

A Preliminary Investigation of Exploration-Oriented, Learning Behaviors for Managing Project Quality

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ABSTRACT

Customers are typically dissatisfied when projects fail to meet requirements and/or expectations. While effectively managing projects requires balancing competing constraints, quality is one aspect of project management that has not been widely explored. To address this issue, this research investigated the characteristics of learning/exploration used to support managing project quality. This qualitative study used semi-structured interviews with information technology (IT) project managers to identify learning/exploration-oriented approaches currently used in project-based environments. Analysis of the data obtained through interviews identified characteristics of learning/exploration used in projects and these findings were validated through a focus group with additional IT project managers. Based on this research, an approach is proposed that provides specific insights for project managers about using exploratory practices. When coupled with traditional project quality management processes, these learning/exploratory activities may help to enhance ambidexterity within project-based organizations and improve project quality outcomes.

Keywords: Ambidexterity Theory, Exploitation, Exploration, Information Technology, Learning, Managing Project Quality, Opportunity Management, Project Management Processes

INTRODUCTION

It is well known that project success is typically linked to organizational success (Crawford, 2011; Peslak, 2012). Effectively managing projects requires balancing competing constraints that include scope, schedule, budget,

resources, risk, and quality (Barnes, 1988; PMI, 2013). In addition, prior research suggests that project performance is largely controlled by the knowledge and experience of the manager leading the project (Easton & Rosenzweig, 2012; Kotnour, 2000; Mir & Pinnington, 2014; Rozenes, 2011). However, "...in the field of

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project management the importance of quality is not so clear cut” (Basu, 2014, p. 178); therefore, project managers may tend to focus more on issues related to schedule, budget, etc. and view quality as merely meeting specifications (Wright & Basu, 2008).

Traditional notions of quality, such as conformance/filling requirements (Crosby, 1979; ISO, 2005) and fitness for use, i.e., meeting or exceeding customers’ expectations (Juran, 1974; Kano, Seraku, Takahashi, & Tsuji, 1984), are often challenging to achieve in project-based environments due to the uncertain nature of this type of work (De Meyer, Loch, & Pich, 2002). The difficulty of precisely specifying project requirements often leads to a gap between project expectations and perceptions (Maylor, Geraldi, Johnson, & Turner, 2009; Parasuraman, Zeithaml, & Berry, 1985). Because customers are usually dissatisfied when projects fail to meet requirements and/or expectations, project managers must effectively manage project quality in order to achieve successful project outcomes (Kloppenborg & Petrick, 2002, 2004); yet, specific practices for managing project quality are aspects of project management that have not been widely explored (Geraldi, Kutsch, & Turner, 2011).

This research seeks to fill this gap by identifying learning/exploration-oriented approaches currently used to manage project quality. This research conducted a qualitative study that involved semi-structured interviews with information technology (IT) project managers. This approach collected detailed data regarding direct insights from project managers about the processes they use to manage project quality, with a special focus on exploratory activities/learning behaviors. The research goal was to identify methods that, when coupled with traditional project quality management processes that focus mainly on exploiting existing knowledge, may help to improve the quality of project outcomes by enhancing ambidexterity (i.e., the ability to balance between exploitation and the exploration of new alternatives) within project-based organizations. In addition to extending our understanding of project quality management,

this study also contributes to the foundation of knowledge concerning opportunity management (i.e., positive risk management) because the ability to exploit select opportunities must be preceded by the exploration of many options/alternatives.

In prior discussions regarding project quality, Winter et al. (2006) proposed shifting away from thinking of projects as product creation mechanisms and moving towards viewing projects as vehicles for value creation. In addition to typically producing tangible products, projects also provide a valuable service, management of the project (Geraldi et al., 2011). From the client’s perspective, project quality additionally involves many intangible attributes (Wright & Basu, 2008). Therefore, service models of quality that emphasize both output (i.e., what is delivered) and process (i.e., how it is delivered) may be applicable within project-based environments (Gronroos, 1984; Lehtinen & Lehtinen, 1991; Wild, 2002). Along these lines, Basu (2010) defined project quality as quality of 1) the design of the product, 2) management processes, and 3) the organization (i.e., leadership, skills, and communication).

Methods for improving quality in repetitive, production/service operations, such as Total Quality Management (Ahire, Landeros, & Golhar, 1995), Lean (Shah & Ward, 2007), and Six Sigma (Schroeder, Linderman, Liedtke, & Choo, 2008), are well known. In fact, Geraldi et al. (2011) conceptualized a typology for practitioners’ views of quality in IT projects and found that the attributes emphasized highly in interviews with project managers were rooted in the classic rhetoric of traditional approaches for managing quality. However, given the uniqueness and uncertainty associated with projects (De Meyer et al., 2002), the currently accepted processes for managing project quality (APM, 2007; ISO, 2003; PMI, 2013) may be inappropriate and/or detrimental to achieving quality project outcomes. Because these processes draw upon traditional quality improvement methods that mainly focus on control/standardization (i.e., exploiting existing knowledge in order to manage quality), they may not be compat-

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