



Impact of Entrepreneurial Leadership on Organization Demand for Innovation: Moderating Role of Employees Innovative Self-efficacy

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ABSTRACT

The main purpose of this paper is to examine the influence of entrepreneurial leadership and employees' self-efficacy towards organization demand for innovation. Introduction to alternative pathways of thinking and actions in an organization is typically tie-up with innovation nowadays. In this regard, the degrees of organizations willingness to engage and perceive advantage from new products or services, or products or services that embody new technology are being focused. Since leadership has been identified as a key determinant of organization innovation, a conceptual framework is proposed to explore the impact of entrepreneurial leadership on organization demand for innovation. Apart from the leadership behaviors, followers' characteristic and their own confidence level or perceived self-efficacy are also studied to capture the effect of innovative work behavior. Hence, this study aims to determine the moderating role of employees' innovative self-efficacy on the relationship between entrepreneurial leadership and organization demand for innovation. A sample from Malaysia Top 100 companies is participated and the hypotheses are evaluated using partial least squares analysis. This research makes a significant contribution by providing empirical evidence that support entrepreneurial leaders and the organizations to generate more opportunities and enact them in ways that increase the firm's receptivity towards innovation.

Keywords: Entrepreneurial Leadership, Receptivity of Innovation, Organizational Innovation Confidence, Innovative Self-Efficacy, Partial Least Squares - Structural Equation Modeling

JEL Classification: L22

1. INTRODUCTION

Leading innovation is one of the most challenging aspects of organization's life. Innovation is more complex than it looks and a unifying general theory did not merged on this issue. At the beginning of the 20 century, the work of Schumpeter (1934) was a prominent stage in innovations' evolution. Schumpeter (1934) argued that innovation denotes the dynamic force of economic development and ensures the economic expansion through recession phases and a cyclic interchange of prosperity. In compare to Schumpeter's time, today the economic prospect has changed and according to several scholars' innovation is now inevitable for companies' development and competitive advantages (Becheikh et al., 2006). The extraordinary economic growth of a country

can be first and for most attributed to innovation. Innovation is a vital factor, with a direct relation to the changing environment, economic growth and life of any organization. Although many definitions are available for innovation, but all of them share a common way of thinking in which innovation is creating something new, including products, services or ideas and it is a beneficial factor for all economies and organizations.

Innovation can be studied at the individual, group, organizational, industry or national level. The conceptualization, scope of innovation definition, research objectives and researcher approaches will be affected based on these levels of analysis (Read, 2000). Previous studies on innovation have focused on different levels of analyses. According to Slappendel (1996) and Hage

(1998) much of the early literature concentrated on innovation at the individual level and addressed the adoption of new ideas and practices by individuals. Since 1980s studies conducted to identify how organizations adopt innovations and examined the relationship between specific organizational variables and organizational innovativeness. This was the beginning of a mounting interest in innovation within, and by, organizations, i.e., organizational innovation. This research also deals with the organizational level of analyses and *per se*, it draws on the research literature for innovation in the organization.

Recently, organizational innovation has been receiving extensive attention and characteristics of organizational innovation have been studied in various researches. Today, due to raises in customers' expectations, lack of resources and business environment complexities, organizations have left with innovation as a single choice (Ravichandran, 1999). Therefore, issues concerning organizational innovation are receiving extensive attention in order to reach the higher level of competitive position in the organizations (Shyu et al., 2006). Most of the earlier studies determined organizational innovation either as a prerequisite for successful product or process innovation or as an adoption to the introduction of new technologies (Read, 2000). However more recent definitions of organizational innovation have expanded to include themes of "demand toward innovation" and "receptivity to innovation." This represents an increasing movement among organizational innovation researchers to understand hidden behavioral preferences of organizations (Obenchain, 2002).

In recording the levels and the stimulants for innovation in the organization, the demand-side factors have been generally neglected in favour of supply-side factors. According to Ashby and Mahdon (2009), "the distinction between supply and demand-side factors is not always clear-cut: Demand and supply represent opposite ends of a continuum." This might be the reason to explain the scarcity of studies on demand-side factors in organizational innovation to show how receptive organizations are to new products and services. Muscio et al. (2010) stated that organization demand for innovation is yet to be manifested especially for a traditional industry. Therefore increasing the latent interest in organization's demand for innovations that might generate benefits to the organization and improve the work life is the main focus of this research.

Previous studies revealed that leadership with its dominant role in the organization is one of the key factors that affect organizational innovation (Jung et al., 2008). In spite of agreement on the importance of leadership for innovation, previous studies in the field of innovation and leadership are not sufficiently benefited by each other and mostly studied in separate areas. Thus, more systematic understanding of the relationship between these constructs is not only timely but even essential (Imran and Anis-ul-Haque, 2011). Beside the significance of leadership for organizational innovation, the paramount importance is having the right type of leadership to effectively drive innovation in the organization (Oke et al., 2009). Skillful leadership is needed in order to optimize the advantages of new ways of working, as well as the unprecedented revolution in the organizations.

Over the past few years, some research findings have presented the positive influence of particular leadership styles on innovation in the organization (e.g., supportive leadership (Oldham and Cummings, 1996), participative and democratic leadership (Tierney et al., 1999) and so many on transformational leadership (Bass and Riggio, 2006; Gumusluoğlu and Ilsev, 2009; Hsiao et al., 2009; Jung et al., 2003, 2008; Sarros et al., 2008). While these studies have reported valuable insights, but recent studies believe that beside participative, supportive and transformational behaviors, entrepreneurial behaviors are increasingly important in a variety of contexts. In organizations, these behaviors foster innovation and adaptation to changing environments. Recent literatures suggest that organizations must be more entrepreneurial to enrich their capacity for long-term survival in the complex and explosive environments with rising competition for critical resources (Gupta et al., 2004). Therefore, researchers have begun to investigate "how to champion entrepreneurial behaviors in organizations and the idea of entrepreneurial leadership is one of the approaches introduced in the literature" (Renko et al., 2015). However due to lack of conceptual development and inadequate tools to measure leaders' entrepreneurial characteristics and behaviors research on entrepreneurial leadership has been hindered over past years (Renko et al., 2015). Hence this research aims to address these critical gaps by reviewing the existing research on entrepreneurial leadership and the key elements of this leadership style.

The attributes, behaviours and actions that distinguish entrepreneurial leadership from other leadership styles, focus on opportunity recognition and exploitation as entrepreneurial goals for such leadership. The opportunity-focused actions of leaders result in recognition and exploitation of new opportunities in an organization, and more importantly, from a leadership perspective, seeing their leaders behave entrepreneurially creates follower's commitment to do the same. Leaders influence and direct their followers by acting as role models and openly encourage followers to work toward entrepreneurial goals (Renko et al., 2015; Churchill et al., 2013). Organization's demand for innovation is the first step to generate or adopt innovation by organization. This places an additional burden on organizational leaders to constantly be alert for, test and propose the use of new products and processes in their organization. Innovation par excellence would be achieved via a continually high level of commercial alertness to opportunities but also a willingness to gather and develop the knowledge and information required exploiting those opportunities (Park, 2005).

To achieve this goal, every level of an organization need to constantly grab new business opportunities to embrace entrepreneurial behaviours and attitudes. Entrepreneurial leaders themselves engage in opportunity-focused activities, and in so doing, they also influence their followers, motivating and encouraging them to pursue entrepreneurial opportunity-focused behaviors. Leadership can establish a direct connection between innovative self-efficacy, employees' innovative work behavior, as well as innovation organizational learning and performance. The success of entrepreneurial leadership depends not only on the behaviors of the leader, but also on the characteristics of their followers in demonstrating entrepreneurial behaviors (Renko

et al., 2015). It embodies a high rank of innovative self-efficacy when an employee has a strong internal belief that he or she can optimistically perform with superior innovation (Dörner, 2012). Therefore this study aims to examine the moderating role of innovative self-efficacy toward the relationship of entrepreneurial leadership and organization's demand for innovation.

Leaders' primary concern is to nourish creativity among employees in the view of innovative results (Jaiswal and Dhar, 2015). Chan (2010) revealed that leadership create enthusiasm, aligns people with vision and empower them to reach the great heights of achievement. The personal factors, such as core self-evaluations, and contextual factors like organizational support for innovation, leadership, and co-worker exchange are indeed sway the formation of self-efficacy (Dorner, 2012). Past studies' findings showed that leadership is positively associated to employees' self-efficacy (Aggarwal and Krishnan, 2013; Jaiswal and Dhar, 2015). While Momeni et al. (2014) found that employees' self-efficacy is positively associated on innovative work behavior. Employees with strong self-efficacy, in the other way, high confidence level lead to ability for effective implementation of their duties. Thus, the innovative self-efficacy on employees has been assigned as the moderator variable to test the correlation between entrepreneurial leadership and the organization demand for innovation.

Due to the fact of innovation being prominence in the current economy instability, leaders commit to harmonize the organization's culture and lay stress on both creativity and innovation. As an outcome, the ultimate target of modern organization is to motivate innovation activities among all employees (Slåtten, 2014). Each individual is unlike; they either react positively or negatively. Latterly, there has been self-efficacy concept related to the different occurrences in employees' participation (Slåtten, 2014). Efficacy believes are the underlying human agency fundamental which affects the general willingness of someone to be engrossed in certain positive behaviors related to high performance, which required high levels of collaboration and innovation to produce exceptional results (Chaudhary et al., 2012). In the literature, self-efficacy often underlined a role that impact individual involvement in innovation activities. The remainder of the paper is structured as follows. The next section reviews the relevant literature followed by a framework for future empirical research. Finally a research methodology is proposed.

2. LITERATURE REVIEW

2.1. Organization Demand for Innovation

Levie (2008) defined organization demand for innovation as the degree to which organizations are willing to engage with and perceive benefit from new products or services, or products or services that embody new technology. Organization demand for innovation is about receptivity toward innovation in organizations. Individual and organizations have different level of desire and existing opportunities to express their innovation preference. Organization demand for innovation is a type of business demand for business innovation (Ashby and Mahdon, 2009). According to Bhide (2009) while many supply-side indicators of innovation exist, global demand-side indicators are markedly absent from

the literature. Also Levie (2008) emphasized that there are many measures of the supply-side of innovation, but there are no global measures of demand for innovation. Therefore the organization's demand-side factors have been generally neglected in favor of supply-side outputs. Yet, organizations cannot succeed in producing innovation without using innovation in day-to-day work.

Since organizational customers are so important in innovation adoption, a measure of Organizational Innovation Confidence (OIC) was developed and funded by the Institute for Innovation and Information Productivity (IIIP) by the Hunter Centre for Entrepreneurship at the University of Strathclyde, Glasgow, UK in association with the Global Entrepreneurship Research Association (Levie, 2008). OIC is a multi-faceted construct that measures the organization demand for innovation based on three items including the willingness to buy products or services that are new to the organization, willingness to try products or services that use new technologies in daily work for the first time, and belief that new products or services will improve one's working life (Levie, 2008). Based on IIIP report after a successful pilot in the United Kingdom in 2008, OIC was measured in 18 different nations and the reliability and validity of the index were acceptable over a 3 year period of study.

Studying the antecedents and stimulants of innovation in the organization was one of the main streams of research over the past years. Previous studies attempt to identify the factors that enhance and facilitate innovation in organization. Organization's characteristics, behaviors of organizational members, and extra-organizational factors were identified as three main antecedents (Obenchain, 2002). Among the three categories, behaviors and characteristics of organizational members had been one of the extensive standing research areas in the field of innovation (Rogers, 2010). As a result, some researchers investigated the importance of leadership in relation with innovation and identified related factors such as leader's behaviors or characteristics that significantly affect innovation in organization (Jung et al., 2003; Gumusluoglu and Ilsev, 2009; Makri and Scandura, 2010).

While there are only few studies on organization demand for innovation the existing literature discuss the importance of communal values and human orientations on how receptive organizations are to new products and services. Previous studies suggest that leaders of paternalistic organization should take additional burden to propose and test the use of new products and services in their organization (Levie, 2008). In spite of agreement on the importance of leadership for innovation, previous studies in the field of innovation and leadership are not sufficiently benefited by each other and more systematic research is required (Imran and Anis-ul-Haque, 2011).

2.2. Entrepreneurial Leadership

Entrepreneurial leadership is a distinctive leadership style that can be presented in any organization (Gupta et al., 2004). The attributes, behaviors and actions that distinguish entrepreneurial leadership from other leadership styles, focus on opportunity recognition and exploitation as entrepreneurial goals for such leaders (Renko et al.,

2015). No matter organizations are in volatile or stable industry, providing services or selling products, in order to remain viable they need to constantly grab new opportunities. In this regard, entrepreneurial attitudes and behaviors must be embrace at every level of organization. Based on the abovementioned challenges in business environment, researchers have begun to identify how to support and champion entrepreneurial behaviors in organizations. Entrepreneurial leadership is the intersection of leadership and entrepreneurship (Renko et al., 2015). Emphasis on opportunity-oriented behaviors, both by leaders and followers is the key to understand entrepreneurial leadership. Entrepreneurial leaders enhance followers' beliefs in their own entrepreneurial abilities and skills and increase their passion for innovation and creativity.

According to Gupta et al. (2004), entrepreneurial leadership has some similarities with transformational leadership in a way that both leaders consider the higher needs of followers and evoke their performance. However the ability of entrepreneurial leaders to evoke followers' performance is based on the organization's need to adapt the changing environment and the main challenge is to create the willingness in followers and organizations to do creative entrepreneurial actions rather than current conservative activities. Due to the lack of conceptual development and the inadequate knowledge of entrepreneurial leadership (Renko et al., 2015), this paper aims to review the existing perspectives on entrepreneurial leadership and its interaction with the followers to enhance the demand of innovation in the organization.

Gupta et al. (2004) conceptualized entrepreneurial leadership based on two main challenges faced by entrepreneurial leaders. According to them the first challenge is creating a scenario of possible opportunities to transform the current situation which is called scenario enactment. The second challenge is convincing the stakeholders and followers that the objectives of the scenario might be accomplished through recruiting additional cast and appropriate resources to execute the transformation. This is called cast enactment. Gupta et al. (2004) suggest that aforementioned challenges requires entrepreneurial leaders to play five important roles including framing, absorbing uncertainty, path clearing, building commitment and specifying limits and these five roles under the two dimensions of enactment provide the theoretical framework of entrepreneurial leadership.

Chen (2007) described entrepreneurial leadership as a combined construct of risk-taking, pro-activeness and innovativeness. This perspective was in line with Gupta et al. (2004) conceptualization of entrepreneurial leadership. Risk-taking considered as the willingness to absorb uncertainty, pro-activeness is about encouraging entrepreneurial initiatives and innovativeness in fostering creativity and innovation among team members. Therefore it can be concluded that the convergence of leadership and entrepreneurship has merged some attributes for entrepreneurial leadership. Influencing and motivating others, focusing on opportunities, vision, risk-taking, creativity and innovation are among aforementioned attributes.

Renko et al. (2015) adopted a wider focus on conceptualizing entrepreneurial leadership and considered the attributes,

behaviors and actions of entrepreneurial leaders. They believe that entrepreneurial goals such as exploitation and opportunity recognition is the main focus of entrepreneurial leaders and characterizes the behaviors, attributes and actions of this leadership style. Entrepreneurial leaders encourage and influence followers to try new ways of doing work and think more innovative. Comparing to previous studies, Renko et al. (2015) treated entrepreneurial leadership as a leadership style rather than a strategic management construct. They suggested innovativeness, creativity, passion, vision and risk-taking as the elements of entrepreneurial leadership which compromised both leader attributes and behaviors. Also an eight-item ENTRLEAD scale was developed and empirically tested to measure the perception of employees from their immediate manager's (leader) entrepreneurial leadership style and indicated a good construct validity and reliability.

Therefore this research aims to employ the eight-item ENTRLEAD scale developed by Renko et al. (2015) to define and measure entrepreneurial leadership as a construct that influence and direct the performance of group members towards recognizing and exploiting new opportunities. However the main focus of this research is on innovative opportunities within the organization which may help the employees and the organization to use innovation in day to day work and improve the organization life. This may lead to an organization that is open to change, try new technologies, find new ways of doing things and has demand for innovation.

3. INNOVATIVE SELF-EFFICACY

Previous studies crucially indicated that besides the direct relationship of leadership and innovation, several factors may influence this relationship. It must be considered that leadership behaviors occurs in the context of the organization and analyzing a bivariate relationship would be incomplete without considering the organizational context in which organizational innovation take place (Jung et al., 2008; Oke et al., 2009). Therefore it is necessary to identify and examine factors that may interact with leadership behaviors in affecting organizational innovation (Jung et al., 2003). This research attempts to take a step further in exploring the impact of entrepreneurial leadership on organization demand for innovation, and likewise the interaction of entrepreneurial leadership and employees' self-efficacy on organization demand for innovation. As mentioned earlier, the success of entrepreneurial leadership depends not only on the behaviors of the leader, but also on the characteristics of their followers in demonstrating entrepreneurial behaviors (Renko et al., 2015).

According to Bandura (1977), self-efficacy is based on the principal assumption of psychological procedures, the social cognitive theory, in which the perceived self-efficacy influences the choice of activities and behavioral settings. The amount of effort spent and the persistence to face the obstacles is determined by individual's efficacy expectations. The concept of self-efficacy come into sight in management and organization, it stimulates motivation and cognitive resources for a better individual achievement in every single aspect of life (Momeni et al., 2014). Self-efficacy is introduced as individual judgments regarding

their abilities to carry out a task or adapt with a certain condition, it is the central component of work for success (Momeni et al., 2014). Robinson (2010) suggested that self-efficacy is a subjective phenomenon, although they owned the top expertise or skills, people may hesitate to presume that they are able to apply their talents for the most diligent use in various situations.

Jaiswal and Dhar (2015) learned that specific styles of leadership can cultivate an innovation climate in harnessing employees' creativity skills, meanwhile, creative self-efficacy was found to be moderated the relationship between innovation climate and employees' creativity. Another recent study also contributed to the leadership literature by connecting it with the issue of employees' creativity through creativity self-efficacy and knowledge sharing (Mittal and Dhar, 2015). Slåtten (2014) claimed that in the workplace, creative self-efficacy may be a key personal attribute where innovation is broadly seen as an essential aspect of organization's competitiveness. Although the pivotal character of self-efficacy in the context of innovation is being underscored, there has been relatively little literature introduced the concept of innovative self-efficacy so far (Jaiswal and Dhar, 2015).

Unlike the general self-efficacy which reflects a common competence belief in a wide-ranging series of situations, innovative self-efficacy signifies an innovation-specific (Dörner, 2012). Leadership can establish a direct connection between innovative self-efficacy, employees' innovative work behavior, as well as innovation organizational learning and performance. Creativity and innovation are seemed to be closely interlinked and across different layers of the innovation process, creativity carries multiple role plays. According to Barakat et al. (2014), creativity is restrained or facilitated by quite a number of mechanisms through regular motivation, rich sense making, shared knowledge, individual ability and perceived self-efficacy. Past researchers have scrutinized creative self-efficacy as a mediating variable between other related variables (Vinarski-Peretz et al., 2011; Mayfield and Mayfield, 2012; Slåtten, 2014; Mittal and Dhar, 2015). However, most of the studies have not shown interest in investigating the moderating role of innovative self-efficacy (Jaiswal and Dhar, 2015).

Thus, this paper will be insightful to examine the effects of entrepreneurial leadership toward organization demand for innovation on the moderating path of employees' innovative self-efficacy. An existing model of innovative self-efficacy development has been adopted from Dörner (2012). The total of fourteen items is included in the measurement of innovative self-efficacy in order to gauge the efficacy belief among employees and to capture those related in producing innovative outcomes. The innovative self-efficacy scale is prepared by using a format of five point Likert scale response (1= Totally disagree to 5= Totally agree). Innovative self-efficacy is intensified in determining employees' innovation where it prompted creativity studies recently to display the role of self-efficacy while bringing the innovation effort within employees. For the moderator variable, innovative self-efficacy, the possible disputations is that even though the contextual factors is subjected to trigger individual behavior in an organizational setting, yet self-assertion about innovation caters

positive confidence and zeal to employ innovative work behavior (Jaiswal and Dhar, 2015).

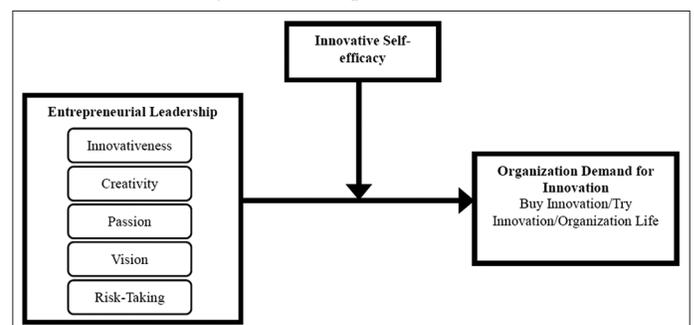
4. CONCEPTUAL FRAMEWORK

Previous studies mostly investigated the influence of leadership on supply-side innovation while it is not clear how organizations can increase their own demand and receptivity toward innovation. Based on the literature, opportunity recognition and exploitation are major factors in producing innovation. To achieve this, employees at every level of an organization have to embrace entrepreneurial behaviors and attitudes. Reflecting these developments in the corporate world, researchers have begun to investigate how to champion entrepreneurial behaviors in organizations. Therefore the purpose of this research is to address the critical gaps by reviewing the existing research on organization demand for innovation and present the key elements of entrepreneurial leadership style while providing a framework to measure the influence of this leadership style on organization receptivity toward innovation (Figure 1). This research contributes to the body of knowledge via developing a conceptual framework to examine the moderating effect of innovative self-efficacy on the relationship of entrepreneurial leadership and organization's demand for innovation, in order to bring more insight into this relationship. The first hypothesis of this research examines the direct relationship between entrepreneurial leadership and organization demand for innovation. Additionally, the moderator effects of employees' innovative self-efficacy on the relationship served as the second hypothesis.

5. METHODOLOGY

This is a descriptive study and quantitative research techniques will be used to measure the relationship between variables. The questionnaire designed for the purpose of this research consists of 33 questions in four parts; First part is general information about respondents. Second part measures the perception of employees about their immediate manager's entrepreneurial leadership style through eight-item ENTRELEAD scale similar to other leadership instruments (Waldman et al., 2001; House et al., 2004; Bass and Riggio, 2006). The third part measures OIC, a measure of organization's demand for innovation, through questions adopted from international survey of innovation confidence (Levie, 2008). The OIC index is derived from three different dimensions of innovation confidence including organization's willingness to

Figure 1: Conceptual framework



buy new products and services, willingness to try new products and services that involve new technology and the belief that new products or services will improve organization's life. The last part includes fourteen items measured on innovative self-efficacy by using five point Likert scales (ranging from 1 "totally disagree" to 5 "totally agree") (Dörner, 2012). Employees are asked to rate their own level of innovative self-efficacy.

Malaysia top 100 companies are the target population of this research and the sample will be identified based on the simple random sampling method. Data collection will be conducted through email or face to face. The unit of analysis is organizations and the employee's perception will be measured to identify the quality of entrepreneurial leadership and the level of organization demand for innovation. Partial least squares - structural equation modeling (PLS-SEM) analysis technique will be employed to test the hypotheses and SmartPLS software package 3 will be used to analyze measurement and structural model.

6. CONCLUSION

This study investigates the relationship of entrepreneurial leadership with organization demand for innovation, and the moderator role played by employees' innovative self-efficacy. By providing empirical evidences on these perceptions, this research may support entrepreneurial leaders and their firms to identify and generate more opportunities and enact them in ways that expand the capabilities of their organizations and demand for innovation. To recognize the external competitiveness and future survival, organizations need to deal with changes and other activities that categorized as innovation-related. Undoubtedly, leadership styles have certain influences toward the employees, they enhance employees' ability to carry out tasks and motivate them to perform beyond expected. Employees' self-efficacy plays a vital role for innovativeness regardless of supervisory behavior as the key driving force. Self-efficacy influences the functional abilities and the potential chances in their attainments of completed duties; it stands among the personal factors that are important. Self-efficacy is referred as a personal's own belief in his or her skills and talents linked to particular activity. Leaders and followers share their interests, make real-life connections and identify potentially valuable opportunities via the knowledge platforms. This research makes an important contribution to our understanding of enhancing organization's demand for innovation through entrepreneurial leadership and employees' innovative self-efficacy.

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