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Shared Leadership and Key Innovation Indicators in Six Sigma Projects

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ABSTRACT

This research establishes the relationship(s) that shared leadership has with two performance metrics in Six Sigma healthcare teams: the perceived effectiveness of a team completing assigned project deliverables and satisfying customer requirements. Another primary goal is to comprehend additional factors affecting the three analyzed variables. The study found that the degree of shared leadership displayed at any Six Sigma project phase is dependent on the deliverables complexity and degree of change management complexity. Throughout this research, the role of shared leadership cannot be stressed enough. This variable yield influence and relationships with several factors, including change management and decision-making. In turn, they impact a team's environment and ability to effectively complete a project. Understanding the impact and relationship(s) that shared leadership has on quality improvement projects can provide an organization with several benefits, such as improved ability to complete projects efficiently and with quality. Finally, this study builds practical knowledge by outlining implications to professionals, managers, and teams for decision-making, change management, leadership development, Six Sigma training, and external coaching.

KEYWORDS

Innovation, Key Performance Indicators, Process Improvement, Project Management, Shared Leadership, Six Sigma

1. INTRODUCTION

1.1. Research Topic Background

Recently, more research goes into understanding and implementing shared leadership. This is because the traditional "top-down" leadership approach is no longer effective. In today's business and engineering environments, organizations strive for maximum efficacy and efficiency to remain competitive and outperform rivals. Organizations promote the growth of team environments to complete projects because it enables them to quickly adjust to industry requirements and demands. Sometimes, these organizations neglect choosing the optimal leadership model for success.

The shared leadership model is created to provide teams and organizations with benefits, including the ability to complete projects on time and make effective and logical decisions (Carson, Marrone, & Tesluk, 2007, p. 1217). Simultaneously, many organizations turn towards Six Sigma methodologies

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to develop innovative solutions and skills in knowledge workers and project managers. Since today's projects are more complex and uncertain, traditional management techniques aren't as adequate. Therefore, organizations lean towards Six Sigma to make teams more adaptive to change and flexible with dynamic requirements. Six Sigma makes it easier to distribute responsibility to teams, which helps them proactively respond to changing demands.

A review of Carson et al. (2007) indicates that little research addresses the shift to internally distributed forms of shared leadership. Some research demonstrates that scholars encourage shared leadership. For example, Gibbs (1954) was the first to argue that "leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group" (Carson et al., 2007, p. 1217). This concept is known as "distributed leadership." Research also shows that "…when team members voluntarily and spontaneously offer their influence to others in support of shared goals, shared leadership can provide organizations with competitive advantage through increases in commitment, in the personal and organizational resources brought to bear on complex tasks, in openness to reciprocal influence from others, and in the sharing of information…" (Carson et al., 2007, p. 1218).

Koschzeck's (2009) research has found that organizations utilizing shared influential acts perform better than those relying on a single individual. Thus, one can conclude that organizations perform more efficiently when utilizing shared leadership as opposed to single-individual leadership common in traditional teams. These thoughts and concepts challenge the conventional leadership view, however further review demonstrates that there lacks an abundance of empirical work on shared leadership.

1.2. Problem Background

A review of existing research leads to the conclusion that in the past several years, shared leadership emerged in academic and industrial environments. This is because organizations are realizing the astounding influence that shared leadership has on teams. However, one field that hasn't been investigated is the relationship between shared leadership and Six Sigma methodologies, specifically regarding the relationship(s) that performance metrics have with shared leadership in Six Sigma teams. Existing research doesn't explore the relationship(s) that shared leadership has with two performance measures, project completion and customer satisfaction, in the context of the Health System. Therefore, in this study, Health System Six Sigma teams are the main data source.

This research performed a longitudinal concurrent mixed-methods study via social network theory/analysis. In doing so, we observed relationships between input environmental conditions and shared leadership in real-life organization and industry teams utilizing Six Sigma methodologies. This study sought to map out shared leadership in each phase of the DMAIC model.

The problem statement incorporates the requirements for a longitudinal study by stating: In the context of Health System Six Sigma teams, there exists a simultaneous relationship between the degrees of shared leadership in these team environments and two performance metrics: the perceived effectiveness of a team to complete the assigned project deliverables (i.e. project completion) and the perceived effectiveness of a team to satisfy customer requirements (i.e. customer satisfaction).

The key metrics utilized to measure the research outcome include: the level of centralization of interactions among team members and the perceived level of influence that each member had on fellow members (shared leadership measure), the perceived effectiveness of a team to complete assigned project deliverables (i.e. project completion), and the perceived effectiveness of a team to satisfy customer requirements (i.e. customer satisfaction).

1.3. Research Purpose and Contribution

This study analyzes the relationships that shared leadership has with performance metrics in Six Sigma teams and the factors impacting these relationships. In addition, this study builds the body of knowledge where there is a gap in the degree of impact that share leadership has on team performance. It was determined that to understand innovation in Six Sigma teams, one must understand the relationship

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