

Organizational Learning Capability, Firm Innovation, Knowledge Management Effectiveness, and Sustainable Competitiveness: A Conceptual Model

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Abstract

This study aims at presenting the relationships among organizational learning capability, firm innovation, knowledge management effectiveness, and sustainable competitiveness. Firstly, organizational learning capability is proposed to have a relationship with firm innovation and sustainable competitiveness. Secondly, firm innovation is considered to have a positive effect on sustainable competitiveness. Lastly, it is likely that knowledge management effectiveness could become a moderator for the organizational learning capability-firm innovation relationship, the organizational learning capability-sustainable competitiveness relationship and the firm innovation-sustainable competitiveness relationship. In summary, organizational learning capability plays a significant role in determining both firm innovation and sustainable competitiveness through moderating effects of knowledge management effectiveness. To verify the proposed research relationships, future research should collect data from real businesses in order to investigate the relationships. Contributions via theoretical and managerial aspects, limitations of the study and conclusion are presented.

Keywords: Organizational Learning Capability, Firm Innovation, Knowledge Management Effectiveness, Sustainable Competitiveness

Introduction

Nowadays, firms have dealt with highly rigorous competitive markets and environments. They have implemented valuable business operations, practices and activities and effective organizational strategies and techniques for excellently achieving their goals, objectives and purposes. Firms also integrate, collaborate and coordinate their resources, assets, capabilities, potentialities, and competencies for encouraging their efficient operations and for enhancing employees' knowledge and experience to build initial key success factors. These key success

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factors are important for determining, driving and explaining firms' sustainable competitive advantage, superior performance, survival, and sustainability. In this study, organizational learning capability is considered as one source of firms' key success factors in the rapidly changing business situations and conditions. It is a major determinant of firms' great organizational outcome. It explicitly plays an important role in influencing and promoting their profitability, growth and stability. Thus, organizational learning tends to have a positive relationship with firm innovation and sustainable competitiveness. The relationships among organizational learning capability, firm innovation and sustainable competitiveness are discussed later.

Interestingly, organizational learning capability is a main driver of firms' innovation and sustainable competitiveness. It is defined as the ability of firms to promote the acquisition, creation and transferring of knowledge as fundamental values that affect their superior performance (Camps et al., 2016). It includes experimentation, risk taking, interaction with the external environments, dialogue, and participative decision making. Within the turbulent environments, firms utilize organizational learning capability to create business innovativeness, develop sustainable competitive advantage and enhance firm performance. Thus, organizational learning capability is positively related to firms' innovation and competitiveness. Also, organizational learning capability is the approach through which firms change and modify their mental models, rules, processes, and knowledge to secure competitive advantage and sustain and improve their performance (Alegre & Chiva, 2013). It definitely helps stand a better change of sensing, acting, adapting, and surviving in the competitive and dynamic environments (Guinot, Chiva & Mallen, 2016). Firms with great organizational learning capability tend to gain sustainable competitive advantage. Better organizational learning capability is likely to relate to more competitive advantage. Thus, the relationships among organizational learning capability, firm innovation and sustainable competitiveness are reasonably considered.

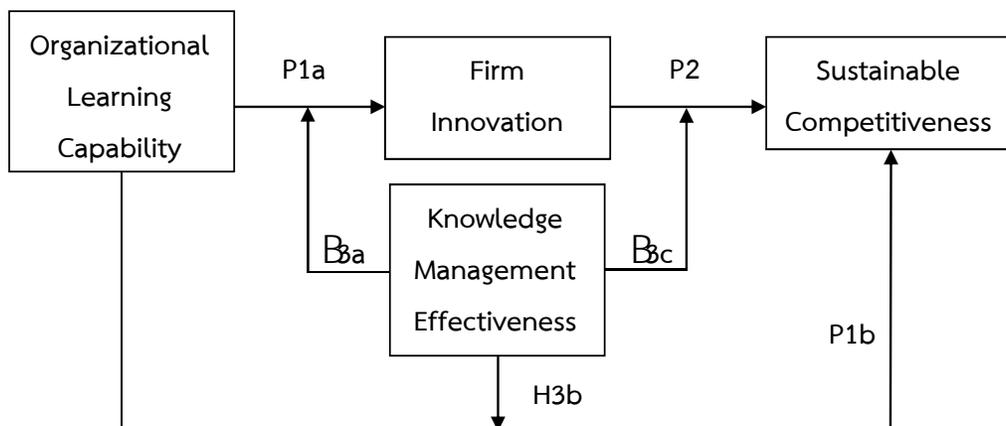
Likewise, organizational learning capability enables firms to implement appropriate management practices, structures and procedures that facilitate and encourage the exchange and integration of organizational knowledge in order to build new businesses and innovations and create their competitiveness (Cai, Hughes & Yin, 2014). It consists of six dimensions, namely (1) clarity of purpose and mission, (2) leadership commitment and empowerment, (3) experimentation and rewards, (4) transfer of knowledge, (5) teamwork, and (6) group problem-solving. Accordingly, this study attempts to explore the relationships among organizational learning capability, firm innovation and sustainable competitiveness and present the research propositions. In existing literature, knowledge management becomes

a basic requirement for organizational learning capability (Shang, 2009). Hence, it is possible that effectiveness of knowledge management enhances the aforementioned relationships. To verify and expand the proposed relationships, this study also identifies knowledge management effectiveness as an important factor that affects the strengths of the relationships among organizational learning capability, firm innovation and sustainable competitiveness. Here, knowledge management effectiveness is proposed to become a moderator of the research relationships. The objective of this study is to present the relationships among organizational learning capability, firm innovation, knowledge management effectiveness, and sustainable competitiveness. In this study, organizational learning capability is an independent variable, firm innovation is a mediating variable, knowledge management effectiveness is a moderating variable, and sustainable competitiveness is a dependent variable. The key research question is how organizational learning capability relates to sustainable competitiveness. Also, the specific research questions are: (1) How organizational learning capability links to firm innovation, (2) How firm innovation interacts with sustainable competitiveness, (3) How knowledge management effectiveness moderates the organizational learning capability-firm innovation relationship, (4) How knowledge management effectiveness moderates the organizational learning capability-sustainable competitiveness relationship, and (5) How knowledge management effectiveness moderates the firm innovation-sustainable competitiveness relationship. The rests of this study are relevant literature review of organizational learning capability and related issues, hypotheses development, limitations of the study, contributions for theory and management, directions for future research, and conclusion of the study.

Relevant Literature Review of Organizational Learning Capability and Propositions Development

According to the dynamic capability theory, a dynamic capability is a key source of determining firms' competitive advantage and performance which emphasizes creating, adapting, combining, integrating, and reconfiguring skills, resources and abilities to renew competencies to achieve congruence with changing environments (Teece, Pisano & Shuen, 1997). In this study, organizational learning capability is considered as firms' dynamic capability that helps promote both firm innovation and sustainable competitiveness because it is valuable, rare, non-imitate, and non-substitute. The conceptual model of the organizational learning capability-sustainable competitiveness relationship is presented in Figure 1.

Figure 1 The conceptual model of the organization learning capability-sustainable competitiveness



Organizational Learning Capability

In uncertain competitive markets and environments, organizational learning capability becomes a valuable strategic tool that can help firms achieve their goals, survival and sustainability. Thus, it is a key in determining firms' success in these business situations. In this study, organizational learning capability is defined as an ability of firms to develop and acquire the new knowledge-based resources and skills needed to offer new products via innovative concepts (Hull & Covin, 2010). It creates their general proficiencies to innovate their operations and products. It focuses on continuously acquiring new knowledge and adjusting in order to successfully adapt to external and internal environmental changes and to main sustainable existence and development (Chen, 2005). Also, organizational learning capability refers to an ability of firms to implement the appropriate management practices, structures and procedures that facilitate and encourage knowledge-building with impact (Chiva & Alegre, 2009). It is a dynamic process of creating and gathering knowledge to develop the resources and capacities which lead to better performance in an organization. It supports firms' business innovativeness by increasing employees' creativity and improving their knowledge explicitly (Akgun et al., 2014). Firms with best organizational learning capability are likely to promote knowledge exchanges among employees and partnerships with other organizations and enhance an open culture in an organization. They can synthesize and apply current and acquired knowledge in order to encourage competitive advantage and build superior performance.

Organizational learning capability explicitly promotes the acquisition, creation and transfer of knowledge as fundamental values (Camps et al., 2016). It includes experimentation (the degree of new ideas and suggestions along with the attendance and sympathetic dealt), risk taking (stressful environment design and considering the risk of errors and accept mistakes in an organization), interaction with the external environments (the degree of interactions with outside of the organization), dialogue (the collective pursuit of processes, assumptions and certainties with form daily experiences), and participative decision making (the level of influence employees in the decision making process (Karimi & Akbari, 2015). Similarly, organizational learning capability emphasizes knowledge acquisition, information dissemination, information interpretation, and institutional memory through managerial obligation, system vision, openness, and knowledge exchange and integration (Jerz-Gomez, Cespedes-Lorente & Valle-Cabrera, 2005). Likewise, organizational learning capability supports the exchange and integration of organizational knowledge via clarity of purpose and mission, leadership commitment and empowerment, experimentation and rewards, transfer of knowledge, teamwork, and group problem-solving in order to build new businesses and innovations and create their competitiveness (Cai, Hughes & Yin, 2014). It changes and modifies firms' mental models, rules, processes, and knowledge to secure competitive advantage and sustain and improve their performance (Alegre & Chiva, 2013). Firms with greater change of sensing, acting, adapting, and surviving in the dynamic environment can gain more sustainable competitive advantage (Guinot, Chiva & Mallen, 2016). Thus, they tend to achieve superior performance, long-term survival and stable sustainability. To utilize firms' organizational learning capability, firms can create and build their innovations in both product and operation aspects and secure and encourage sustainable competitiveness. Accordingly, firms with organizational learning capability seem to enhance their innovation and achieve sustainable competitiveness in the highly complex business markets and environments. Therefore,

Proposition 1a: Organizational learning capability is positively related to firm innovation.

Proposition 1b: Organizational learning capability is positively related to sustainable competitiveness.

Firm Innovation

In this study, organizational learning capability is a key determinant of firms' innovation. Thus, firm innovation is a consequence of the proposed relationships. It also plays an important role in enhancing firms' sustainable competitive advantage and encouraging their superior performance (Rangus & Slavec, 2017). It focuses on the search for, and the discovery, experimentation, development, imitation, and adoption of new products, new production processes and new organizational set-ups (Hsieh, Yeh & Chen, 2010). Firms with great innovation are likely to provide and utilize operational innovation and create and build product innovation. They tend to adapt new products, services and processes to respond to customer requirements, expectations and market needs and wants. Better innovation can support firms to gain more competitiveness and achieve greater performance. Similarly, firm innovation refers to the integration of new and different information, knowledge and resources to generate new technologies, new products and services, and new markets (Cui & O'Connor, 2012). It helps firms well sustain competitive advantage by responding to customer needs and market expectations. Accordingly, firm innovation becomes a significant enabler to develop unique products, services and processes that help firms build and secure sustainable competitiveness in the turbulent markets and environments.

Firm innovation involves the generation, adoption, implementation, and incorporation of new ideas, practices and artifacts within an organization and it includes technical and administrative innovation, product and process innovation and radical and incremental innovation. (Wan, Ong & Lee, 2005). It is critical to predict firms' continuous success and long-term survival and sustainability. Firstly, technical innovation is an approach by which firms exploit opportunities to commercialize new products, services, processes, or business models while administrative innovation utilizes the management and alteration of their structural and managerial procedures for generating innovations in an organization (Chrisman et al., 2015). Secondly, product innovation is the production of new products and services to create new markets and customers and satisfy current markets and customers while processes innovation is the improvement and introduction of new production process for products and services (Jiao, Koo & Cui, 2015). Thirdly, radical innovation is the generations of new products, services, processes, and business models through original and non-routine ideas while incremental innovation creates products, services, processes, and business models by using part of routine changes from present organizational activities, practices, actions, and functions (Damanpour, 1991). Greater implementation of firms' innovations can

support longer sustainable competitiveness. Thus, firm innovation is critical to help firms sustain organizational competitiveness, build business performance and create corporate success. It is likely to have a positive relationship with sustainable competitiveness. Therefore,

Proposition 2: Firm innovation is positively related to sustainable competitiveness.

Sustainable Competitiveness

Here, sustain competitiveness is a significant outcome of both organizational learning capability and firm innovation. It enables firms to achieve superior performance, continuous survival and long-term sustainability. In this study, sustainable competitiveness is defined as firms' potentialities to produce the right products and services of the right quality at the right price and time (Balkyte & Tvaronaviene, 2010). It explicitly represents the effective response of customer needs, wants, requirements, and expectations more efficiently, effectively and excellently than commercial rivals. Firms with sustainable competitiveness can secure organizational position, maintain customer values, improve financial strength, and achieve business survival in the competitive markets and environments. Also, sustainable competitiveness refers to firms' operations, practices and actions which can provide the need to meet product demand in the markets and gain profits continuously by using more advanced capacity and production efficiency (Zhang & London, 2013). It definitely obtains and utilizes resources and assets to participate in competition. Likewise, sustainable competitiveness emphasizes comparative advantages of firms' operations with their commercial rivals (Ivanovic, Katic & Mikinac, 2010). Firms which achieve sustainable competitiveness tend to knowledge-intensive and service oriented products and services by improving the quality of their products and services through constant innovation. Thus, the organizational learning capability-sustainable competitiveness relationship and the firm innovation-sustainable competitiveness relationship are positive. Accordingly, a great innovation of firms is positively related to sustainable competitiveness while the sustainable competitiveness is a key driver of incremental performance, success, survival, and sustainability in long-term aspects.

Knowledge Management Effectiveness

The relationships among organizational learning capability, firm innovation and sustainable competitiveness are reasonably discussed and proposed. To expand and increase the benefits and contributions of the research relationships, knowledge management

effectiveness is considered as a moderator of these relationships. In existing literature, knowledge management enhances an ability of firms to effectively utilize their important resources and assets that have the potential to provide sustainability and competitive advantage (Benbya & Belbaly, 2005). It focuses on professional and managerial activities that create, acquire, gather, capture, organize, distribute, share, and disseminate their knowledge as opposed to information for securing competitiveness, enhancing performance, encouraging success, and gaining survival in the highly competitive markets and environments. Thus, an effectiveness of knowledge management positively relates to firms' success, stability, survival, and sustainability. Here, knowledge management effectiveness refers to the development, deployment and usage of a comprehensive system that enhances the growth of an organization's knowledge to support the achievement of strategic business objectives (Cheng L. & Mohd. N., 2010). It consists of knowledge acquisition effectiveness, knowledge sharing effectiveness and knowledge application effectiveness. Firms with knowledge management effectiveness are likely to develop their norms and values of knowledge acquisition, sharing and application that support innovation activities.

Then, knowledge management effectiveness is an important predictor of organizational innovation and performance. Additionally, knowledge management effectiveness explicitly improves communication, advanced collaboration, employee skills, better decision making, and productivity in an organization (Bharadwaj, Chauhan & Raman, 2015). Accordingly, it can help moderate the aforementioned research relationships. Greater knowledge management effectiveness is likely to enable stronger relationships among organizational learning capability, firm innovation and sustainable competitiveness. Hence, it is a moderator of the proposed relationships. Therefore,

Proposition 3a: Knowledge management effectiveness positively moderates the organizational learning capability-firm innovation relationships.

Proposition 3b: Knowledge management effectiveness positively moderates the organizational learning capability-sustainable competitiveness relationships.

Proposition 3U Knowledge management effectiveness positively moderates the firm innovation-sustainable competitiveness relationships.

Contributions and Directions for Future Research

Theoretical Contribution, Limitations and Directions for Future Research

This study applies the dynamic capability theory in determining and explaining the relationships among organizational learning capability, firm innovation, knowledge

management effectiveness, and sustainable competitiveness. However, this study has a limitation because it only presents the research propositions by conceptualizing the relationships according to existing literature. Thus, future research may need to collect data from real businesses in order to verify and expand the proposed relationships. Also, future research may need to do more literatures for identifying antecedents of organizational learning capability, search for its components and dimensions and find out other moderators of its relationships. Likewise, future research may apply statistical techniques, including regression analysis, structural equation model, path analysis, or partial least squared, to investigate the research relationships. For proving the generalizability of the study, future research may need to collect data from different population or multi-group of populations for testing a comparative study.

Managerial Contribution

This study identifies the importance of organizational learning capability. It plays a significant role in driving firms' great outcomes, such as continuous competitive advantage, superior performance, long-term growth, stability, survival, and sustainability in the rigorous business markets and environments. Accordingly executives of firms need to pay attention in establishing, building, developing, and improving learning capability in an organization via investments of resources and assets. Likewise, they need to integrate, collaborate and coordinate experience and knowledge from employees and the organization itself in order to support success of organizational learning capability implementation. Lastly, best understanding of predicted environment, situations and conditions can help firms succeed, survive and sustain. Thus, organizational learning capability becomes a necessary factor that encourages firm to achieve their goals, objectives, and purposes effectively and efficiently.

Conclusion

Organizational learning capability is a key determinant of firms' competitiveness, success, survival, and sustainability. It enhances firms to meet their business operations, activities and practices. This study presents the effects of organizational learning capability on sustainable competitiveness through the mediator of firm innovation and the moderator of knowledge management effectiveness. The results propose that organizational learning capability positively affects both firm innovation and sustainable competitiveness. Next, firm innovation is proposed to positively relate to sustainable competitiveness. For the moderating effects of the research relationships, knowledge management effectiveness is a key to moderate the organizational learning capability-firm innovation relationship, the

organizational learning capability-sustainable competitiveness relationship and the firm innovation-sustainable competitiveness relationship. While the research relationships are proposed, future research may need to collect data from real businesses for investigating the research propositions and different population or multi-group of populations for testing a comparative study. To verify, prove and expand the current study, future research may need to review more literature relating to antecedents, components and components of organizational learning capability and search for other moderators of the study. To achieve their goals, firms need to consider organizational learning capability as a key strategic tool of their operations through investments of their resources and assets and participations of employees' knowledge, experience and competency.

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