so, how? Researchers are generally interested in how IT affects learning effectiveness. In this regard, some authors have shown that a technology's capabilities emphasized learning performance (e.g., Alavi, 1994).

Other researchers demonstrated that IT had no significant effect on learning performance (Alavi et al., 1995; Russell, 1999). For example, Alavi et al. (2002) found that the learning outcome of an e-mail environment was greater than the learning outcome of a more sophisticated Group Support System environment. Mehlenbacher et al. (2000) pointed out that there was no significant difference in student performance in the two learning situations (two web-based sections of a technical writing class and a conventional version of the class).

These outcomes are in contradiction with richness media theory (Daft & Lengel, 1984). For Clark

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