Chapter XV
Designing Practice-Oriented Interactive Vocabularies for Workflow-Based Virtual CoP

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ABSTRACT

This chapter concentrates on the development of practice-specific toolkits for managing on-line practices in the context of virtual communities of practice. The authors describe two case studies in different application domains each presenting alternative but complementary insights to the design of computer-mediated practice vocabularies. The first case study describes how established practices in music performance are encapsulated in a suitably augmented music toolkit so as to facilitate the learning objectives of virtual teams engaged in music master classes. The second case study is slightly different in orientation as it seeks to establish a toolkit for engaging in new coordinative practices in the course of building information-based products such as vacation packages for tourists. This time the virtual team is a cross-organization virtual community of practice with members streamlining

their efforts by internalizing and performing in accordance with the new practice. Collectively, the case studies provide insight to building novel practice-specific toolkits to either encapsulate existing or support novel practices.

INTRODUCTION

Several chapters in this book have addressed, explicitly or implicitly, the issue of what constitute the 'practice' elements in virtual communities of practice. As a result, a variety of research questions are raised which are seldom addressed in the relevant literature on virtual communities of practice. In this chapter, we will argue that community management is distinct and different from practicing. Moreover, our intention is to support the view that although community management fosters social tights, it is practicing in community settings that may lead to improved capacity, deepening of professional knowledge and innovation.

In general, defining practice is not trivial as there are alternative views and perspectives (i.e., sociology, organization and management science, philosophy) to frame the term. However, independently of theoretical standpoint there are some issues that seem to be common concerns for practice-oriented researchers. Firstly, practice is conceived of as activities or sets of activities. Such activities have to be meaningful for the people or the practice being analyzed. Thus, their object of reference, its symbolic manifestation and relational properties must be clearly defined and labeled so as to make sense. Secondly, activities embedded in or subsumed by practice are built on knowledge, skills or competences of those performing the activities or of the community in which the activities are performed. In turn, knowledge may be expressed through communication acts or codified into routines, procedures or patterns through which the world is made sense of. Thirdly, practices involve human agents who may share, obey and adhere to a designated practice without necessarily enacting it in the same manner. As a consequence practice articulation may vary according to cultural background, folklore knowledge and experience.

In this chapter we are concerned with the design of on-line collaborative practices for workflow-based communities of practice. The emphasis on workflow highlights intertwined activities and staged accomplishment of an engineering goal. Moreover, our objective is not to advance the theoretical thinking behind practice in general, how it is instituted and what effects it may have. Instead, we will concentrate on designing vocabularies for enacting either established or new practices. Specifically, we are equally interested on two issues, namely how practices are technologically mediated (i.e., enacted using dedicated software tools), as well as how new practices may arise and become institutionalized within a virtual community of practice. A related issue, briefly commented but not exhausted in the present context, is that of the interrelationship between on-line and off-line practices in virtual organizations.

The approach followed is to briefly review existing literature on collaborative practices to solicit requirements for designing practice-specific toolkits and then to present two case studies which provide a context for reflecting upon these requirements. It is worth clarifying from the start that although the two case studies are different in orientation and perspective, they share common engineering grounds with respect to how practice-specific toolkits are designed. Specifically, the case studies present alternative pathways towards expanding the design language of modern graphical toolkits to facilitate new types of interaction components and techniques