Moderating Effect of Team Distributedness on Organizational Dimensions for Innovation Project Success

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ABSTRACT

This article addresses the issue of geographically distributed work teams that carry out new product development projects. These are task-oriented, goal-driven, temporary teams that use ICTs. This exploratory study measures the moderating affect of team distributedness on the relationships between organizational and workforce management best practices and two measures of project success (efficacy and effectiveness). Data were obtained from real teams working in Canadian companies in diverse high-tech industries. The results show a moderating effect of team distributedness, which is interesting in that the distributedness factor is examined from a different perspective, that is, as a moderating rather than an explanatory dimension.

Keywords: Communication Processes, Distributed Teams, Moderation, New Product Development, Organizational Impact, Project Management, Workforce Practices

INTRODUCTION

In recent years, projects have constituted the cornerstone of many strategic and/or economic actions, particularly in enterprises that must continuously cope with a complex and uncertain environment (Cleland & Ireland, 2007). Moreover, market globalization, corporate mergers and outsourcing have had a major impact on project structure and management (van Fenema & Kumar, 2000). Against this background, and in the light of current economic changes, more and more interest has been directed toward temporary inter-organizational and intra-organizational structures that involve distributed team members (Martins et al., 2004; Zigurs et al., 2001). Distributed projects have become a source of competitive advantage, and consequently profits, for high-tech companies (Katzy & Sung, 2001; Swan et al., 2004), and

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it is still assumed that interaction through ICT can overcome the disadvantage of not being face to face. But in practice, whether it is considered a cyclical economic necessity or an opportunity to gain a competitive edge, team distributedness strongly affects the way a project and the organizations involved in it function. Thus, when distributed project teams are used, management practices, workforce management and communication processes are applied in a different context, which has fascinating ramifications. This situation clearly requires a greater understanding of the particular dynamics of such settings. Accordingly, the objective of this study is to contribute to that understanding. In order to present the phenomenon, the first section of the article offers an overview of the importance of team distributedness in the modern economy and the main results regarding the factors that affect team and project success in the literature. We conclude this section with a model.

The second section presents the empirical results of a study in innovative Canadian companies that focus on developing new products and services. The intent is to measure the moderating impact of distributedness on organizational dimensions for two measures of project success.

RESEARCH REVIEW

This study focuses on two broad streams of research that represent major challenges for companies: team management and innovation project management. We first discuss some of the major trends in distributed teams. We then identify key aspects of innovation that are considered in this study, specifically, practical actions to be taken when conducting new product development projects.

ABOUT DISTRIBUTED TEAMS

Profound changes in international politics, combined with market globalization and the unprecedented development of information and communication technologies (ICTs), have fostered global competition and spurred companies to rethink their managerial practices (Arnison & Miller, 2002; Lipnack & Stamps, 1997). Similarly, due to the trend toward specialization, competencies and skills focus, there is an ongoing need for inter-organizational cooperation (Wehmeyer & Riemer, 2007). This need is manifested in the rise of dynamic company networks designed to overcome strategic challenges such as intense global competition and investment barriers (Cleland & Ireland, 2007; Pinto, 2002); operational challenges such as response time, risk management, and vertical and/or horizontal integration (Pinto, 2002; Wehmeyer & Riemer, 2007); and financial challenges (Kokko et al., 2007). Economic organizations and government institutions’ networks enable – if they do not require – the establishment of teams whose members are not necessarily located at a single site, known as distributed teams. For instance, a study conducted with 376 managers from different industrial branches in Germany revealed that 20% of full-time and almost 40% of temporary managers worked in distributed mode (AFW, 2002). Comparable numbers have been reported in other countries as well (Gibson & Cohen, 2003; Hertel et al., 2005).

Research on distributed teams has long been considered a subset of research on information systems (Schiller & Mandviwalla, 2007). It was formerly classified as a branch addressing the technical and behavioral aspects of dispersion, among other factors, and it required abstraction from the specificities of the tasks to be executed. However, this is no longer the case. Currently, the research encompasses a multitude of disciplines, including R&D, supply management, marketing, and project management. Distributedness is, in effect, a new challenge that will ultimately impact the successful completion of projects (Lipnack & Stamps, 1997; Williams, 1999). Clearly, in view of their differences from so-called “traditional” or co-located teams, distributed project teams merit particular attention (Huxham & Vangen, 2005; Mihhailova, 2007; Pinto, 2002; Wehmeyer & Riemer, 2007). What, though, is a distributed team?
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