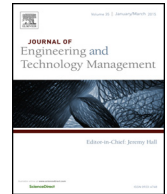




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# The impact of leaders' technical competence on employees' innovation and learning

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### ABSTRACT

The support of leaders plays a crucial role in enhancing employees' learning and innovation. While most of the current literature focuses on leadership styles and managerial skills, limited research has considered the impact of leaders' technical competence on subordinates' learning and innovation. Data were collected from 52 leaders and 127 subordinates within 68 telecommunication companies in Vietnam. The results show that the leaders' technical competence has positive relationships with the subordinates' innovative and learning work behavior. Moreover, learning work behavior has a partial mediating effect on the relationship between the leaders' technical competence and the subordinates' innovative work behavior.

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## 1. Introduction

The innovative potential of an organization resides in the knowledge, skills, and abilities of its people, both employees and leaders (Kelley et al., 2011). This is particularly true in high-tech industries where work has become more knowledge-based and less rigidly defined. In this context, employees can help to improve business performance through their ability to generate ideas and use these as building blocks for new and better products, services and work processes (De Jong and Den Hartog, 2007). However, in order for creative ideas to take place and be implemented, support for employees by their leaders is essential (Basadur, 2004; Ibarra, 1993). Scholars argue that leaders play a crucial role in enhancing employees' creativity (Kratzer et al., 2008) and innovation (Afsar et al., 2014), and in the development of innovation capability (Borjesson et al., 2014; Kelley et al., 2011).

Despite a vast amount of research linking leadership and innovation in organizations (Basadur, 2004; De Jong and Den Hartog, 2007; Shalley and Gilson, 2004), the employees' level is neglected. First, although individual employees propose innovative ideas, develop them, and advocate their implementation, most of the research into innovation and learning has been conducted at the organizational level of analysis. This ignores individual roles (Ibarra, 1993; Gumusluoglu and Ilsev, 2009). Second, the most available behavioral research on individual innovation has focused on the employees' creativity, while the implementation of ideas is explored far less often (De Jong and Den Hartog, 2007; Baer, 2012). Third, in most of the leadership research that investigates the impact of leaders on subordinates and their innovation, scholars have focused most exclusively on leadership behaviors or styles (e.g., transactional/transformational leadership, participative leadership,

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empowering leadership) (Shin and Zhou, 2003; Axtell et al., 2000; Badir et al., 2012; Zhang and Bartol, 2010; Afsar et al., 2014) and managerial skills (Carmeli and Tishler, 2006). With the exception of studies by Hyson (2008) and Slusher et al. (1972), which investigated the impact of leaders' technical skills on managerial performance and their managerial role adoption. Research attention has been limited on the technical competence of the leaders and the role it may play in influencing subordinates' learning and innovation.

In this research, we investigate the relationship between the leaders' technical competence and their subordinates' innovative work behavior (IWB) in knowledge-intensive firms because IWB plays a major role in shaping a firm's competitiveness and performance. Our first research question was: What is the relationship between the leaders' technical competence and their subordinates' IWB? This is a significant issue, especially in knowledge-based industries. First, work activities in these industries tend to involve non-standardized tasks and complicated, ill-defined problems for which novel and useful solutions are far from obvious (Zhang and Bartol, 2010, Slusher et al., 1972). Second, most often, leaders in these industries have engineering education and technical experience and skills. How these leaders impact their subordinates' innovative behavior becomes significant as well, to ensure the success and competitiveness of firms in these industries.

Despite widespread scholarly consensus that leaders influence IWB (Scott and Bruce, 1998), researchers have not delineated the mechanisms through which leaders affect IWB. Therefore, our second research question was: How does the leaders' technical competence impact the subordinates' IWB? In an attempt to understand the mechanism through which the leaders' technical competence impacts the subordinate's IWB, we drew on organizational learning theory to posit that subordinates' learning work behavior (LWB) reflects the relationship between their IWB and the leaders' technical competence. If the leaders' technical competence has a positive impact on the subordinates' LWB, then this will also have a positive impact on the subordinates' IWB.

## 2. Theoretical background and hypothesis development

This research seeks to understand the relationship between leaders' technical competence and the IWB of their subordinates, and the mediating role of LWB in knowledge-based industries. Our model is shown in Fig. 1.

### 2.1. Employee's innovative work behavior (IWB)

Organizational innovation includes both the development of new ideas (creativity) and the implementation of these ideas within an institutional context (van de Ven, 1986). Despite the widespread agreement that creativity and implementation are two distinguishable activities of an innovation process with potentially different antecedents (Axtell et al., 2000; Baer, 2012), researchers and practitioners alike often use them interchangeably (Scott and Bruce, 1994; Carmeli et al., 2006). Creativity can be viewed as the first stage of an innovation process (Baer, 2012). Creativity refers to the development of ideas that are both novel, something that has been done for the first time, and useful, either in the short or the long term (Amabile, 1996; Woodman et al., 1993). Idea implementation is more complex (Carmeli et al., 2006) and describes the process of converting these ideas into new (radical) and improved (incremental) products, services, or ways of doing things (Woodman et al., 1993; Baer, 2012; Aronson et al., 2006). However, innovation management research suggests that both, idea generation and implementation, are interrelated since the implementation of ideas requires finding or creating ideas in the first place (Parzefall et al., 2008). Therefore, innovation may be defined as a process that involves the generation, adoption, implementation and incorporation of new ideas, practices or artifacts within organizations (Axtell et al., 2000). As such, it is a broader and more complex concept than that of creativity. The concept of innovation involving both the generation and the implementation of ideas is not new (Mumford and Gustafson, 1988) and has been examined at different organizational levels.

The foundation of all innovations is ideas and it is employees who develop, carry, react to, modify and implement ideas (Janssen, 2000). The environment of organizations in knowledge-based industries, for example, telecommunications, is very dynamic (Shih and Susanto, 2011) and work activities tend to involve complicated non-standardized and non-routine tasks (Zhang and Bartol, 2010; Slusher et al., 1972). The routines implemented by organizations may not be able to respond quickly enough to rapid changes in technology, or to frequent technical problems that require fast and creative solutions. Employees

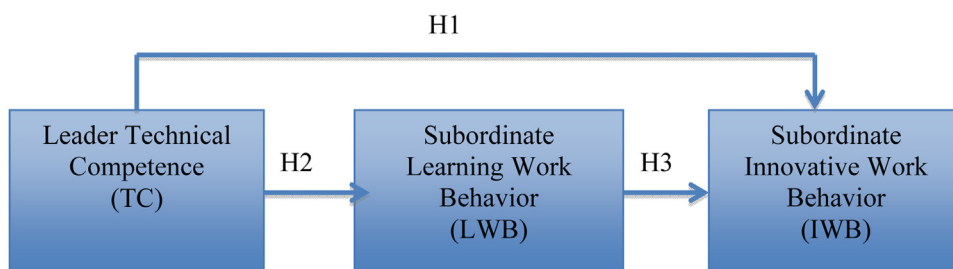


Fig. 1. Proposed Model.

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