



Chapter IX

Implementing Communities of Practice to Manage Knowledge and Drive Innovation

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Abstract

A community of practice (CoP) unites individuals with shared interests and shared or complementary competencies to interact on a regular basis, advancing communal learning and knowledge. By facilitating increased, relevant interactions between people, CoPs often improve organizational effectiveness. They can be initiated as a performance-improvement intervention at the individual, group, and organizational levels. After describing the theoretical background of CoPs as discussed in the organizational theory and knowledge management literature, this chapter classifies the results of research in the knowledge management domain, dating from 1991, into an actionable plan-do-check-act (PDCA) model. Future trends in CoP development, including e-science and digital ecosystems, are then discussed.

Introduction

A “community of practice” (CoP) is a “group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Lave & Wenger, 1991). According to Lesser and Storck (2001), a CoP is equivalently defined as a group “whose members regularly engage in sharing and learning, based on common interests.” Members share competencies that distinguish them from nonmembers, and “engage in joint activities and discussions, help each other, and share information... develop[ing] a shared repertoire of resources: experiences, stories, tools, ways of addressing recurrent problems” (Wenger, 2006). According to these researchers, there are four requirements for a CoP to exist: there must be people, shared interests, shared competencies, and shared activities performed on a regular basis that advance learning and knowledge. The latter two requirements exclude, for example, interest groups that do not qualify its members based on skill, social clubs in which members share experiences in the absence of advancing a communal body of knowledge, or the typical professional or academic conference for which the core group of attendees varies.

Though the term “community of practice” was first coined in the 1991 study by Lave and Wenger, the concept was not new even at that time. Their research, focusing on the theory underlying community-based learning, was initiated as a study in anthropology. It examined the learning processes in traditional apprenticeship settings, such as medieval tradesmen’s guilds, and provided a descriptive framework for the characteristics of these communities and their knowledge generation and dissemination processes. The authors determined that the learning process followed the pattern of *legitimate peripheral participation*, in which members initially joined the community as limited participants, but as their competence strengthened, they became more central to the community and adopted apprentices of their own. At the turn of the 20th century, Schloss (1898) attributed the mechanisms for accomplishing team-based work in factories to a similar process he described as employee self-organization.

A comprehensive review of the literature describing CoPs and the theories underlying them, particularly organizational theory, was performed to construct a conceptual model for the practical implementation of a CoP. The primary limitation for this study is that it represents a collection of recommendations from the research literature which has not been validated empirically and collectively as a methodology for implementing CoPs in the context of a quality improvement culture. Nonetheless, the presentation of results from theory development and empirical studies in an operational context is novel and provides substantiated guidance for implementing CoPs.

The following sections describe the background as provided by supporting literature, the outcomes from the research organized for actionable implementation and quality

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