Chapter 6.33
Where Knowledge Management Resides within Project Management

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EXECUTIVE SUMMARY

This chapter explores how an engineering consulting company creates, manages, and reuses knowledge within its projects. It argues that the informal transfer and reuse of knowledge plays a more crucial role than formal knowledge in providing the greatest benefit to the organization. The culture of the organization encourages a reliance on networks (both formal and informal) for the exchange of tacit knowledge, rather than utilizing explicit knowledge. This case study highlights the importance of understanding the drivers of knowledge transfer and reuse in projects. This will provide researchers with an insight into how knowledge management integrates with project management.

INTRODUCTION

To sustain their competitive edge, businesses are continually searching for ways to differentiate themselves from their competitors. One method of achieving this is for an organization to develop a knowledge management strategy. A knowledge management strategy articulates how the organization creates, values, preserves, and transfers knowledge critical to its operations. The development of an effective knowledge management strategy is important for project management organizations. Crucial factors in achieving these objectives are to manage and more effectively apply and reuse knowledge gained throughout the project life cycle. If useful information is identified, assimilated, and retained within the
organization, it represents intellectual capital that can be reused on other projects, reducing the time staff spend recreating what has already been learned. The reuse of knowledge can assist an organization in not reinventing the wheel and ensuring that past mistakes are not repeated. Effective project management is a key enabler for business success. However, where corporate knowledge is ineffectively managed during the project life cycle, valuable intellectual capital is lost, causing rework and lost opportunities.

As a global engineering project management consulting firm Engineering Consulting XYZ consults on projects to organizations worldwide, these projects can potentially reuse knowledge from earlier projects.

The purpose of this case study is to explore how project team members at Engineering Consulting XYZ acquire and reuse knowledge. The chapter analyzes and describes how project staff capture, transfer, and reuse knowledge. The findings are positioned within the Project Management Body of Knowledge’s (PMBOK) methodology, the de facto global standard for project management methodology (Project Management Institute, 2000). The case study determines the relative importance and use of tacit, implicit, and explicit knowledge in managing projects.

At the beginning of the research, there was an expectation that the majority of knowledge was obtained via formal means and would provide the most benefit to the organization. However the empirical data suggests that the informal transfer and reuse of knowledge played a more crucial role and provided greater benefit to Engineering Consulting XYZ. The culture of Engineering Consulting XYZ encourages collective learning and sharing.

The chapter initially provides a background to how knowledge management integrates with project management, grounded in relevant literature. The next section looks at how Engineering Consulting XYZ acquires and reuses knowledge on projects, followed by current challenges facing the organization.

**BACKGROUND**

Project management companies continually compete for business against competitors. The challenge for these companies is to ensure that they deliver their projects faster and more effectively than their competitors. To achieve this, organizations can utilize knowledge gained from earlier projects, or project phases — that is, not reinvent the wheel. Knowledge gained from earlier projects or project phases can be obtained via explicit or tacit means.

**Importance of Learning**

To succeed competitively and to achieve their business strategies and goals, organizations need to gain knowledge of both the internal and external worlds. An effective knowledge management strategy will help an organization achieve these ends. Stata (1989) suggested that to maintain a competitive advantage, organizations need to learn and obtain knowledge faster than their competitors. Learning allows an organization to respond to changes in the business environment (Baldwin, Danielson, & Wigenhorn, 1997). A knowledge management strategy is developed by the organization for improving the way it develops, stores, and uses its corporate knowledge. Both tacit and explicit knowledge are important in the creation and reuse of knowledge. Organizational memory forms the basis of intellectual capital that is held in an organization. Intellectual capital is the knowledge and capability to develop that knowledge in an organization (Nahapiet & Ghoshal, 1998).

If an organization is to continually change, it needs to evolve and learn continuously. Kim (1993) defines learning as the acquiring of skills (know