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### **Chapter V**

# Investigating the Influence that Media Richness has on Learning in a Community of Practice: A Case Study at Øresund Bridge

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### ABSTRACT

This chapter explores the influence that rich media has on learning in a Community of Practice (CoP) at a large multi-billion dollar infrastructure project, the bridge between Sweden and Denmark. The findings show that an increase in the number of deviations from customer requirement was associated with an organizational change that impeded the community from communicating through face-to-face interaction. In turn, it is suggested that the CoP studied could not reduce equivocality through collaborative narratives because of the absence of rich media. Thus it is argued that rich media are essential for effective learning in Communities of Practice (CoPs). The author hopes that the understanding of how communication influences learning will assist managers, through providing an understanding of the central role that communication has on learning, and researchers, through introducing the concept of equivocality and media richness into the domain of CoPs.

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### **INTRODUCTION**

How organizations prevent and manage problems is critical to organizational performance and long-term competitiveness. Changes in the detection and correction of problems are considered as learning (Argyris & Schön, 1995). However, not all problems that firms encounter are of the same quality. These differences can be understood in terms of equivocality (Daft & Lengel, 1986; Daft & Weick, 1984). The term equivocality refers to the existence of multiple and conflicting interpretations (Weick, 1979). In a highly equivocal situation, there are many possible meanings; people are not certain of what the relevant questions are to ask, or of the right answers to these questions (Weick, 1995). Solving problems requires a low level of equivocality, since long-term effective solutions to problems require that the situation is well understood (Buchel & Raub, 2001).

The concept of Communities of Practice (CoPs) offers a means to understanding how problems in organizations are solved (Brown & Duguid, 1991; Lave & Wenger, 1991) and how equivocality is reduced during the problem-solving process. CoPs are groups of people contextually bound in a work situation and applying a common competence in the pursuit of a common enterprise (Brown & Duguid, 1991; Lave & Wenger, 1991; Wenger, 1998; Teigland, 2000). It has been suggested that through patterns of exchange and communication, communities are able to reduce equivocality (Pava, 1983; Purser, Pasmore & Tenkasi, 1992; Teigland, 2000). Researchers in the field of CoPs (Lave & Wenger, 1991; Wenger, 1998; Brown & Duguid, 1991) have recognized the importance of communication in problem-solving. However, little distinction has been made between different types of communication media. The term communication in CoP literature has referred in a broad sense to all types of communication media. However, there are differences in media "richness", or the ability of a specific medium to convey and change understanding or to reduce the degree of equivocality (Daft & Lengel, 1986).

The goal of this exploratory research is to explore how media richness influences learning in a CoP at the Øresund Bridge, the bridge that connects Sweden and Denmark. The context of this study is thus a highly complex infrastructure project of immense size, with stringent quality requirements, a well-defined completion time and which is subject to harsh environmental conditions.

### **COMMUNICATING PRACTICE**

The development and dissemination of the community's problem-solving ability is dependent upon a shared repertoire consisting of the community's routines, gestures, artefacts, vocabulary and understandings (Wenger, 1998; 9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-</u> <u>global.com/chapter/investigating-influence-media-richness-</u> has/25422

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