

**ORGANIZATIONAL CREATIVITY CAPABILITY AND FIRM  
PERFORMANCE: EMPIRICAL EVIDENCE FROM  
SOFTWARE BUSINESSES IN THAILAND**

**BY**

**WADSANA CHARUNSRICHOTIKOMJORN**

**A thesis submitted in partial fulfillment of the requirements for  
The Doctor of Philosophy degree in Management  
At Mahasarakham University  
January 2015**

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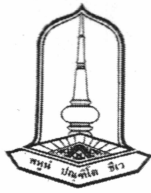
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The examining committee has unanimously approved this dissertation, submitted by Miss Wadsana Charunsrichotikomjorn, as a partial fulfillment of the requirements for the degree of the Doctor of Philosophy in Management at Maharakham University.

Examining Committee

..... (Asst.Prof.Dr.Karun Pratoom)	Chairman (Faculty graduate committee)
..... (Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit)	Committee (Advisor)
..... (Dr.Prathanporn Jhundra-indra)	Committee (Co-advisor)
..... (Asst.Prof. Dr.Buavaroon Srichaikul)	Committee (Faculty graduate committee)
..... (Asst.Prof. Dr.Kanchana Sukanthasirikul)	Committee (External expert)

Maharakham University has granted approval to accept this dissertation as a partial fulfillment of the requirements for the Doctor of Philosophy degree in Management.

.....  
(Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit)  
Dean of Maharakham Business School

.....  
(Prof.Dr.Pradit Terdtoon)  
Dean of Graduate School  
..... January 30, 2015

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<b>AUTHOR</b>	Miss Wadsana Charunsrichotikomjorn		
<b>ADVISORS</b>	Assoc.Prof.Dr.Phaprukbaramee Ussahawanitchakit and Dr.Prathanporn Jhundra-indra		
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### ABSTRACT

Organizational creativity capability has been the main key success factor in execution under vacillating business environments. Representation on the resource-advantage theory (RA), contingency theory, and the organizational learning theory, the objective of this research is to examine the relationship organizational creativity capability and firm performance through the mediating influences; business practice effectiveness, organizational innovation success, and organizational excellence efficiency. In addition, four antecedents including, executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity and three moderating variables comprising organizational well-roundedness, organizational learning capability, and transformational orientation are also examined. The results were derived from a survey of 104 software businesses in Thailand, which CEOs or managing partners are the key informant. The twenty-four hypothesized relationships among variables are tested by using ordinary least square (OLS) regression analysis.

Results suggest that new management method and valuable human resource development have significant influences with all of two organizational consequences; business practice effectiveness, and organizational innovation success; whereas useful operational control establishment has an insufficient influence to yield significantly expected outcomes. Interestingly, business practice effectiveness, organizational innovation success, organizational excellence efficiency is related to firm performance. Moreover, both internal and external determinants have impacts, at least partially, on building organizational creativity capability. Especially, executive proactive vision, strategic renewal mindset, and corporate resource readiness seem to be the most crucial.



Meanwhile, organizational well-roundedness plays a significant moderating role only on the relationships among organizational creativity capability and its three consequences. The contributions of theoretical and managerial, conclusion and suggestions for future research are also discussed.



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## CHAPTER I

### INTRODUCTION

#### Overview

Currently, under the severe competitive business environment such as economic, technology, and culture, those firms generate rapid responses in order to survive and success. In an era of high-technology changes, firms encounter globalization and rapid changing in business environment, many firms have been affected by macro environmental factors including the threat of new entrants and established competitors, substitute products, bargaining power of suppliers and customers (Porter, 1979). These factors have a pressure on firm characteristics. The results reveal which the survival of firms is reflected by the configuration of their competencies (Mintzberg, Lampel, and Ahlstrand, 2005). The rapid changes in the external environment comprise intensive competition, immediately information transfer, economic challenges, and advance technologies which provide advantageous or disadvantageous outcomes to the firms. Firms must be capable of current adaptation and future changes in the external business environment by continually renewing their products and services.

According to this change, firms can create their capability to resist the drawback under the rigid competitive context. The approaches which the firms employed to operate to gain accomplishment of the organizational objectives are the implementation of their strategy. The diverse strategies are formulated under the situation of existing firm capabilities. In order to grow up and survive, firms require continuous improvement of their capabilities for responding to the changing of the dynamic external business environment. As a result, the best way for growth and survival depends on often having new capability, new products, and new services.

Firms that have the growth and survival provide evidence by demonstrating that firms have configuration and continuous development. Firms are able to build up, survive and performance by developing their competence for creating new products toward reaching of competitive advantage (Audretsch, 1995; Eddleston et al., 2008).



In contrast, the relationships between innovation and productivity have never linked in the short term, because complex organizational environment needs a long period so as to change (Chakrabarti, 1990). Especially, the manufacturing industry is encountering gradually more competitive environment (Danneels, 2002). such as, firms have a new diversity of products affecting operations of both production and sales with more complication. Consequently, the manufacturing industry continues to execute several techniques for the sustainable achievement of the firm (Chenhall and Langfield-Smith, 1998). However, in the long term, innovations are still significant in increasing productivity and firm performance. Likewise, firms require creativity capability in the process of generating innovation for new opportunities in markets. Hence, both creativity and innovation are key success factors for firm survival, growth, and are a cause of organizational excellence (Cook, 1998). Barney (1986). recognized which the resources of the firm are keys that endow with competitive advantage for firm. Particularly, the resources of sustainability competitive advantage consist of value, rareness, inimitability, and non-substitutability (Barney, 1991).

Thailand which the country has a population of approximately 67 million in 2013 produces a large market value for software businesses products. The overall value of Thailand's software products greater than before from 24.304 million baht in 2011 to 31.979 million baht in 2012 that an increase of 24.0 percent (Software Industry Promotion Office, 2013). In addition, the changing of the external environment comprising the Thai baht's volatility, Asian Free Trade Area, ASEAN Economic Community (AEC), and the progress in technology are causes of growing factors for the intensive competitive environment in both industries. Software businesses in Thailand must face rapidly changing including internal and external environment. Therefore, in this research, the software businesses in Thailand are selected for population and sample, because there are rapid-growing and inconstant marketing surroundings among intensive competitive business environments.

Likewise, the antecedent constructs of organizational creativity capability consist of internal factors – executive proactive vision, strategic renewal mindset and corporate resource readiness, and external factors such as business environment complexity. Additionally, the organizational creativity capability outcomes –



organizational innovation success, business practice effectiveness, organizational excellence efficiency, and firm performance- are the consequent constructs. Furthermore, firm performance is a dependent variable. Finally, transformational orientation, organizational well-roundedness, and organizational learning capability are the three moderators of the aforementioned relationships.

Thus, the three theories – are applied to explain the phenomena in this research. First, the resource-advantage theory (RA) is used to explain the relationships among five dimensions of organizational creativity capability, the antecedents, and the organizational creativity capability outcomes. Moreover, the contingency theory is used to explain the relationships among organizational creativity capability antecedent, and transformational orientation on five dimensions of organizational creativity capability. Then, the organizational learning theory is used to explain the moderating effect of organizational well-roundedness, and organizational learning capability, which have the influence on the relationships among five dimensions of organizational creativity capability, and the organizational creativity capability outcomes.

Finally, this research is intended to provide a clearer understanding of the relationships between organizational creativity capability and firm performance via organizational innovation success, business practice effectiveness, and organizational excellence efficiency. This research provides contributions to the literature of organizational creativity capability. Firstly, this research proposes five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system) for theoretical and practical investigation. Secondly, this research provides a second contribution by advancing the literature via categorizing many antecedents and consequences of organizational creativity capability, and develops a model to test the relationships. Organizational creativity capability is examined in terms of a quantitative variable of the collected data from the software businesses in Thailand, while most of the past research proposed the conceptual relationships.



## Purposes of the Research

The key purpose of this research is to examine the relationships among organizational creativity capability and firm performance. The specific research objectives are as follows:

1. To investigate the relationships among each dimension of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system), business practice effectiveness, organizational innovation success, and organizational excellence efficiency.
2. To inquire the relationships among business practice effectiveness, organizational innovation success, and organizational excellence efficiency.
3. To examine the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance.
4. To study the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each dimension of organizational creativity capability.
5. To test the moderating effect of organizational well-roundedness that has influences on the relationships among each dimension of organizational creativity capability, business practice effectiveness, organizational innovation success, organizational excellence efficiency.
6. To prove the moderating effect of organizational learning capability that has influences on the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance.
7. Lastly, to analyze the moderating effect of transformational orientation that has influences on the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each dimension of organizational creativity capability.



## Research Questions

The key research question of this research is, “How does organizational creativity capability have an effect on firm performance?” Also, the specific research questions are presented as follows:

1. How does each dimension of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system), have an influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency?
2. How does organizational innovation success have an influence on the business practice effectiveness, and organizational excellence efficiency?
3. How does business practice effectiveness, organizational innovation success, and organizational excellence, efficiency have an influence on firm performance?
4. How do executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity have an influence on each dimension of organizational creativity capability?
5. How does organizational well-roundedness moderate the relationships among each dimension of organizational creativity capability, business practice effectiveness, organizational innovation success, and organizational excellence efficiency?
6. How does organizational learning capability moderate the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance?
7. How does transformational orientation moderate the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each dimension of organizational creativity capability?





## Scope of the Research

There are three theories explaining the phenomena in the research, including the resource-advantage theory, the contingency theory, and organizational learning theory. All theories illustrate the relationships among five dimensions of organizational creativity capability, its antecedents, its consequences, and its moderator constructs in the next chapter. Moreover, this research proposes the theory interaction to describe the relationships of each variable to examine and to answer the research questions and objectives. Additionally, the research questions and objectives are answered by analysis which is based on the data collection from the sample of software businesses in Thailand.

This research focuses on the effects of organizational creativity capability on firm performance in the context of software businesses in Thailand. This research chooses the software business as a basis for the investigation of organizational creativity capability. The data for the research are collected from a self-administered mail survey. The sample in this research focuses on 535 existing software businesses in Thailand, and the key informants are the executives, directors, or managers of each of the software firms. Regression analysis is used to test and examine the hypothesized relationships.

Meanwhile, the consequences of organizational creativity capability consist of organizational innovation success, business practice effectiveness, organizational excellence efficiency, and firm performance. Additionally, this research aims to investigate the antecedents of organizational creativity capability on five dimensions of organizational creativity capability of Thai software businesses. Also, the factors such as executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity are assumed to become the antecedents of the model. Moreover, this research attempts to investigate the moderating effect of organizational learning factors on the relationships between five dimensions of organizational creativity capability, its antecedents, and its consequences. Thus, the three factors, organizational well-roundedness, organizational learning capability, and transformational orientation, are tested as the moderators in the model.

With respect to the research objectives and research questions, there are many variables in the research. Organizational creativity capability is an independent variable



and it is the suitable attribute to manage the capability of the firm. Hence, organizational creativity capability is measured by new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Organizational creativity capability is hypothesized to be positively associated with organizational innovation success, business practice effectiveness, organizational excellence efficiency, and firm performance. Within the relationship, firm performance is the dependent variable and it is a subjective performance measure.

Furthermore, the three moderators in this research –organizational well-roundedness, organizational learning capability, and transformational orientation– are hypothesized to have positive effect on the relationships among organizational creativity capability antecedents, five dimensions of organizational creativity capability, organizational creativity capability outcomes, and firm outcomes. The organizational well-roundedness is proposed to positively moderate an effect on the relationships among five dimensions of organizational creativity capability, organizational innovation success, business practice effectiveness, and organizational excellence efficiency. The organizational learning capability is proposed to positively moderate an effect on the relationships among organizational innovation success, business practice effectiveness, organizational excellence efficiency, and firm performance. Whereas, transformational orientation is a moderator of the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and five dimensions of organizational creativity capability.

In conclusion, the scope of this research consists of three major parts. The first is to investigate the effect of organizational creativity capability on business practice effectiveness, organizational innovation success, and organizational excellence efficiency, including the moderating effect of organizational well-roundedness. The second is to investigate the effect of organizational innovation success, business practice effectiveness, and organizational excellence efficiency on firm performance, including the moderating effect of organizational learning capability. Finally, the third is to examine the relationships among four antecedents and each dimension of organizational creativity capability, including the moderating effect of transformational orientation.



## **CHAPTER II**

### **LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

The prior chapter provides an overview of the situation with organizational creativity capability, which contains information about the purpose of the research, research questions, and scope of the research. Moreover, this chapter attempts to present insights into organizational creativity capability that consists of the theoretical foundation, the literature review, the conceptual framework, and the hypotheses' development. Hence, the hypotheses to be proposed are expected to answer the purposes of the research and the research questions.

Organizational creativity capability is the core construct in this research. This research empirically investigates the understanding of how organizational creativity capability is built and how they influence firm performance. However, prior literature on creativity is concerned with much research, and there is little empirical research on organizational creativity capability based on strategies of firms that create organizational creativity capability outcomes and firm performance. In fact, there are few prior studies on the new dimension of organizational creativity capability to increase organizational creativity capability outcomes leading to firm performance. Therefore, this research creates the characteristics of organizational creativity capability through five distinctive dimensions leading to organizational creativity capability outcomes. Moreover, this research endeavors to integrate many theoretical perspectives that support the relationships among antecedents of organizational creativity capability, organizational creativity capability, organizational creativity capability outcomes, firm performance, transformational orientation, organizational well-roundedness, and organizational learning capability. These theories include the resource-advantage theory, the contingency theory, and the organizational learning. An earlier overview of the literature on the role of antecedent and consequence factors of organizational creativity capability was drawn. The literature review is intended to provide an understanding of the founding fields on the proposed conceptual framework.

This chapter is organized into three major sections. The first section introduces theories that backup the conceptual model in this research. The second section provides



a literature review of all the constructs of the conceptual framework, the definitions, and the previous researches on the subject of organizational creativity capability in the context of software businesses in Thailand. The final section presents the conceptual model and details the development of the hypotheses.

## **Theoretical Foundation**

This research attempts to integrate many theoretical perspectives that support how organizational creativity capability affects firm value. Three theories supporting this research are the resource-advantage theory, the contingency theory and organizational learning theory. Therefore, this chapter presents three major sections that review the theories backing-up the conceptual model, and then provides the previous research and relevant literature detailing organizational creativity capability and other constructs in the conceptual model. Finally, the definition of each construct is presented. Additionally, the linkages of the constructs and hypotheses development are discussed.

The organizational creativity capability is used to describe the relationships between organizational creativity capability and the consequence variables and apply them to explain organizational learning capability as the moderating relationship between organizational creativity capability and the consequence variables. The contingency theory is applied to explain the relationships between the antecedent variables and organizational creativity capability. In summary, the two theories are elaborated for the aforementioned relationships as follows.

### **Resource-Advantage Theory**

The resource-advantage theory (R-A theory) is the main theory explaining organizational creativity capability. In the origin of strategic management literature, this approach was developed in 1995, and has been extended by the contributions of Hunt and Morgan (1997).

The R-A theory aims that the resources of firms are dissimilar, unique, and relatively dormant within the same industry. “ R-A theory is an evolutionary, disequilibrium-provoking, process theory of competition in which innovation and organizational learning are endogenous, firms and consumers have imperfect information, and entrepreneurship, institutions, and public policy affect economic



performance,” (Hunt and Madhavaram, 2006). The R-A theory emphasizes that a source of competitive advantage leads to sustainable performance. Especially, firm resources are inimitable, non-substitutable, valuable, and rare in which are applied four principles: (1) market segments, (2) heterogeneous firm resources, (3) comparative advantages and disadvantages in resources, and (4) marketplace positions of competitive advantage or disadvantage (Hunt and Madhavaram, 2006). The R-A theory highlights on creativity, including proactive and reactive. Both proactive and reactive creativity capability contribute to the competitive advantage.

Resources are divided into tangible and intangible assets. Tangible resources are defined as the concrete assets that can be quantified (Hunt and Madhavaram, 2006). For example the items are identified as tangible resources; financial resources, technological resources, production equipment, and manufacturing plants. On the other hand, intangible resources are defined as the subject’s assets that are unobservable, such as knowledge, skill, experience, brand image, reputation, human capital, and patents of know-how. Resources are transformed into final products or services by using a wide kind of other firm assets and bonding mechanisms. A capability refers to the ability to deploy and coordinate different resources, usually in combination, using organizational processes, to affect a desired end (Amit and Schoemaker, 1993; Grant, 1991). Firms will have different natures of resources and varying levels of capabilities (Hunt and Morgan, 1997). These capabilities help convert selected strategies in the process of shaping positional advantages (Atuahene-Gima Slater and Olson, 2005).

The resource-advantage theory realized organizational creativity capability as a one of resource which supports a firm to perform superior than other competitors and yield marketplace positions of competitive advantage. According to, a learning orientation perspective viewed that firms will concentrate on learning the market such as market and customer research, seeking out competitive intelligence, analyzing customer and competitors’ products, benchmarking, and test marketing when they are the learner oriented. The R-A theory emphasizes concerning with organizational learning, which a competitive advantage of firms on both dynamic and unstable markets that derived from the complex resources (Liu Luo and Shi, 2002). Slater and Narver (1995) argued firms will attain superior performance and survival in the market which



should be having the ability to learn faster than their competitors. Consequently, the using feedback of firms involved performance to develop the strategy, and their attempt to obtain the imitated resource for a competitive advantage and constructing to a superior advantage with creativity.

Furthermore, the ability of firm can become to the survival such as create a new resource, build on its capability platform, and make the capabilities more inimitable to achieve competitive advantage and sustainability (Day and Wensley, 1988; Peteraf, 1993; Prahalad and Hamel, 1990). To complete the sustainable competitive advantage, the R-A theory explains that a firm's achievement is reached by virtue of unique resources, which have the characteristics of being rare, valuable, non-substitutable, and inimitable as well as firm-specific (Hunt and Morgan, 1997; Wade and Hulland, 2004). In addition, when firms combine resources and capabilities, they can develop the firm's competencies and apply them to create specific organizational abilities (Teece Pisano and Shuen, 1997). It is a specific ability to manipulate a firm's resources in bundles to create a capability for accomplishing the purposed strategic objectives.

In the literature, there has been wide-ranging use of the R-A theory framework to analyze firm performance (Atuahene-Gima Slater and Olson, 2005; Hunt and Morgan, 1995), to recognize the interrelated between marketing and other functional capabilities and their effect on performance (Song Di Benedetto and Nason, 2007; Song et al., 2005), and principally to understand inter-organizational relationship performance (Palmatier Dant and Grewal, 2007). Furthermore, the R-A theory proposes that heterogeneity performance of firms which is due to ownership of resources that have degree of difference productivity (Makadok, 2001).

In this research, the R-A theory is applied to explain that organizational creativity capability is the intangible strategic resource which creates an advantage for the marketplace position (organizational innovation success, and business practice effectiveness, organizational excellence efficiency) leading to organizational outcomes, as well.



### Contingency Theory

In an era of globalization, organizational management needs to be consistent with the environment and the situation. The executive is the key person for making decisions in all situations. The firm believes that the situation determines what management does. The contingency theory is used to explain the phenomena of the organization's flexibility to the environmental context factor.

In the 1950s, the researchers were shown the contingency theory (Woodward, 1965). Fiedler (1967) proposed that the contingency theory depended on the situation and chose the best practices which were appropriate with each situation. When the situation was different, the management changed. Therefore, the organizational performance relationship is between the environment and organization, which the organizational practice created or adapted in accordance with the environment (Drazin and Van de Ven, 1985). The contingency theory points to three approaches consisting of a) selection, b) interaction, and c) systems (Drazin and Van de Ven, 1985). The main contingency theory refers to the operational fit of the organization by the contingencies application such as the environment, organizational culture, and society for best performance (Drazin and Van de Ven, 1985).

In addition, the contingency theory assumption is not the best practice for every situation, but it creates the best way for the decision-making of businesses, which should be considered carefully as alternative analyses because each method has its advantages and limitations (Vroom and Yetton, 1973). The contingency theory attempts to identify and evaluate the conditions under everything likely to occur (Schoech, 2006), which affect the best method and any method of an organization for operational performance (Gerdin and Greve, 2008). Hence, the sustainable success of an organization must depend on the flexibility of the organization appropriately, so the organization should be aware of integrate resource management, joint facility utility, mutual target emphasis, and valuable activity cooperation, which affect the operation appraising fit. Also, the contingency theory describes organizational management to improve organizational success. In addition, it concerns the possible fit of the operation (Cadez and Guilding, 2008), which is consistent with Phokha and Ussahawanitchakit (2011) who propose that superior organizational performance results in the proper alignment of internal and external contextual factors and operational management.



Internal and external factors have an effect on the organization and are imposed on the manager's behavior. The internal factors are environmental factors in the organization that have an impact on operational forms such as an organization's culture, vision, climate, technology, and policy (Lawrence and Lorsch, 1967). External factors such as competition, environmental uncertainty, technological change, society, and economic conditions affect firm performance (Sauser et al., 2009). However, the key success of competitive sustainability is optimal management strategies which cause best practices and lead to greater firm success (Anderson and Lanen, 1999).

Furthermore, the contingency theory is applied to executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and transformational orientation as an improvement of the organization which can enhance organizational creativity capability. Thus, the contingency theory is employed to investigate the effectiveness of the antecedent variables (executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity) on organizational creativity capability. Additionally, the organizational learning theory is applied to explain the moderating effects of transformational orientation in the relationships among the antecedents of organizational creativity capability and each dimension of organizational creativity capability, as well.

#### Organizational Learning Theory

The organizational learning theory explains knowledge integration and a deep understanding related to the effectiveness of past actions, which will also affect future actions (Roberts, 2012). Schwandt (1993) defines organizational learning as the system of operations, processes and those which are related to learning, which enable firms to transform information into valuable knowledge. Moreover, it enables firms to gradually develop in the long-term. Thus, based on the knowledge-based view of the firm, the attention is focused on intangible resources, especially knowledge, which is considered as the most strategically significant resource of the firm in the determination of competitive advantage (Conner and Prahalad, 1996; Grant, 1996a; Hoskisson et al., 1999; Roos, 1998; Spender and Grant, 1996). This theoretical perspective provides a perspective on the creation, transfer, and application of learning (Morgan, 2004; Nonaka, 1994). Harmel and Prahalad (1994) suggest that only being a learning





organization is not sufficient; the organization must also attempt to translate the learning process into the firm's capabilities.

Following March (1991) the organizational learning theory asserts that organizations engage in two forms of learning activities: exploitation and exploration by considers the two types of learning as fundamentally incompatible, and subsequent studies often conceptualize exploitation and exploration as orthogonal variables that can be achieved simultaneously (Baum Li and Usher, 2000; Katila and Ahuja, 2002; March, 1991). Firms may engage in high levels of exploitation as well as exploration activities. Knowledge flows within their organizations to take advantage of existing knowledge for maximum benefits, which are positively related to exploitation. On the other hand, new knowledge and new skills flowing from the outside through the organization are positively related to exploration. Both exploration and exploitation are valuable and scarce organizational resources (March, 1991). As a result, the learning and management of knowledge within organizations encourage firms to obtain a high competency to organizational creativity and achieve a long-term competitive advantage.

In a highly competitive situation, firms have realized that knowledge, its effective use, and the fast acquisition and utilization of new knowledge are the only sources of sustainable competitive advantage. The development of organizational capabilities with an effective exploitation and management of knowledge resources are the basis of the firm's capacity to perform business and deliver targeted value propositions. The development of an organizational knowledge resource through the learning mechanisms and management process of an organization will affect the capabilities of the organization. After that, the capabilities of the organization are translated into performance and valuable consequences when they are leveraged into products and services that, in turn, generate value for the firm's stakeholders (Schiuma Carlucci and Lerro, 2012).

As discussed above, the organizational learning theory is applied to explain the organizational well-roundedness as the moderating variable on the relationships among five dimensions of organizational creativity capability, business practice effectiveness, organizational innovation success, and organizational excellence efficiency, as well as, the moderating effects of organizational learning capability on the



impact among business practice effectiveness, organizational innovation success, and organizational excellence efficiency on firm performance.

In summary, the resource-advantage theory is applied to explain the relationships of organizational creativity capability between its consequences (i.e., business practice effectiveness, organizational innovation success, and organizational excellence efficiency and firm performance). Likewise, the contingency theory is employed to investigate the effectiveness of the antecedent variables (executive proactive vision, strategic renewal mindset, c

orporate resource readiness, business environment complexity) on organizational creativity capability. Additionally, the organizational learning theory is applied to explain the moderating effects of transformational orientation in the relationships among the antecedents of organizational creativity capability and each dimension of organizational creativity capability. Besides, the organizational learning theory describes organizational well-roundedness and organizational learning capability as the moderating variables in this research that enhance the influence of organizational creativity capability on the organizational creativity capability outcomes (i.e., business practice effectiveness, organizational innovation success, and organizational excellence efficiency and firm performance). Besides, the resource-advantage theory is applied to explain the relationships of organizational creativity capability between its antecedents (i.e., executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity) and its consequences (i.e., business practice effectiveness, organizational innovation success, and organizational excellence efficiency and firm performance). The two theories in this research, namely, the resource-advantage theory and the organizational learning theory, are integrated to explain the phenomenon in this research for the complete explanation and backup of the dimensions of organizational creativity capability as well. Hence, these theories illustrate the relationships of organizational creativity capability between its antecedents, its consequences, and its moderating variables as shown in Figure 1. The next section elaborates on the literature review and the hypotheses of organizational creativity capability as discussed below.



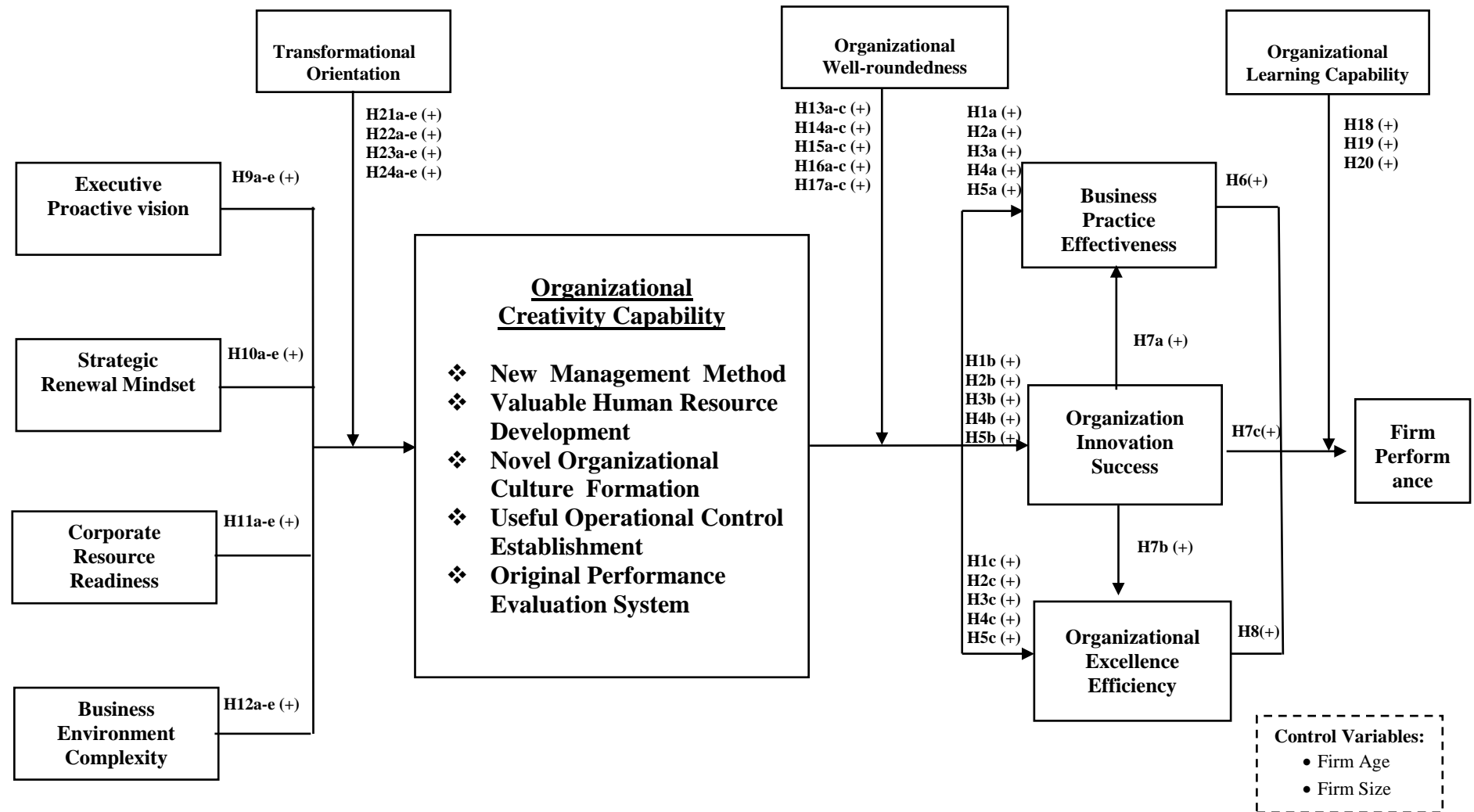
## Relevant Literature Review and Research Hypotheses

The relevant literature is developed for the conceptual framework as shown in Figure 1 on the basis of extant research. The framework includes one main construct, namely, organizational creativity capability proposed in five dimensions. These components of organizational creativity capability are a compound of new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Furthermore, there are four influential variables on organizational creativity capability which are executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity.

Additionally, the consequence factors of organizational creativity capability are that of business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. The three moderating variables are transformational orientation, organizational well-roundedness, and organizational learning capability, which transformational orientation has a positive effect on the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity and dimensions of organizational creativity capability. Moreover, organizational well-roundedness has a positive effect on the relationships among the dimensions of organizational creativity capability and business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Moreover, organizational learning capability has a positive effect on the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. All together; a developed conceptual model in this research is shown in Figure 1.



Figure 1 Conceptual Model of Organizational Creativity Capability and Firm Performance:  
Empirical Evidence from Software Businesses in Thailand



## Organizational Creativity Capability Background

Nowadays, organizations are influenced by external factors such as globalization, technology, and competitive situations. As a result, organizations need to create relationships with other firms for competitiveness. Organizational creativity capability is a key component of this research and it refers to the way that organizations use focusing on the generating of new ideas by taking advantage of the knowledge, skills and experience to be used as guide to gain the continuous improvement and competitive advantage. These characteristics include five dimensions, namely, new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Based on the definition of creativity capability, organizational creativity is as a scheme for creating competition. In a complex social system, organizational creativity is about the creation of valuable, useful new products, services, ideas, procedures, or processes (Woodman Sawyer and Griffin, 1993). Moreover, creativity is a tool for producing innovative solutions and solving complex organizational problems (Paper and Johnson, 1997).

In another aspect, organizational creativity becomes an issue for building an organizational strategy because both mechanisms of individual and organizational creativity led to innovation performance at the highest level (Bharadwaj and Menon, 2000). The development of an organizational strategy should be synchronized with development of an individual strategy (Rasulzada and Dackert, 2009). In addition, the companies might allocate firm resources to maintain their talented, relation in-team work, and organizational climate for improving organizational creativity and innovation (Rasulzada, 2007; Rasulzada and Dackert, 2009). Thus, the organizational creativity capability is an intangible asset that includes value, relationships among employees, learning, and knowledge creation process and organization culture. All these factors are influenced by the role of leaderships (Mumford, 2002 ; O'Hara, 2001).

Many studies examine creativity by different theories, which are similar to the organizational creativity concept such as system theory, process theory, and cognitive view. Hence, the definitions of creativity capability and organizational creativity are various as evidenced in Table 1 below.



Table 1 Summary of Key Definitions and Dimensions on Organizational Creativity Capability

Author(s)	Definitions and Dimensions of Organizational Creativity Capability
Kardoff, (1989)	This article investigates selected extrinsic factors to ascertain if they influenced the creativity of individuals at work, to try to develop successful method for evaluating individual creativity, to determine if selected common descriptive characteristics existed in highly creative persons, and to investigate some ways in which creativity might be enhanced within organizational settings. Creativity is the dependent variable in the product making assignment.
Adams, (1991)	The challenge is to create an environment that stimulates creativity and innovation is the scope and guide the development on the one hand,they represents both opportunities and risks of the enterprise in build an creativity and innovation.
Collins, (1991)	This research is to investigate the factors necessary for adapting a performing arts program for creativity training to the corporate sector; to test the effectiveness of the training program; and to test the retention of specific creativity skills 2 weeks after the intervention. The creative thinking skills nurtured in artistic training activities are evaluated in terms of the needs of organizations as well as the perceived needs and attitudinal disposition of the workers.
Nyström, (1993)	Creativity is defined as the management of radical change due to balanced unfolding and converging of experience of entrepreneurship
Woodman, Sawyer and Griffin, (1993)	In this article, organizational creativity is the creation of a valuable, useful new product, service, idea procedure or process by individuals working together in a complex social system.



Table 1 (Continued)

<b>Author(s)</b>	<b>Definitions and Dimensions of Organizational Creativity Capability</b>
Burns and Napier, (1994)	This article discusses the relationship between the three key aspects of the climate of the organization: creativity, common vision, and customer connection found creativity and innovation have become way critical to the growth and competitive advantage of organizational.
Barnett,(1996)	This research investigates the effects of individual's levels of creativity and perceived organizational support on their organizational commitment. The results provide that creative employees who work for an organization high in organizational support or high in support for innovation would be more committed to the organization than other employees.
Coste,(1996)	Creativity is measured by totaling the completeness, originality, and practicality ratings for each design. It finds that idea generation significantly decreased, while evaluation and modification significantly increased, over the course of the design task. Furthermore, modification in the beginning and middle of the design process negatively predicted creativity, while idea generation in the middle and evaluation throughout the process positively predicted creativity.
Livingstone, Nelson and Barr, (1997)	This research, advanced from the previous research by examining fit concern with the dimension of creativity and incorporating both supply-value and demand-ability kinds of fit. However, the environmental influences, especially of supplies for creativity influence that was outcomes by the most impressive influence. These results recommended that the particular environmental is required to explore for driving creativity in organizational.



Table 1 (Continued)

Author(s)	Definitions and Dimensions of Organizational Creativity Capability
Hickman, (1997)	This paper describes the impact of executive team excellence and the work environment of acute care, general hospitals as expected to contribute to organizational creativity. Selected dimensions of the work environment included stimulants and obstacles to creativity. Organizational impediments and workload pressure were negatively correlated with organizational creativity, but non-significant.
Derksen, (1998)	The purpose is to identify factors that characterize innovative organizations, to explore which behavioral roles leaders and members identify as critical, and to investigate the importance of both congruency and agreement between leader and member perceptions and its effect on creative climate. The findings drawn from interview research offered insights into the impact and role of creativity in organizational culture, differences of perception and the role of congruency and agreement upon organizational climates, the impact of perception upon practice in formulating creative cultures, the characteristics of organizational creativity, and how learning environments are influenced by leaders and members.
Heunks, (1998)	This research seek for the role concerning with innovation in both the small and medium firms of size which relate to the firm's success. These relationships are showed that in between success, innovation and creativity, that include any possible backgrounds of creativity and innovation. Separately, one side involves an individual nature view as the entrepreneur's values, attitudes and level of education.





Table 1 (Continued)

<b>Authors</b>	<b>Definitions and Dimensions of Organizational Creativity Capability</b>
Oxendine, (1998)	The research focuses on developing a working description of the creative coalition, outlining the development process, and defining the developmental phases the creative coalition progressed through in the course of implementing the idea. It is argued that models that focus on individual action as opposed to collective action of multiple people do not fully explore the creative process.
Siau, (2000)	The aim of this paper is pointed to knowledge discovery as an aid to creativity. The order of paper, first to presents the concept of knowledge discovery and then discusses the various techniques in knowledge discovery. The theoretical foundation for this research is served by Mednick's associative theory of creative.
Hunt, (2002)	The findings of study recommended the academic entrepreneurship with viability of considering as a common working style with attributes associated both innovation and creativity.
Hong, Hwang and Lin, (2003)	This paper presented three computer-manufacturing companies involve the effectiveness of the knowledge-sharing practices which from the comparison between working environment design and knowledge-sharing mechanism of perspective. Finally, this paper will verified some best practices for the enhancement of organizational creativity.
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Table 1 (Continued)

<b>Authors</b>	<b>Definitions and Dimensions of Organizational Creativity Capability</b>
McLean, (2005)	This article reviews the literature for factors related to organizational culture and climate that act as supports and impediments to organizational creativity and innovation.
DiLiello and Houghton, (2006)	The purpose of this paper is to develop and present a model of self-leadership, innovation and creativity. The model suggests that individuals with strong self-leadership will consider themselves to have more innovation and creativity potential than individuals who have weak self-leadership, and that individuals who have innovation and creativity potential will be more likely to practice innovation and creativity when they perceive strong support from the workplace than individuals who perceive weak support from the workplace.
Mostafa and El-Masry, (2009)	This paper explores organizational creativity in firms within the creative industries. The results indicate that both on both Amabile's 'Organizational Creativity' model and Ekvall's 'Creative Climate' model, models of organizational creativity are complementary, although they are not necessarily fully applicable in the creative industries.

Table 1 shows several organizational creativity explanations. Incidentally, most of the organizational creativity work focuses on factor that influences creative outcomes in firms (Ekvall, 1997; Amabile, 1997). The creativity outcomes at the organizational creativity level are viewed into two segment; 1. the characteristics of organizational members; 2. the characteristics of the organization (McAdam and McClelland, 2002). Moreover, levels of creativity are identified which focus on the concept from the product, the person and the process (Ekvall, 1997). Also, the three components for creativity at an organizational level include; organizational motivation to innovate, resources and management practices (Amabile, 1983).



Thus, the concepts of creativity in organizations are different. Amabile (1983) considers that creativity is an outcome of an individual context that provides newness and value. Heap (1989) recommends that the implementation of the innovation is the result of creativity by synthesizing the radical restructuring of new ideas and concepts. Gurteen (1998) considers creativity to include divergent thinking, and defines creativity as the generation of new ideas, and then action by sifting, refining and implementing those new ideas for generating innovation. Moreover, McAdam and McClelland (2002) assumes creativity as the idea-generating stage for implementation in the innovation process.

In view of above-mentioned, these are the main concepts related to organizational creativity. The acceptance of this concept has been reflected by empirical studies in the past. Thus, a summary of key empirical studies on organizational creativity capability is presented in Table 2 below



Table 2 Summary of the Key literature reviews on organizational creativity capability

Author(s)	Independent Variables	Dependent Variables	Results
Hickman (1997)	Executive teams perceived clear, elevating goal, organizational encouragement	Organizational creativity	Executive teams perceive clear, elevating goal, organizational encouragement, and supervisory encouragement and challenging work as important aspects for organizational creativity. Organizational impediments and workload pressure are negatively correlated with organizational creativity.
Choi (1999)	External funding	Organizational creativity, original program development, and new program initiative	The funding is likely to hurt the autonomy of the cultural nonprofit organizations, however, public funding level does not have significant relationships with the perceptions regarding organizational creativity of cultural nonprofit organizations in Korea. Private funding does not have significant impacts on both organizational autonomy and organizational creativity.
Eskildsen, Dahlgaard and Norgaard (1999)	Creative organization, the learning organization	Organizational creativity	Shows a causal relationship between the creative organization, the learning organization and business excellence. Description of an excellent company; Methodologies of business excellence; Statistical technique in examining the relationship between the creative organization, the learning organization and business excellence; Impact of organizational creativity on organizational learning.

Table 2 (Continued)

Author(s)	Independent Variables	Dependent Variables	Results
Bharadwaj and Menon (2000)	Individual and organizational creativity mechanisms	Innovation performance	The results recommend which the existence of both individual and organizational creativity mechanisms directed to the highest level of innovation performance. The results in this research propose which high levels of organizational creativity mechanisms directed to significantly greater innovation performance than low levels of organizational and individual creativity.
Ryan, (2001)	Transformational style of leadership	Creativity, productivity, and efficiency of creative work teams within organizations	The findings in this research support a link between a transformational style of leadership and higher levels of creativity, productivity, and efficiency of creative work teams within organizations mostly through two intervening variables: challenge of work and support of manager.
Lapierre and Giroux, (2003)	Creativity work-environment	Creativity achieved	This research statements the methods in which creativity is all creative work-environmen (work atmosphere, vertical collaboration, autonomy/freedom, alignment, lateral collaboration and respect). The dimensions describe creativity achieved has a high level of significance.

Table 2 (Continued)

Author(s)	Independent Variables	Dependent Variables	Results
Lee and Choi, (2003)	Socialization Externalization Combination internalization , Organizational creativity	Organizational Creativity, Organizational performance	The results approve the effect of trust on knowledge creation. The information technology support has positively effect on knowledge combination only. Organizational creativity finds critical for improving performance; neglecting ideas can damage a business.
Sundgrenet, (2005)	Information sharing, learning culture, and motivation	Creative climate	This research suggests that information sharing and intrinsic motivation are important drivers for organizational creativity in a complex R&D environment in the pharmaceutical industry.
Fong, (2006)	Individuals experiencing emotional ambivalence , recognizing unusual	Organizational creativity	The effects of emotion suggest that individuals interpret emotional ambivalence, which is perceived to be an unusual emotional experience, as indicating they are in an unusual environment, that in order to increase sensitivity to unusual associations. The results produce important implications concerning how to influence creative performance.

Table 2 (Continued)

Author(s)	Independent Variables	Dependent Variables	Results
Einstein and Hwang, (2007)	Organizational culture, leadership style, employee personality	Organizational creativity	This research is showed to improvement a better understanding of the factors influencing organizational creativity and determines to relate an influence of individual personality characteristics and organizational characteristics on individual innovative behavior.
Rasulzada and Dackert, (2009)	Organizational climate and work resources	Perceived organizational creativity	The results show significantly relationship between perceived organizational creativity and innovation and individual psychological well-being. Also, the enhancing the situation for creativity and innovation is useful for the individual in terms of better psychological well-being.
Gumusluoglu and Ilsev, (2009)	Transformational leadership	Followers' creativity, Organizational innovation	The results in this research propose that transformational leadership has effected on the both individual and organizational heights. TFL definitely relates to followers' creativity.
Hsu and Fan, (2010)	Time pressure (organizational innovation climate)	Creative outcomes	This research describes time pressure as a moderating variable. This results displayed which time pressure has moderated the relationship between organizational innovation climate and creative outcomes.

Table 2 (Continued)

Author(s)	Independent Variables	Dependent Variables	Results
Isaksen and Ekvall, (2010)	Debate and Conflict in Climate	Organizational creativity and innovation	The dimension is defined as reflecting a more productive idea tension and the conflict dimension suggests a more non-productive personal tension. A sequences of studies are summarized and a new study is reported so as to highlight the finding which relatively higher levels of debate and lower levels of conflict are more conducive to organizational creativity and innovation.
Lang and Lee, (2010)	Functions of humor; liberating humor, controlling humor, and stress relieving humor	Organizational creativity	This research studies the relationship between the three functions of humor and organizational creativity. This results advise which liberating humor and controlling humor has related to organizational creativity, the prior positively and the latter negatively, while stress relieving humor did not relate to organizational creativity.
Sohn and Jung, (2010)	Basic skills, compensation systems, external environment factors, and the effects of creativity factors	Creativity factors, and innovative performance	his research is proposed to examine the effects of basic skills, external environment and compensation systems factors on creativity, and the effects of creativity factors on the innovative performance of an organization. This results are expected to offer how to develop creativity and innovative performance.



However, the literature review on organizational creativity capability suggests that there are still two gaps. The first is that most of the previous research concentrated on the conceptualization of organizational creativity, and only a little research focuses on organizational creativity capability. The second is that there is little empirical research which investigates the dimensions of organizational creativity capability, and its effect on the organizational creativity capability outcomes as a strategic resource. Therefore, this research attempts to fill these gaps. Next, a more detailed discussion of the constructs in this research is provided below.

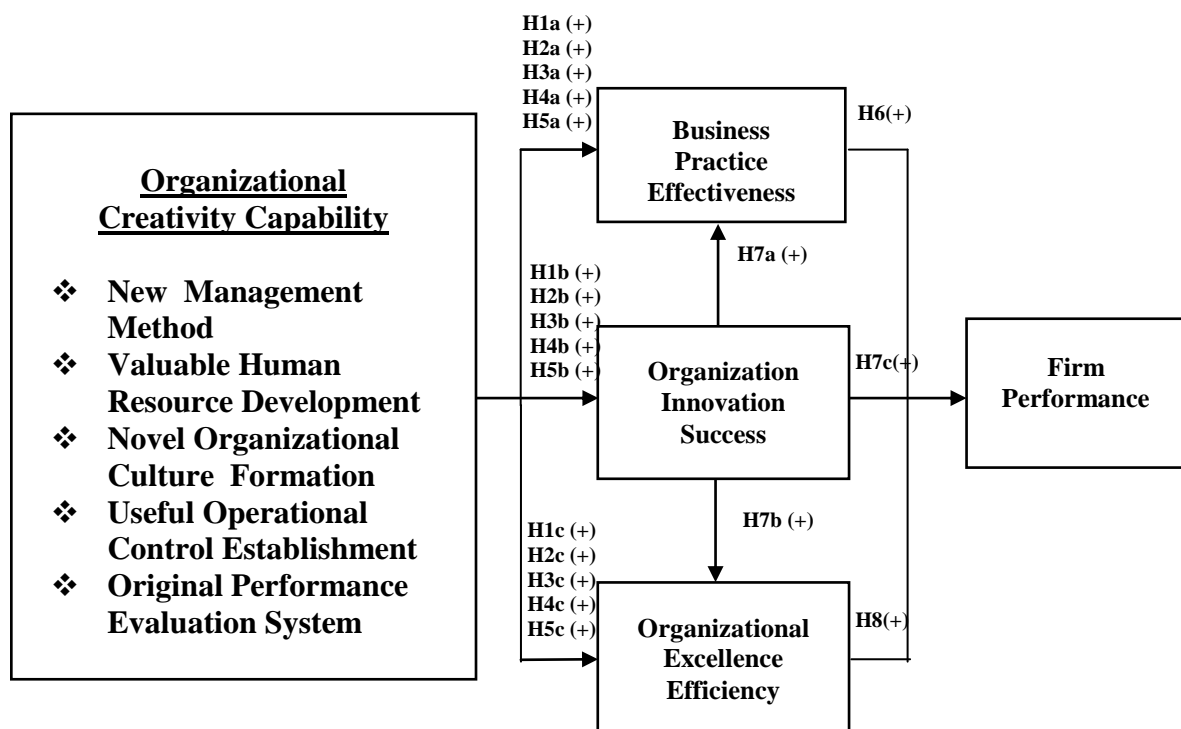
Organizational creativity capability is the key element of this research. The term “organizational creativity capability” comes into common use in organizational capability, which an empirical research suggests that this organizational creativity capability is positively related to firm performance. Organizational creativity capability can improve firm performance. The five distinctive dimensions of organizational creativity capability are indicated to assess how organizational creativity capability creates a competitive advantage in their business success; namely, new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. They also contribute greatly to firm performance. The detailed argument of these dimensions is presented below.



## The Effects of Organizational Creativity Capability on Its Consequences

This section investigates the effects of five dimensions of organizational creativity capability that consist of new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system on four consequences comprising business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance as shown in Figure 2 below.

Figure 2 the Effects of Organizational Creativity Capability on Its Consequences



### New management method

New management method is the first dimension of organizational creativity capability, and it is defined as the competency of a firm to create new processes, new products, and new methods for operation, promote staff for new information and knowledge development, new concepts, and support a budget to create new ideas for increasing potential, the efficiency, and effectiveness of the firm (Grandi and Grimaldi, 2005; Howell and Boies, 2004). Kamm and Nurick (1993) suggest that the process



through which the original business concept is changed into a product/service ready for commercialization turns an initial informal social group into an business group. Prior study of Foo, Wonga and Ong (2005) reveals that business effectiveness is an effect of the quality of planning and the quality of new business ideas.

In this research, the new management method is defined as an ability of a firm to try new management ideas and methods. Moreover, new management methods are searched for new ideas to combine these with existing knowledge and new techniques which lead to business effectiveness (McNelly and Harmancioglu, 2009). Likewise Macduffie (1995) mentions that new management methods aim to create either superior outputs or more cost-efficient input.

However, operational management can lead to new value creation across and within industry and firm-level boundaries (Aldrich and Fiol, 1994; Balakrishnan Eliasson and Sweet, 2007; Busenitz Gomez and Spencer, 2000). New management method is an important issue for firms as they seek to upgrade their productivity, procedures and retain competitiveness (Ichniowski et al., 1996). The greater the diversity of sources the firm has the more likely it is that the insight gained from these sources is recombined in creative and valuable ways to try new management techniques (Hargadon, 2002).

In summary, new management method affect on business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Hence, the hypotheses are proposed as follows:

***Hypothesis 1a: New management method has a positive influence on business practice effectiveness.***

***Hypothesis 1b: New management method has a positive influence on organizational innovation success.***

***Hypothesis 1c: New management method has a positive influence on organizational excellence efficiency.***



### Valuable human resource development

Valuable human resource development is the second dimension of organizational creativity capability. Human resource development (HRD) is a process of developing and unleashing human expertise through training and development for the purpose of performance improvement (Swanson, 2001). HRD is the important activity for increasing new knowledge, skills and ability of employees which vary from firm to firm, though it is an important factor leading to firm success (Prachsrithum and Ussahawanitchakit, 2009). The study of Tabibi et.al (2011) proposed the main factors of commitment to human resource development namely, organization development, management commitment, and employment system. Becker (1962) defines human capital investments as any activity that influences future real income through the embedding of resources in people, whereas Marimuthu et.al (2009) propose that human capital investment is any activity which improves the quality (productivity) of the worker (McLean, 2006). In addition, investing in employee development is a central view of maintaining and developing the knowledge, skills and abilities of both individual employees and the organization as a whole (Lee and Bruvold, 2003) and improves organizational performance (Huselid et al., 1997; Way and Thacker, 2001). However, the effect of human resource development on organizational effectiveness will be improved when an organization has organized a human resource management system containing practices that are constant with each other and work to stimulate those outcomes from the organization's human resources, essential for the achievement of organizational goals and objectives (Huselid et al., 1995; 1997; Schuler and Jackson, 1995; Wright and Snell, 1998) offers the incentive for this growth.

In this research, valuable human resource development refers to the firm's perception of the importance of human resources as a valuable asset, staff will help the organization's operations more efficient through knowledge, skills, talent, know-how and intellectual ability that aligns with the organization's mission and strategic goal required to development and unleashing human expertise through training and development for increasing the new knowledge, skills and ability of the employees.

In attempting to increase human capital value, the firm needs to concentrate on input of the firm's human capital such as attracting employees, and developing and implementing schemes to retain and provide incentive talent staffing (Wyatt and Frick,



2010). According to Huang et.al (2002), the study proposes that such competition is very widespread, and the firm needs to search activities for the best talent to create a competitive battle ground. The recruitment and selection process for executive and professional positions achieve an organization's mission, playing a critical role as a core competitive advantage. As Syverson (2010) points out, either managerial talent or the quality of the management practices can contribute to productivity. The talent of the workforce is a strategic asset for the firm to acquire, cultivate, retain and organize for business strategy (Ballout, 2007). Having a talent strategy for getting work done well, career development opportunities and reward programs that make employees feel their efforts worthwhile may have an impact on job satisfaction which, ultimately, produces revenue (Bergeron, 2004). In addition, Zheng (2009) confirms that there are statistically significant linkages between HR practices, talent retention and firm performance.

Hence, valuable human resource development will have a positive influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency. These ideas lead to posit the following hypotheses.

***Hypothesis 2a: Valuable human resource development has a positive influence on business practice effectiveness.***

***Hypothesis 2b: Valuable human resource development has a positive influence on organizational innovation success.***

***Hypothesis 2c: Valuable human resource development has a positive influence on organizational excellence efficiency.***



### Novel organizational culture formation

Novel organizational culture formation is the third dimension of organizational creativity capability. Organizational culture as the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provides those norms for behavior in the organization (Desphande and Webster, 1989). Williams et al. (1993) proposed that it is the beliefs, and attitudes of members in the organization which are fundamental to the practice and it is a principle accepted by all members. Organizational culture focuses on the underlying values and attitudes which affect the way in which things are done (Deal and Kennedy 1982). Moreover, organizational culture comprises a set of social norms that describe what are appropriate or inappropriate behaviors within the borders of the organization (Cabrera Cabrera and Barajas, 2001). Various studies have argued that organizational performance depends on the degree of cultural values (Denison, 1996). Cooke and Szumal (2000) indicate that it is the organizational culture, based on the member's acceptance on shared knowledge, shared values, and shared expectation which affects the new organizational standard. Cooke and Szumal (2000) indicate that organizational culture based on the member's acceptance on shared knowledge, shared values, and shared expectation, affects the new organizational standard. Kwantes and Boglarsky (2007) propose that organizational culture reflects the standard, practice, and activity of organizational members to manage the conflicts or different ideas between members (Trice and Beyer, 1993). Moreover, the different cultures provide different outcomes for firms in the Taiwanese electronics industries and the branches in China (Tseng and Lee, 2009).

Indeed, the culture of a firm affects organizational member expectations of each other. For firms' creativity context, the five commonly shared factors include motivation, perception, action, temperament, and social interaction which are the factors that generate the motivation power for creative efforts (Caselli, 2009). Moreover, the critical factors of organizational creativity are the recognition and support of employee creative ideas, and the conditions of social cognitive approach that are motivated by relationships among employees within an organization (Zhou and Woodman, 2003).



In this research, novel organizational culture formation is defined as the pattern of beliefs in learning, exposure, exchange, and integration of new and beneficial things to improve the firm's operations, practices, and management in each function. The value the organization employs is to accept new ideas and processes that are important for creative activities in organizations (Chaveerug and Ussahawanitchakit, 2008).

Thus, the valuable organizational culture is the important key for the use of technologies, knowledge sharing processes among members of a team, cooperative-team perceptions and procedural justice which can be enhanced by organizational creativity (Gupta and et.al, 2009; Hong, Hwang and Lin, 2003; Schepers and van den Berg, 2007). It is a form of knowledge sharing in order to understand the organizational functions, and to improve the organizational operational effect for the best organizational performance (Cabrera et al., 2001). In addition, it is a collaboration of the members in the organization (Day and Nedungadi, 1994), and the way to develop the operations of the organization (Bettis and Prahalad, 1995).

As aforementioned, the novel organizational culture formation will have a positive influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Hence, the hypotheses are proposed as follows:

***Hypothesis 3a: Novel organizational culture formation has a positive influence on business practice effectiveness.***

***Hypothesis 3b: Novel organizational culture formation has a positive influence on organizational innovation success.***

***Hypothesis 3c: Novel organizational culture formation has a positive influence on organizational excellence efficiency.***



### Useful operational control establishment

The fourth dimension of organizational creativity capability is useful operational control establishment. The main purpose of the useful operational control establishment is to monitor decisions throughout the organization and to guide employee behavior in desirable ways in order to increase the chances that an organization's objectives, including organizational performance, is to be achieved (Kallunki et al., 2010; Langfield-Smith, 1997). An operational control system is defined as a tool designed to assist the manager's decision-making, consisting of both formal and informal forms of controls (Chenhall and Euske, 2007). An operational control system is defined as that which includes planning systems, reporting systems, and monitoring procedures that are based on information use (Henri, 2006). Malmi and Brown (2008) definition includes all those organizational arrangements and actions designed to facilitate the achievement of performance goals with the least unintended consequences.

In this research, useful operational control establishment refers to the focus on methods and develops a good tracking performance to make the operation planned and effective (Mahama, 2006).

However, useful operational control establishment represents an emblem of survival in the organization that is high cost and time consuming to set up and use (Sandino 2007). Many researchers have focused on the role useful operational control establishment design, in an environment to implement useful operational control establishment. However, this researched will focus on useful operational control establishment. Taken all together, this discussion implies that useful operational control establishment to promote the control system is present in all aspects of the operations of the organization are necessary in the process of management as more exert effort on behalf of their organization, to gain higher levels of firm success. As well as, capability of organizing would mediate the relationship between useful operational control establishment and firm success. Unless the performance is per the objectivity of useful operational control establishment, no one could be rewarded despite the willingness of the top management. Therefore, everything would be converted at a higher level of productivity (Nilniyom and Ussahawanitchakit, 2009). Therefore, useful operational





control establishment plays an essential role in organizational development (Abernethy et al., 2004).

Hence, useful operational control establishment will have a positive influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency. These ideas lead to posit the following hypotheses.

***Hypothesis 4a: Useful operational control establishment has a positive influence on business practice effectiveness.***

***Hypothesis 4b: Useful operational control establishment has a positive influence on organizational innovation success.***

***Hypothesis 4c: Useful operational control establishment has a positive influence on organizational excellence efficiency.***

#### Original performance evaluation system

Original performance evaluation system is the last dimension of organizational creativity capability. Performance evaluation is a systematic review process carried out to achieve organizational goals. To evaluate the performance of management, the system enables organizations to manage existing resources more effectively and to measure the effectiveness that has to be related to the goals of the company (Wu, 2008). The traditional indicators are based on the operational and financial restrictions in the evaluation of overall performance evaluation, as traditional financial performance alone cannot measure the performance of covered operations. Joshi (2001) said performance evaluation is to assess the importance of management accounting. This suggests that both financial and nonfinancial measures are used to measure performance and specifically looks at a business from four perspectives: finance, customers, internal processes, and learning and growth (Cardinaels and Veen-Dirks, 2010; Wu and Chang, 2012). Naranjo-Gil, Maas, and Hartmann (2009) refer to the Balanced Scorecard (BSC) as a measure of performance that complements financial measures with traditional measures of performance providing insight into more success strategies of the organization. BSC provides a comprehensive set of indicators of



current and future operating results. BSC is a holistic concept evaluation (Cebeci, 2009; Chen, Hsu and Tzeng, 2011) that presents a balanced scorecard approach of how to balance indicators in order to overcome these shortcomings.

In this research, performance evaluation competency refers to the focus of the guidelines, approaches and methods of assessment measurement on operational suitability for the work to be successful, goal-achieved and efficient (Mahama, 2006).

Moreover, performance evaluation is very important in an organization because it supports frame phenomena in ways that affect our observations and explanations of them, which in turn, affect decisions and actions (Johns, 2006). Performance appraisal is included for staffing, training, involvement/participation, compensation/rewards, and is considerate (Chuang and Liao, 2010). Furthermore, this assessment model is helping organizations to design future strategies and set up performance objectives of employees in order to attain the final target of the complete organization. Performance evaluation is for attaining the intact target. In the meanwhile; performance evaluation also retains the function of adjusting respective policies and unifying the target of individuals and organizations (Green and Keim, 1983). Mahama (2006) finds that performance measurement systems affect cooperation within the organization and enhances organization performance. Performance evaluations are the key factors to stimulate enthusiasm in the task and cooperation within the organization.

Hence, useful operational control establishment will have a positive influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency. These ideas lead to posit the following hypotheses.

***Hypothesis 5a: Original performance evaluation system has a positive influence on business practice effectiveness.***

***Hypothesis 5b: Original performance evaluation system has a positive influence on organizational innovation success.***

***Hypothesis 5c: Original performance evaluation system has a positive influence on organizational excellence efficiency.***



### Business practice effectiveness

Organizational practice may also be relevant to the sense of external and internal competition. Loo (2002) states that great firms are often compete against themselves. In other words, firms may have best practices, yet, they can never be good enough so they try to be better. It reflects organizational practices are likely to be adapted for improving performance. As well as, operational effectiveness is defined as the ability of an organization to achieve its absolute level of operational goals and objectives of activities (Ostroff and Schmitt, 1993; Kumar and Gulati, 2010). Mathiyalakan and Chung (1996) suggest effectiveness is the contribution towards organizational goals. Business practice effectiveness refers to the perform in operations to attain the business goal and maintain continuous better performance following the mission and vision of the organization (Bolat and Yılmaz, 2009; Kumar and Gulati, 2010; Mouzas, 2006). And also, the effectiveness has reflected the overall performance (Kumar and Gulati, 2010). The business practice effectiveness focuses on firms continuously aproducing new service, service efficiency, a firm's ability to maintain old customers and attract new customers. The efficient service is the production and distribution of products or services with a minimum of expenses or wasted resources such that firms have a cost advantage in the market.

Moreover, the manufacturer of products or services conformity with specifications or meeting customer needs has superior quality over competitors (Badri and Davis, 2000). Many firms are aggressively seeking better ways to operate because of the increase of competition in the business world. Business practice effectiveness with the best operating performance is considered an important factor to competitive advantage. With better operational performance, the products or services offered by an organization should become more attractive to customers, and firms should have greater business performance (Naveh and Marcus, 2005). There a body of empirical evidence that indicates operation performance leads to business performance (Badri and Davis, 2000; Nath, Nachiappan and Ramanatan, 2010; Naveh and Marcus, 2005).

In this research, business practice effectiveness is the upper-level achievement of the organization's operations on goals, criteria, mission, and vision of the organization (Ussahawanitchakit and Pongpeachan, 2010). Besides, effectiveness has an influence on the overall performance (Kumar and Gulati, 2010). Business



practice effectiveness with the best operating performance is considered an important factor to competitive advantage. There is a body of empirical evidence that indicates operation performance leads to business performance (Badri and Davis, 2000; Butler Leong and Everett, 1996; Nath Nachiappan and Ramanatan, 2010; Naveh and Marcus, 2005).

This research proposes that firms with a higher effective practice of business lead to achieve firm performance. Therefore, the hypotheses are posited as follows:

***Hypothesis 6: Business practice effectiveness has a positive influence on firm performance.***

#### Organizational innovation success

Innovation is defined as “adoption of an internally generated or purchased device system policy program process product or service that is new to the adopting organization,” (Damanpour, 1991). In research Nasution et al., (2011) defined innovation as “the creation of and first successful application of a new product or process, the creation of a new idea, a form of knowledge, and a new way of delivering quality or better value.” Organizational innovation is defined as “adoption of an internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization,” (Damanpour, 1991). It is the creation of valuable and useful new products/services different within technology environment and organizational context (Woodman et al., 1993). Incremental innovation relates to creating new ideas and turning them into an organization’s activities for excellent processes, products and services through interorganizational relationships (Hurley et al., 2005). Likewise, innovation relates to product-line postponements or refining remaining products as invented for radical innovation, and being products that are new to both the market and the firm (Garcia and Calantone, 2002; Radas and Bozic, 2009).

In this research, organization innovation success is defined as the firm’s ability to continuously produce, continuously service, sustain old customers, and attract new customers. Organization innovation is a strategy used by system technology, machinery, equipment, and innovation as well as idea generation, and opportunity appreciation (Laforet and Tann, 2012). A business must attempt to create innovation for



sustainable competitive advantage. Organizational innovation creativity may be created for new technology, products, services and processes (Weber and Weber, 2007). Likewise, innovation relates to product-line postponements or refining remaining products as invented for radical innovation, being products that are new to both the market and the firm (Garcia and Calantone, 2002; Radas and Bozic, 2009). In addition, creativity is vital to organizational success and provides the foundation of the ideas for innovation (Dewett and Gruys, 2007).

As a result, this research proposes that the greater organizational innovation success will lead to greater business practice effectiveness, organizational excellence efficiency, and firm performance. Therefore, the hypotheses are posited as follows:

***Hypothesis 7a: Organizational innovation success has a positive influence on business practice effectiveness.***

***Hypothesis 7b: Organizational innovation success has a positive influence on organizational excellence efficiency.***

***Hypothesis 7c: Organizational innovation success has a positive influence on firm performance.***

#### Organizational excellence efficiency

Efficiency refers to the organizational goal achieved under the limited resources available, thereby reducing the time of the operation for efficiently and effectively fulfilling the needs of customers with accurate operational goals (Kumar and Gulati, 2010). Similarly Ostroff and Schmitt (1993), has defined efficiency in the literature of management as the utilization of resources (labor, machine, capacity, and energy), and using resources for their best use of money and time, and accordingly leading to increase business performance. It is based on the amount of money, raw material, and employees necessary to produce a given level of outputs or the ability of an organization to reach its absolute level of operational goals and objectives of the activities (Daft, 2007). The efficiency concept is measured by the return on investment or value for money (Khare, 2006). The right strategy is a very important exercise to



maintain a high degree of efficiency in business (Mukherjee Nath and Pal, 2002). Organizational excellence is based on the principles of customer focus, stakeholder value, and process management through the systematic use of quality management principles and tools in business management, with the goal of improving performance. Organizational excellence is described as outstanding practices in managing the organization and achieving results as the following: customer focus, leadership and constancy of purpose, continuous learning, innovation and improvement, partnership development, management by processes and facts, people development and involvement, output orientation, and public responsibility of the European Foundation for Quality Management (EFQM) in 1988.

In this research, the definition of organizational excellence efficiency refers to the organizational goal achieved under the limited resources available, thereby reducing the time of the operation for efficiently and effectively fulfilling the needs of customers with accurate operational goals (Kumar and Gulati, 2010; Ostroff and Schmitt, 1993). It is based on the amount of raw material, money, and employees necessary to produce a given level of outputs or the ability of an organization to reach its absolute level of operational goals and objectives of the activities (Daft, 2007). The efficiency concept is measured by the return on investment or value for money. The right strategy is a very important exercise to maintain a high degree of efficiency in business (Mukherjee Nath and Pal, 2002).

In general, the critical links between organizational excellence models, best practice, and benchmarking are fundamental to the success of the models as tools of continuous improvement. Those phases evolve continuously within the ever-growing organization, driving constant monitoring, optimization and re-evaluation (Hardjono and van Marrewijk, 2001). Organizational excellence is considered a long-term process, concerned with key strategic issues such as developing core functional processes, to be the best, to motivate people to perform better, and to develop a quality to provide excellent customer service. The outcome of business excellence is the best practice within an organization, responding to strategic objectives, providing stakeholder satisfaction, and sustaining firm competitiveness (Ritchie and Dale, 2000). In addition, organizational excellence efficiency focuses on a measure of efficient appraisals of the organization's capability to attain output, seeing the minimum input level. Thus, the



pursuit of corporate excellence is as a way of improvement of businesses for competitive advantage via increasingly recognizing eight factors that are addressed by EFQM (Hakes, 1997). Moreover, Achabal (1984) pointed out that efficiency mainly links to costs at the minimum level and refers to assign resources across possible uses. As a result, this research proposes that greater organizational excellence efficiency will lead to greater firm performance. Therefore, the hypothesis is posited as follows:

***Hypothesis 8: Organizational excellence efficiency has a positive influence on firm performance.***

#### Firm performance

Firm performance is used as a dependent variable in most outsourcing research (Lee, 2000). Performance is established by implications of a firm's strategy (Venkatraman and Ramanujam, 1986). Moreover, firm performance is defined as the firm's overall outcome which achieves goals with effectiveness (applied from Lahiri et al., 2009). Although business managers are often reassured by efficiency indicators achieved by outsourcing activities, and many researchers use objective measures of assessing firm performance (Mouzas, 2006), accounting based indicators such as ratio or cost analysis, outsourcing is viewed as too complex and political, hence the objective performance measurement is not entirely appropriate (Phusavat et al., 2009). Similar to Venkatraman and Ramanujam (1986)'s suggestion, broader measures of firm performance were different because of the differences in the research questions. Therefore, in this research, firm performance will be measured by subjective performance.

In previous research, Arthurs and Busenitz (2006), and Gao (2010) propose that firm performance is a firm's emphasis on success, which comprises the capability in response to the customer demands and the adaptation capabilities in environmental change. Similarly Barczak et al. (2008) explain that firm performance is the degree to which the new product meets customer expectations with regards to sales, a market share greater than its competitors, profitability, and the ability of the firm to respond to customers and create customer satisfaction. Likewise Murray and Chao (2005) use new product development speed, development cost efficiency, and product quality in order



to reflect the performance. Moreover, performance reflects on profitability, sales growth, and market share. Performance measure should capture firm performance at both current and future levels. More explicitly, a broad and well-balanced performance conceptualization, including financial and non-financial measure, will help marketers to fully understand the performance consequences of their strategies (Varadarajan and Jayachandran, 1999). Financial performance literally refers to financial measures, such as profit margin, return on investment, and revenue growth; whereas marketing performance implies measures such as the volume of new customers, sales volume, and market share (Jaakkola et al., 2010; Kaynak and Kara, 2004). Moreover Morgan (2012) argues that performance is the capability of a firm to increase sales volume and firm activities which are the ultimate organizational goals in terms of financial performance. Marketing performance can be measured in terms of accounting indicators such as cash flows and profitability. In addition O'Sullivan and Abela (2007) suggest that marketing performance is measured by return on assets (ROA), and return on investment (ROI). However, firm performance can be measured by sales volume, sales growth, and market share, whereas financial performance can be measured by profitability, a percentage of sales, return on investment (ROI), profit margin, and profit growth (Hultman et al., 2011).

In this research, firm performance refers to the perceptions of a firm regarding the outcomes of a marketing strategy towards the customer, marketplace, and financial benefits. In this section, the researcher intends to measure the organizational performance that includes financial performance and market performance. Thus, the respondents were asked to indicate their organization's performance in their market segment over the past year, such as an increase in new customers, sales growth, market share, profitability, revenue growth, and return on investment. Firms can achieve a sustainable competitive advantage from resources and capabilities as strategic planning and management skills (Barney, 1991; Conner and Prahalad, 1996). Hence, this research expects organizational creativity capability to be positively related to firm performance, showing that the generating of a organizational creativity capability as a source of competitive advantage helps a firm to generate superior performance both in the short- and long-term (Hurley and Hult, 1998; Vazquez et al., 2001).

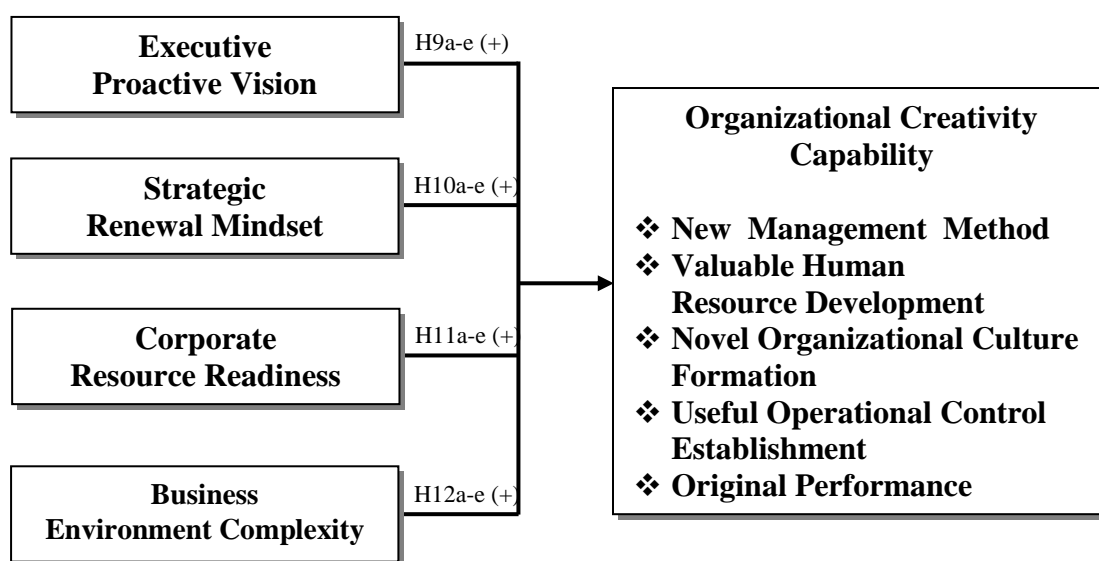




### The Effects of the Antecedent Variables on Organizational Creativity Capability

This research proposes that organizational creativity capability is gained from the influence of both endogenous and exogenous organizational determinants. It includes four antecedents of organizational creativity capability. Executive proactive vision, strategic renewal mindset, and corporate resource readiness are the endogenous determinants of a firm, whereas business environment complexity is the exogenous determinant of a firm. This research tests what and how the antecedents of organizational creativity capability have a significant effect on organizational creativity capability as shown in Figure 3 below.

Figure 3 The Effects of the Antecedent Variables on Organizational Creativity Capability



#### Executive proactive vision

Vision is defined as the leader's evaluation of the current status of the business, and the leader looks forward to the future helping the business to achieve its goals. Moreover, the leader's vision and mission demonstrate the operation of the firm at the present and in the future such as policies, objectives and emergency plans of the organization. In addition, the vision positively influences the outcomes of the organization such as motivating employees to work hard, commitment of the organization, and corporate reputation (Fanelli Misangyi and Tosi, 2009). Likewise



Brush (2008) investigates pioneering strategies leading to entrepreneurial success, and the one thing which the firm will be focusing on is the vision of the manager or executive. Besides, vision refers to the long range view of the executive's concept to develop products emphasizing technology utilization and innovativeness. Moreover, the executive team will creatively plan now and for the future. On the other hand, the work of Collins and Porras (1991) shows that organizational vision is the guideline or the map of the organization which leads to the operation of firm performance. Likewise, the leader who has a proactive vision will look forward and seek opportunities and that focus on an innovative and technology perspective. Accordingly, the study of Gluck (1981) suggests that a vision's organizational power forces the organization to reach its goals. Furthermore, leadership is the one intangible resource that positively influences firm performance. Hence, leadership and vision is helpful to the firm leading it to achieve its goal. Larwood et al., (1995) found that the vision of the organization depends on the organizational types and sizes of the business. However, vision is the tool related to the rapid changes of the firm. For example, in the globalized world where there is environmental change, the firm will adapt policies and methods to help the process work efficiently; it is a know-how development leading to firm performance. Therefore, firm size has an influence on firm vision. Leadership and vision are helpful in leading the firm to achieve its goals. Hence, the leaders are an important team that leads an organization to firm strategy, and firm success (Brush, 2008; Collins and Porras, 1991). There has been some research on the importance of vision as well as its contribution to effective organizational outcomes.

In this research, executive proactive vision is defined as a viewed guideline or an idealized goal to clarify of the firm's operations with a forward-looking perspective involving introducing new products or services ahead of the competition, focusing on innovation, technology, newness, and dynamic technology. Moreover, it analyses and understands environmental change (Gluck, 1981; Lumpkin and Dess, 2001; Phong-inwong and Ussahawanitchakit, 2012).

Thus, these seem to imply that executive proactive vision has a positive influence on new management methods, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original



performance evaluation system. As a result, this research proposes the following hypotheses:

***Hypothesis 9a: Executive proactive vision has a positive influence on new management method.***

***Hypothesis 9b: Executive proactive vision has a positive influence on valuable human resource development.***

***Hypothesis 9c: Executive proactive vision has a positive influence on novel organizational culture formation.***

***Hypothesis 9d: Executive proactive vision has a positive influence on useful operational control establishment.***

***Hypothesis 9e: Executive proactive vision has a positive influence on original performance evaluation system.***

#### Strategic renewal mindset

Guth and Ginsberg (1990) define strategic renewal as the “transformation of organizations through renewed of the key ideas on which they are built.” Huff Huff and Thomas (1992) define strategic renewal as the “viability of organizations that have the capacity to frequently improve their alignment with internal and external demands.” Sharma and Chrisman (1999) define strategic renewal as the “significant changes to an organization’s business or corporate level strategy or structure.” Changes may involve the customer base, technology, organizational structure, business model, and market strategy. Strategic renewal entails the acquisition and use of new knowledge through innovative behavior that leads to capability development and ultimately a modification of the firm’s product-market domain (Floyd and Lane, 2000). Thus, the purpose and direct effect of renewal is to replace or refurbish existing product lines, existing markets, existing structural relationships, and/or existing resource configurations, usually in response to performance that has fallen below aspiration levels (Cyert and March, 1963).



Alterations of organization's strategy have intent of regaining sustained competitive advantage. Besides, strategic renewal explicitly in the present context is useful in that it highlights the dual challenge of innovative behavior (e.g. new product development) and subsequent change (e.g. customer response new market entry). In fact, the challenge of strategic renewal is "the tension between exploration and exploitation," (Crossan and Berdrow, 2003). To put it simply, exploration is concerned with acquiring new knowledge whereas exploitation focuses on the utilization of extant knowledge (March, 1991). In addition, creativity is vital to organizational success and provides the foundation of the ideas for innovation (Dewett and Gruys, 2007). Exploratory innovation relates to such activities as the development of new product offerings, as distinct from exploitative or incremental innovation where extant offerings are modified (Smith and Tushman, 2005). The merits of pursuing exploratory innovation are evident from March's (2006) observation that in the absence of exploration, exploitation causes stagnation; new and useful directions will not be discovered. However, the creation of new wealth is through new combinations of resources. It involves changing a firm's scope of business, competitive approach, or both, and building and creativity acquiring new capabilities (Yui Lau and Bruton, 2007).

In this research, strategic renewal mindset as the organization recognizes and the importance of modifying corporate strategies to improve or change the strategy of the organization that lead to a competitive advantage (Guth and Ginsberg, 1990; Huff and Thomas, 1992; Sharma and Chrisman, 1999).

Thus, these seem to imply that strategic renewal mindset has a positive influence on new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. As a result, this research proposes the following hypotheses:

***Hypothesis 10a: Strategic renewal mindset has a positive influence on new management method.***

***Hypothesis 10b: Strategic renewal mindset has a positive influence on valuable human resource development.***



***Hypothesis 10c: Strategic renewal mindset has a positive influence on novel organizational culture formation.***

***Hypothesis 10d: Strategic renewal mindset has a positive influence on useful operational control establishment.***

***Hypothesis 10e: Strategic renewal mindset has a positive influence on original performance evaluation system.***

#### Corporate resource readiness

The resource is a tool for considering the strategic resources available to a business. Resources include all firm assets, capabilities, organizational processes, attributes, information, experience, knowledge, and technology. In a resource-based perspective, resources can be tangible, intangible and personnel-based (Grant, 1991). Likewise, these abilities comprise at least three dimensions: physical assets, technologies and skills required to use them; human resources and organizational capabilities such as culture and values; and the intangible resources of reputation and radical expertise. However, if the firms have the resources in readiness and potentiality, this advantage will support the firms to create new opportunity. The resource readiness refers to a firm's ability to allocate the existence of a firm's resources to maximize benefits, and the adequacy of a firm's resource can compete with competitors (Tzokas et al., 1997).

In this research, corporate resource readiness is defined as the fruitfulness of both tangible and intangible factors for supporting the work of firm processes to achieve firm targets (Barney, 1991; Barney and Muhanna, 2004).

In addition, Takeno (2001) indicates that utilizing the shared resource, the updated information should also be gained and shared by processes including information-sharing, resource-sharing, techniques and know-how sharing, and opportunity-sharing. Firm resource readiness has been shared over the firm where the capability to create new products, new services, and new processes will increase (Barner, 1997; Kratzer et al., 2008). Thus, these seem to imply that corporate resource readiness has a positive influence on new management method, valuable human



resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. As a result, this research proposes the following hypotheses:

***Hypothesis 11a: Corporate resource readiness has a positive influence on new management method.***

***Hypothesis 11b: Corporate resource readiness has a positive influence on valuable human resource development.***

***Hypothesis 11c: Corporate resource readiness has a positive influence on novel organizational culture formation.***

***Hypothesis 11d: Corporate resource readiness has a positive influence on useful operational control establishment.***

***Hypothesis 11e: Corporate resource readiness has a positive influence on original performance evaluation system.***

#### Business environment complexity

Business environment complexity is the change of the external organizational environment in which business must adapt their operations to match with changes in the economic, technological, social, and political factors outside the firm's control (Lissack and Gunz, 2005). Nicolau, (2005) defined environmental complexity as the level of various business conditions which have ambiguity and instability or heterogeneity of external events that are involve with the firm's potential to continuously perceive to explain rapid changes and adaptation to effectively cope with change. Prempre and Ussahawanitchakit (2012) propose that environmental uncertainty is the external factor which affects the practice and operation of a business such as available material, the economy, technology, and competitiveness. Luo (2001) proposes that environmental complexity means the heterogeneity, uncertainly, diversity, and instability of environmental elements. Likewise, Limpsurapong and



Ussahawanitchakit (2011) define business competition complexity as the heterogeneity, diversity, uncertainly, and instability of business competition components, which consist of the business dynamics, new competitor's entry, number of competitors, and competitor's activity in the marketplace leading to higher diversity of the business competition.

In this research, business environment complexity is defined as the firm's perception concerns heterogeneity, diversity, instability, and uncertainty, which are external factors affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increase of competitor numbers, new competitors' entry into the market, and technological change (Limpsurapong and Ussahawanitchakit, 2011; Prempree and Ussahawanitchakit, 2012; Luo, 2001; Zhou Yim and Tse, 2005).

In sum, business environment complexity is a factor contributing to the development of organizational creativity capability. Thus, business environment complexity will have a positive effect on each dimension of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system). Thus, the hypotheses are posited as follows:

***Hypothesis 13a: Business environment complexity has a positive influence on new management method.***

***Hypothesis 13b: Business environment complexity has a positive influence on valuable human resource development.***

***Hypothesis 13c: Business environment complexity has a positive influence on novel organizational culture formation.***

***Hypothesis 13d: Business environment complexity has a positive influence on useful operational control establishment.***



***Hypothesis 13e: Business environment complexity has a positive influence on original performance evaluation system.***

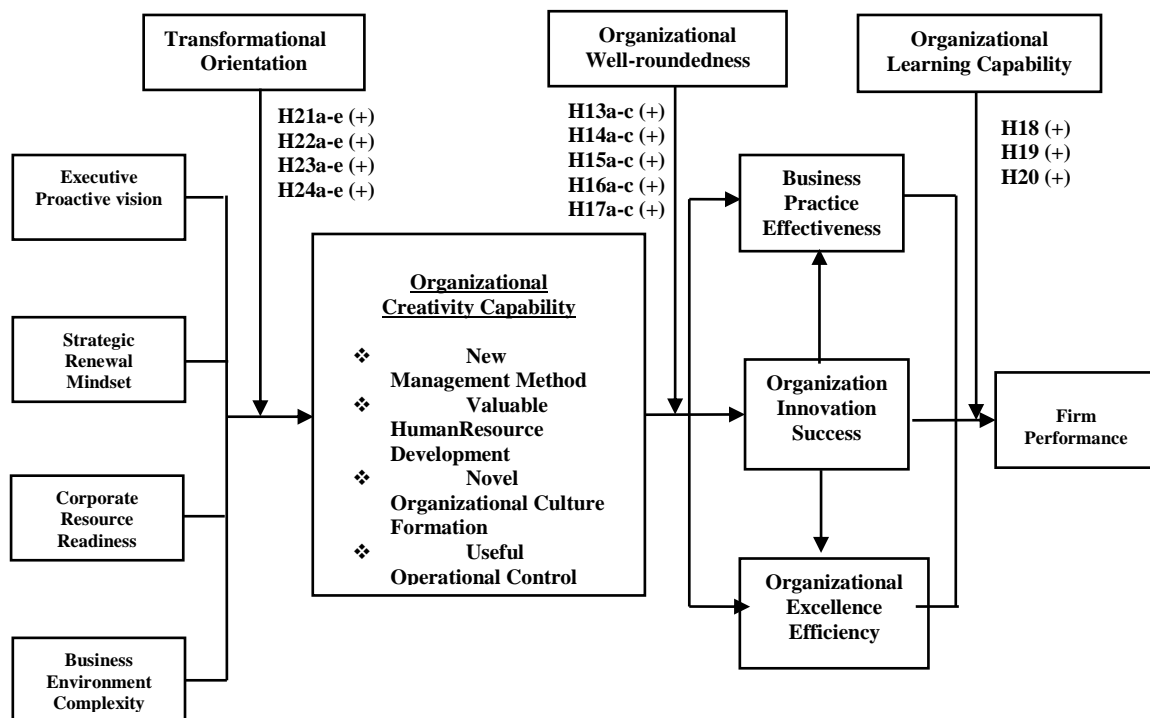
**The Moderating Effect of, Organizational Well-roundedness, Organizational Learning Capability, and Transformational Orientation on the Relationships Among the Antecedents of Organizational Creativity Capability, Organizational Creativity Capability and Its Outcomes**

This research assigns organizational well-roundedness, organizational learning capability, and transformational orientation, as the three moderating variables on the relationships among the antecedents of organizational creativity capability, organizational creativity capability and its outcomes. This part describes the influence of organizational well-roundedness on the relationships among five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system) and business practice effectiveness, organizational innovation success, and organizational excellence efficiency. As well as, it explores the influence of organizational learning capability on the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. As well as, it researches the influence of transformational orientation on the relationships among the antecedents of organizational creativity capability and five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system) which are shown in Figure 4 below.





Figure 4 The Moderating Effect of Organizational Learning Capability, Organizational Well-roundedness, and Transformational Orientation on the Relationships Among the Antecedents of Organizational Creativity Capability, Organizational Creativity Capability and Its Outcomes



### Organizational well-roundedness

In this research, Organizational well-roundedness as the resources of the organization that involves a variety of aspects such as knowledge, skills and abilities related to the operation and management of the organization. Additionally, the organization is well-roundedness; the ability to manage the operations of the organizations involved in the governance design and redesigning business operations related to the conversion of resources into products and services that are available effective way to increase the profitability of the organization has the knowledge and experience of the organization.

Previous studies indicated that the ability of organizational well-roundedness has an impact on firm performance (Ghrai, 2011; Herri, 2011; Tanriverdi, 2005). Furthermore, organizational well-roundedness directly related to process



improvement, particularly those involving the coordination of cross-functional within the organization. Therefore, organizational well-roundedness that focuses on the coordination of internal and external organizations that leads to firm growth and new business development (Zott and Amit, 2007) from the knowledge and experience of the organization. Most especially, organizational well-roundedness is important for editing make decisions on certain issues such as quality management, product design, process design, capacity, location, layout design, human resources, and supply chain management, material requirements planning, scheduling and short-term projects and maintenance. Therefore, organizations that have an impact on the decisions made roundedness is valuable because it is acceptable to all parties involved, and it also affects the company's success.

Ultimately, organizational well-roundedness is treated as a moderating variable which has a positive effect on the relationships among the five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system) and business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Therefore, firms with more organizational well-roundedness will enhance organizational creativity capability to increase the business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Hence, the hypotheses are posited as follows:

***Hypothesis 13a: Organizational well-roundedness will positively moderate the relationship between new management method and organizational innovation success.***

***Hypothesis 13b: Organizational well-roundedness will positively moderate the relationship between new management method and business practice effectiveness.***



***Hypothesis 13c: Organizational well-roundedness will positively moderate the relationship between new management method and organizational excellence efficiency.***

***Hypothesis 14a: Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational innovation success.***

***Hypothesis 14b: Organizational well-roundedness will positively moderate the relationship between valuable human resource development and business practice effectiveness.***

***Hypothesis 14c: Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational excellence efficiency.***

***Hypothesis 15a: Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational innovation success.***

***Hypothesis 15b: Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and business practice effectiveness.***

***Hypothesis 15c: Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational excellence efficiency.***

***Hypothesis 16a: Organizational well-roundedness will positively moderate the relationship between and organizational innovation success.***



***Hypothesis 16b: Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and business practice effectiveness.***

***Hypothesis 16c: Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational excellence efficiency.***

***Hypothesis 17a: Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational innovation success.***

***Hypothesis 17b: Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and business practice effectiveness.***

***Hypothesis 17c: Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational excellence efficiency.***

#### Organizational learning capability

Organizational learning is “development of new knowledge or insights that have the potential to influence behavior,” (Slater and Narver, 1995). Dawes et al. (2007) defined organizational learning as a process that acquires knowledge that is stored in the organization. Madsen and Desai (2010) proposed that organizational learning focuses on the development of knowledge and a knowledge base of the organization to support the development of organizational efficiency. Huang and Chu (2010) defined it as the process that allows organizations to actively improve through an increase in knowledge and understanding of the processes that occur within the organization. Organizational learning capability refers to the organizational and managerial characteristics that facilitate the organizational learning process (Dibella et al., 1996; Goh and Richards, 1997). Alegre and Chiva (2008) argue that learning capability is a bundle of tangible and



intangible resources or skills of the firm which enhances the firm's opportunity to achieve competitive advantage in new forms. Moreover, Tohidi and Jabbari (2012) also defined organizational learning capability as "an organization's ability to learn from its experiences and pass them on through time and borders." Organizational learning capability is the firm's ability of having acquisition capacity, assimilation capacity, transformative capacity, and exploitation capacity (Camisón and Forés, 2011; Flatten, Engelen, Zahra and Brettel, 2011).

In this research, organizational learning capability is defined as the ability of an organization to create and develop knowledge based on the commitment of the management systems perspective, knowledge absorption, knowledge transformation, knowledge transfer, and integration of all processes in an organization and contribute to the effective implementation of both short and long term.

Based on previous research, empirical findings also support that learning has a significant positive impact on performance (Baker and Sinkula, 1999). Zellmer-Bruhn and Gibson (2006) state that team learning positively influences task performance, quality of interpersonal relations, and organizational outcomes (Hanvanich et al., 2006; Ruiz-Mercader et al., 2006). Moreover, Alegre and Chiva's (2008) research provides the evidence of a positive relationship between organizational learning capability and product innovation performance. Furthermore, the organizational learning capability also has a positive impact on firm performance and a sustained competitive advantage (Flatten et al., 2011).

In this research, organizational learning capability is treated as a moderating variable which has a positive effect on the relationships among the organizational creativity capability outcomes (i.e., business practice effectiveness, organizational innovation success, and organizational excellence efficiency), and firm performance. Hence, firms which have more organizational learning capability will enhance the organizational creativity capability outcomes to increase the firm performance. Therefore, the hypotheses are posited as follows:

***Hypothesis 18: Organizational learning capability will positively moderate the relationship between organizational innovation success and firm performance.***



***Hypothesis 19: Organizational learning capability will positively moderate the relationship between business practice effectiveness and firm performance.***

***Hypothesis 20: Organizational learning capability will positively moderate the relationship between organizational excellence efficiency and firm performance.***

#### Transformational orientation

Transformational orientation is a part of strategic orientation, which Venkatraman (1989) defines as a set of behaviors which operationalizes the firm's strategy. Gatignon et al. (1997) define strategic orientation as the specific approach a firm implements to create superior and continuous performance. Noble et al., (2002) define a firm's strategic orientation as the deep-rooted set of values and beliefs that guides its managerial actions and resource assortment. Lau et al., (2008) define strategic orientation as the business direction and objectives that the top management of a firm wants to achieve. In conclusion, strategic orientation is processes, practices, principles and business direction which achieve continuous superior performance under competition.

Transformation refers to an ability to rapidly adapt aspects of the organization in the face of new opportunities or threats to the environment (Birkinshaw, 2000). Bass et al., (2003) propose that transformation is the selected way to change or improve the overall organization. Several studies have classified flexibility into internal and external flexibility, which affect the formal structure, strategy, policy and other parts of management in the organization (Limpsurapong et al., 2011). This is consistent with Sookaneknun and Ussahawanitchakit (2012) who propose that transformation can affect organizational strategy, policy, operation, and performance on develop for knowledge and skills of organization. Consequently, the organization should be aware of the situation to appropriately implement transformation of the business (Correa et al., 2007).

In this research, transformational orientation is defined as a concept of organizational management, for change, consistent with the flexibility of the



organization to improve the policy, strategy, processes, practices, management, and format structure so as appropriate situations and goals of organizational. This affects the management, culture, operations, practice, principles and other aspects of the organization to be dynamic and successful according to the main goals of the organization to create a competitive advantage and survive in a changing situation under competition.

Ultimately, transformational orientation is treated as a moderating variable which has a positive effect on the relationships among the antecedents of organizational creativity capability and five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system). Therefore, firms which have more transformational orientation will enhance antecedent of organizational creativity capability to increase the organizational creativity capability. Hence, the hypotheses are posited as follows:

***Hypothesis 21a: Transformational orientation will positively moderate the relationship between executive proactive vision and new management method.***

***Hypothesis 21b: Transformational orientation will positively moderate the relationship between executive proactive vision and valuable human resource development.***

***Hypothesis 21c: Transformational orientation will positively moderate the relationship between executive proactive vision and novel organizational culture formation.***

***Hypothesis 21d: Transformational orientation will positively moderate the relationship between executive proactive vision and useful operational control establishment.***



*Hypothesis 21e: Transformational orientation will positively moderate the relationship between executive proactive vision and original performance evaluation system.*

*Hypothesis 22a: Transformational orientation will positively moderate the relationship between strategic renewal mindset and new management method.*

*Hypothesis 22b: Transformational orientation will positively moderate the relationship between strategic renewal mindset and valuable human resource development.*

*Hypothesis 22c: Transformational orientation will positively moderate the relationship between strategic renewal mindset and novel organizational culture formation.*

*Hypothesis 22d: Transformational orientation will positively moderate the relationship between strategic renewal mindset and useful operational control establishment.*

*Hypothesis 22e: Transformational orientation will positively moderate the relationship between strategic renewal mindset and original performance evaluation system.*

*Hypothesis 23a: Transformational orientation will positively moderate the relationship between corporate resource readiness and new management method.*

*Hypothesis 23b: Transformational orientation will positively moderate the relationship between corporate resource readiness and valuable human resource development.*

*Hypothesis 23c: Transformational orientation will positively moderate the relationship between corporate resource readiness and novel organizational culture formation.*





*Hypothesis 23d: Transformational orientation will positively moderate the relationship between corporate resource readiness and useful operational control establishment.*

*Hypothesis 23e: Transformational orientation will positively moderate the relationship between corporate resource readiness and original performance evaluation system.*

*Hypothesis 24a: Transformational orientation will positively moderate the relationship between business environment complexity and new management method.*

*Hypothesis 24b: Transformational orientation will positively moderate the relationship between business environment complexity and valuable human resource development.*

*Hypothesis 24c: Transformational orientation will positively moderate the relationship between business environment complexity and novel organizational culture formation.*

*Hypothesis 24d: Transformational orientation will positively moderate the relationship between business environment complexity and useful operational control establishment.*

*Hypothesis 24e: Transformational orientation will positively moderate the relationship between business environment complexity and original performance evaluation system.*

## **Summary**

In conclusion, organizational creativity capability is the main concern of this research that is focused on its antecedents and its consequences. In this research,



organizational creativity capability has five dimensions comprised of new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Moreover, this research investigates the impact of business practice effectiveness, organizational innovation success, and organizational excellence efficiency on firm performance. Furthermore, this research also investigates the influence of four antecedents including executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity on each dimension of organizational creativity capability. In addition, three variables as the moderators are transformational orientation, organizational well-roundedness and organizational learning capability in which transformational orientation stimulates the relationships among the antecedents of organizational creativity capability (executive proactive vision strategic renewal mindset corporate resource readiness and business environment complexity) and five dimensions of organizational creativity capability; whereas organizational well-roundedness stimulates the relationships among five dimensions of organizational creativity capability and the three outcomes of organizational creativity capability (business practice effectiveness, organizational innovation success, and organizational excellence efficiency); whereas organizational learning capability stimulates the relationships among the three outcomes of organizational creativity capability (business practice effectiveness, organizational innovation success, and organizational excellence efficiency) and firm performance.

This chapter discusses the theoretical foundations, the literature review, and the hypotheses development. Consequently, this chapter has detailed the three theoretical foundations, including the resource-advantage theory, contingency theory and the organizational learning theory. Moreover, this chapter demonstrates the literature review with all its constructs in the conceptual model of organizational creativity capability, as well as its antecedents, its consequences, and its moderators. Finally, the hypotheses development has proposed a set of twenty five testable hypotheses. Therefore, the related hypotheses are postulated and the summary of all hypotheses are presented in Table 3as shown below.

The next chapter describes the research methods including the sample selection and data collection procedure, the variable measurements of each construct, the



instrumental verification, the statistics and equations to test all twenty five hypotheses, and the summarized definitions and operational variables of the constructs for the research.

Table 3 Summary of Hypothesized Relationships

Hypothesis	Description of Hypothesized Relationships
H1a	New management method has a positive influence on business practice effectiveness.
H1b	New management method has a positive influence on organizational innovation success.
H1c	New management method has a positive influence on organizational excellence efficiency.
H2a	Valuable human resource development has a positive influence on business practice effectiveness.
H2b	Valuable human resource development has a positive influence on organizational innovation success.
H2c	Valuable human resource development has a positive influence on organizational excellence efficiency.
H3a	Novel organizational culture formation has a positive influence on business practice effectiveness.
H3b	Novel organizational culture formation has a positive influence on organizational innovation success.
H3c	Novel organizational culture formation has a positive influence on organizational excellence efficiency.
H4a	Useful operational control establishment has a positive influence on business practice effectiveness.
H4b	Useful operational control establishment has a positive influence on organizational innovation success.



Table 3 (Continued)

Hypothesis	Description of Hypothesized Relationships
H4c	Useful operational control establishment has a positive influence on organizational excellence efficiency.
H5a	Original performance evaluation system has a positive influence on business practice effectiveness.
H5b	Original performance evaluation system has a positive influence on organizational innovation success.
H5c	Original performance evaluation system has a positive influence on organizational excellence efficiency.
H6	Business practice effectiveness has a positive influence on firm performance.
H7a	Organizational innovation success has a positive influence on business practice effectiveness.
H7b	Organizational innovation success has a positive influence on organizational excellence efficiency.
H7c	Organizational innovation success has a positive influence on firm performance.
H8	Organizational excellence efficiency has a positive influence on firm performance.
H9a	Executive proactive vision has a positive influence on new management method.
H9b	Executive proactive vision has a positive influence on valuable human resource development.
H9c	Executive proactive vision has a positive influence on novel organizational culture formation.
H9d	Executive proactive vision has a positive influence on useful operational control establishment.



Table 3 (Continued)

Hypothesis	Description of Hypothesized Relationships
H9e	Executive proactive vision has a positive influence on original performance evaluation system.
H10a	Strategic renewal mindset has a positive influence on new management method.
H10b	Strategic renewal mindset has a positive influence on valuable human resource development.
H10c	Strategic renewal mindset has a positive influence on novel organizational culture formation.
H10d	Strategic renewal mindset has a positive influence on useful operational control establishment.
H10e	Strategic renewal mindset has a positive influence on original performance evaluation system.
H11a	Corporate resource readiness has a positive influence on new management method.
H11b	Corporate resource readiness has a positive influence on valuable human resource development.
H11c	Corporate resource readiness has a positive influence on novel organizational culture formation.
H11d	Corporate resource readiness has a positive influence on useful operational control establishment.
H11e	Corporate resource readiness has a positive influence on original performance evaluation system.
H12a	Business environment complexity has a positive influence on new management method.
H12b	Business environment complexity has a positive influence on valuable human resource development.



Table 3 (Continued)

Hypothesis	Description of Hypothesized Relationships
H12c	Business environment complexity has a positive influence on novel organizational culture formation.
H12d	Business environment complexity has a positive influence on useful operational control establishment.
H12e	Business environment complexity has a positive influence on original performance evaluation system.
H13a	Organizational well-roundedness will positively moderate the relationship between new management method and business practice effectiveness.
H13b	Organizational well-roundedness will positively moderate the relationship between new management method and organizational innovation success.
H13c	Organizational well-roundedness will positively moderate the relationship between new management method and organizational excellence efficiency.
H14a	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and business practice effectiveness.
H14b	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational innovation successes.
H14c	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational excellence efficiency.
H15a	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and business practice effectiveness.



Table 3 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H15b	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational innovation success.
H15c	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational excellence efficiency.
H16a	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and business practice effectiveness.
H16b	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational innovation success.
H16c	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational excellence efficiency.
H17a	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and business practice effectiveness.
H17b	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational innovation success.
H17c	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational excellence efficiency.
H18	Organizational learning capability will positively moderate the relationship between organizational innovation success and firm performances.



Table 3 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H19	Organizational learning capability will positively moderate the relationship between business practice effectiveness and firm performances.
H20	Organizational learning capability will positively moderate the relationship between organizational excellence efficiency and firm performances.
H21a	Transformational orientation will positively moderate the relationship between executive proactive vision and new management method.
H21b	Transformational orientation will positively moderate the relationship between executive proactive vision and valuable human resource developments.
H21c	Transformational orientation will positively moderate the relationship between executive proactive vision and novel organizational culture formations.
H21d	Transformational orientation will positively moderate the relationship between executive proactive vision and useful operational control establishments.
H21e	Transformational orientation will positively moderate the relationship between executive proactive vision and original performance evaluation systems.
H22a	Transformational orientation will positively moderate the relationship between strategic renewal mindset and new management method.
H22b	Transformational orientation will positively moderate the relationship between strategic renewal mindset and valuable human resource development.
H22c	Transformational orientation will positively moderate the relationship between strategic renewal mindset and novel organizational culture formation.





Table 3 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>
H22d	Transformational orientation will positively moderate the relationship between strategic renewal mindset and useful operational control establishment.
H22e	Transformational orientation will positively moderate the relationship between strategic renewal mindset and original performance evaluation systems.
H23a	Transformational orientation will positively moderate the relationship between corporate resource readiness and new management method.
H23b	Transformational orientation will positively moderate the relationship between corporate resource readiness and valuable human resource development.
H23c	Transformational orientation will positively moderate the relationship between corporate resource readiness and novel organizational culture formation.
H23d	Transformational orientation will positively moderate the relationship between corporate resource readiness and useful operational control establishment.
H23e	Transformational orientation will positively moderate the relationship between corporate resource readiness and original performance evaluation system.
H24a	Transformational orientation will positively moderate the relationship between business environment complexity and new management method.
H24b	Transformational orientation will positively moderate the relationship between business environment complexity and valuable human resource developments.



Table 3 (Continued)

Hypothesis	Description of Hypothesized Relationships
H24c	Transformational orientation will positively moderate the relationship between business environment complexity and novel organizational culture formation.
H24d	Transformational orientation will positively moderate the relationship between business environment complexity and useful operational control establishment.
H24e	Transformational orientation will positively moderate the relationship between business environment complexity and original performance evaluation system.



## **CHAPTER III**

### **RESEARCH METHODS**

Prior chapter described to intensely understand organizational creativity capability with theoretical foundation, literature review, conceptual framework, and hypotheses development. Subsequently, research methods comfort to obviously answer with testable hypotheses. Research methods are elaborated in this chapter with four components: sample selection and data collection procedure, measurements, methods, and statistical analysis. This chapter is organized as follows. Firstly, the sample selection and data collection procedures, including population, sample, data collection, and test of non-response bias are detailed. Secondly, the variables measurements are developed. Thirdly, the instrumental verifications, including the test of validity and reliability and the statistical analysis, are presented. Finally, the table of summary of definitions and operational variables of constructs is included.

#### **Sample Selection and Data Collection Procedure**

##### **Population and Sample**

In this research the population and sample are the software businesses in Thailand. Total population of 535 is from the database of the Thailand Board of Investment. ([www.boi.go.th](http://www.boi.go.th)). Due to the population size approaching 550, the required sample size to be a representative of the software in this research is 226, which is a minimum usable sample size (Krejcie and Morgan, 1970). However, since organizational research often uses a survey as a data-collection method, the response rates are typically lower than 100 percent (Bartlett et al., 2001). Menon et al (1999) indicate that average top management survey response rates are in the range of 15-20 percent. In accordance with prior suggestions, oversampling is needed to ensure a minimum sample size is achieved (Bartlett et al., 2001). This research assumes a required sample size as 20 percent and to maximize response rate up to 100 percent, this research systematically confines 1,130 (226x5) firm. Nevertheless, the number of software business populations was only 535 firms. Thus, it was necessary to determine



the 535 population as the sample size for mail survey in this research.

For this research, the software businesses are interesting to investigate for several reasons. First, the software products sector is greatly important to the country's economic development; it can prominently help create an international economy. Nowadays, Thailand is increasing its domestic demands and changes in the lifestyle of Thai consumers, particularly in the growing middle class, and consequently the software processing industry has grown significantly over the last decade.

Apart from that, there has been no known previous empirical research having investigated the influence of organizational creativity capability on firm performance in Thailand. The sample of this research is chosen from the online database of the Thailand Board of Investment which provides a total of 535 existing firms (Thailand Board of Investment, 2014). The source of data used in this research is collected through a selected list of 535 software businesses which are recorded in March 2014. Therefore, the 535 firms of software business are an appropriate sample for a distributed mail survey which is the efficient population for the research. As a result, the questionnaires are directly distributed to 535 executives of software firms in Thailand.

#### Data Collection

In this research, the main research instrument is a self-administered questionnaire, initially designed based on previous studies. The causes to use this instrument are because a mail survey reaches a greater number of firms at a lower cost, saving time, has less distribution bias, puts less pressure for an immediate response on the potential informants, and gives respondents a greater feeling of autonomy. Besides, in reducing a possible desirability bias, the researcher promises all individual responses will be kept completely confidential, and no information would be revealed or shared with any outside party without an informant's written permission (Neuman, 2006; Sittimalakorn and Hart, 2004; Yasamorn, 2011).

The key informants are the executives, directors, or managers of software firms in Thailand. The executive, director, or manager is selected as the key informant because these positions have a major responsibility in the function of the organization. Moreover, these key informants are appropriate because they determine the business policy and strategy, as well as can provide the real information and true understanding of their business. Thus the information is more valid. The questionnaires were directly



distributed to the executive of software firms in Thailand by a mail survey. Then, the completed questionnaires were directly sent back to the researcher within four weeks by the prepared returned envelopes for ensuring confidentiality. Then, for the undelivered mail, firms which are no longer in business will be eliminated.

Each set of questionnaire package consisted of a questionnaire, a letter with a description of the research, and a postage pre-paid reply envelope. This package was distributed to each key informant. The total number of questionnaires sent were 535 packages mailed in April 2014. The collection plan of data was received. At the first step, the questionnaire was answered and sent to the researcher in the first three weeks after the first mailing. After five weeks, to increase response rate, a following up postcard was sent to all firms to be thankful and remind them to complete the questionnaire and to request them to cooperate in answering it. In summary, duration of data collection was approximately sixteen weeks, which the total of 107 responded questionnaires were received.

In this research, the data were collected using a questionnaire consisting of seven parts. The choices of the questionnaire use multiple-choice and scale questions, because it is easier and quicker for respondents to answer and easier to code and statistically analyze (Neuman, 2006). Episode one asks the key informants for personal information such as gender, age, and marital status, level of education, working experience, revenue, and current position. Episode two contains the questions about the general information and history of the business, such as number of business owner types, location of business, operational years, operational capital, the firm's average revenues per year, and number of full-time employee. Episode three through part six are related to evaluate each of the constructs in the conceptual model which measures items anchored by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). According to Nunnally (1978) and Neuman (2006), for the number of choices, it was better to use four to eight categories, beyond this were not meaningful and it would become confused. Therefore, using five categories was appropriate for creating a refined measure. All constructs were developed for measuring from the definition of each, as well as from previous literature reviews.

Episode three requests information for five dimensions of organizational creativity capability, that consists of new management method, valuable human resource



development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Next, Episode four asks for the perceptions of business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. Episode five enquires about the perceptions of the internal factors of organizational creativity capability consisting of executive proactive vision, strategic renewal mindset, corporate resource readiness, transformational orientation, organizational well-roundedness, and organizational learning capability. Respectively, episode six contains questions about the perceptions of the two variables of the external factors that have an impact on organizational creativity capability consisting of business environment complexity. Finally, Episode seven includes an open-ended question for the informant's suggestions and opinions regarding the management of software business in Thailand. Appendix E and F present both English and Thai version of the questionnaire in this research.

According to a questionnaire mailed to respondents, 61 surveys were undeliverable because some firms were no longer in business or had moved to unknown addresses. The undeliverable surveys were deducted from the original 535 surveys. As a result, the valid mailing was 474 surveys and 107 of them were received. Due to 3 found incomplete and with response errors, they were deducted from further analysis. Of the surveys completed and received, only 104 were usable. The effective response rate was approximately 21.94%. According to Aaker et al. (2001), a 20% response rate for a mail survey, without an appropriate follow-up procedure, is considered acceptable. Table 4 shows the results of questionnaire mailing used for analysis in this research.



Table 4 the Details of Questionnaire Mailing

Details	Numbers
Amount of questionnaire mailing	535
Number of undelivered questionnaires	61
Number of successful questionnaire mailing	474
Received questionnaires	107
Unusable questionnaires	3
Usable questionnaires	104
Response Rate $(104/474) \times 100$	21.94%

#### Test of Non-Response Bias

The testing of non-response bias is the important step before the sample is generalized to the population. Most mail surveys have been criticized for a non-response bias. Therefore, the t-test statistic comparisons of the firm characteristics are used to test the difference between the early group and the late group of respondents in order to test a non-response bias. This method is used to prevent possible response bias of the problems between the respondents and non-respondents (Armstrong and Overton, 1977). Following recommendations of Armstrong and Overton (1977), a non-response bias is tested by employing a t-test to compare the differences of group means of organizational demographics between early and late responding firms. The expected result should reveal non-statistically significant differences between them to reject a non-response bias.

In this research, all 104 received questionnaires were separated into two equal groups. The first fifty percent of responses were defined as the early group of respondents ( $n = 52$ ) and the last fifty percent of responses were defined as the late group of respondents ( $n = 52$ ). Then, 52 responses from the early group were used to test the difference with 52 responses received from the late group by the t-test statistics in various firm characteristics which consisted of business owner type, location of business, operational years, operational capital, average revenue per year and the number of full time employees. The results of the t-test statistics reveal that there are no statistically significant difference between the two groups in the overall variables



including business owner type, location of business, operational years, operational capital, average revenue per year, and the number of full time employees. Thus, non-response bias does not pose a significant problem for this research. The results of non-response bias test are shown in Appendix A.

## Measurements

The measure of developmental procedures are relevant to multiple items adjusted for measuring each construct in the conceptual model due to the abstraction of the construct. Variables are measured from the definition and adapted from prior literature, by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Consequently, the contents of variable measurements are comprised of the dependent variable, the independent variables, the moderating variables, and the controlled variables described below.

### Dependent Variable

*Firm performance.* Firm performance refers to the perception of a firm concerning the outcomes of organizational capability towards the customer, marketplace, and financial benefits. Firm performance measures both financial performance and market performance, which are an organization's performance in their market segment over the past year, such as an increase in new customers, sales growth, market share, profitability, revenue growth, and return on investment. This construct is developed as a new scale from the definition, literature review, and adapted from Phokha and Ussahawanitchakit (2011) which includes five-item scale.

### Independent Variables

This research consists of 13 independent variables divided into three groups. The first group is the core construct of this research, which is organizational creativity capability that comprises five dimensions: new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. The measure of each construct depends on its definition, which is also detailed.

*New management method.* New management method relates to the ability of a firm to generate and develop new processes, new products, and new methods for





operations. It is measured by creating new processes, and new methods of operations, promotion among staff of new concepts, new information and knowledge development, and support budget for creating new ideas. The measure is created as a new scale with five-items developed from the definition and literature review.

*Valuable human resource development.* Valuable human resource development is the firm's perception of the importance of human resource as a valuable asset. The staff will help the organization's operations more efficiently through knowledge, skills, talent, intellectual ability, and know-how that aligns with the organization's mission and strategic goals required to develop and release human expertise via development and training for increasing new knowledge, skills and the ability of employees. The measure is created as a new scale with four-items developed from the definition and literature review.

*Novel organizational culture formation.* Novel organizational culture formation is the pattern of beliefs in learning, exposure, exchange, and integration of new and beneficial things to improve the firm's operations, practices, and management in each function. It is value the organization employs to accept new ideas and processes which is important for creative activities in organizations (Chaveerug and Ussahawanitchakit, 2008). The measure is created as a new scale with three-items developed from the definition and literature review.

*Useful operational control establishment.* Useful operational control establishment is measured by a firm's capability to focus on methods and develop a good tracking performance system to make the operation planned and effective (Mahama, 2006). The measure is created as a new scale with four-item developed from the definition and literature review.

*Original performance evaluation system.* Original performance evaluation system is measured by focusing on the guidelines, approaches and methods of assessment, measurement on operational suitability for the work to be successful, goal-achieved and efficient (Mahama, 2006). The measure is created as a new scale with four-item developed from the definition and literature review.



### Consequent Variables

The second group is the consequence of organizational creativity capability; namely, business practice effectiveness, organizational innovation success, and organizational excellence efficiency. The measure of each dimension conforms to its definition to be discussed as follows.

*Business practice effectiveness.* Business practice effectiveness is assessed by the upper-level achievement of an organization's operations regarding goal; criteria, mission, and vision of the organization. This construct is developed as a new scale from the definition, literature review, and adapted from Pongpearchan and Ussahawanitchakit (2010) which includes four-item scale.

*Organizational innovation success.* Organizational innovation success is measured by the firm's ability to continuously produce, continuously service, sustain old customers, and attract new customers. Organization innovation is a strategy used with system technology, machinery, equipment, innovation, idea-generation, and opportunity-appreciation. This construct is developed as a new scale from the definition, literature review, and adapted from Laforet and Tann (2012), and Kittikunchotiwut et al. (2013) which includes three-item scale.

*Organizational excellence efficiency.* Organizational excellence efficiency is measured by organizational goals achieved under the limited resources available, thereby reducing the time of the operation for efficiently and effectively fulfilling the needs of customers with accurate operational goals. The measure is created as a new scale with four-item developed from the definition and literature review.

### Antecedent Variables

The third group is the antecedent of organizational creativity capability which encompasses four variables—executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity. The measure of each dimension conforms to its definition to be discussed as follows.

*Executive proactive vision.* Executive proactive vision is measured by a CEO's viewed guideline or idealized goal used to clarify the firm's operations with a forward-looking perspective, involving introducing new products or services ahead of the competition, focusing on innovation, technology, newness, and dynamic technology. Moreover, it analyzes and understands environmental change (Lumpkin and Dess,



2001; Larwood et. al., 1995; Gluck, 1981; Phong-inwong and Ussahawanitchakit, 2012). This construct is developed as a new scale from the definition, literature review, and adapted from Phong-inwong and Ussahawanitchakit (2012) which includes five-item scale.

*Strategic renewal mindset.* Strategic renewal mindset is evaluated by the transformation of organizations through the renewal of key ideas on which they are built and the viability of organizations that have the capacity to frequently improve their alignment with internal and external demands. These include significant changes to an organization's business or corporate level strategy or structure (Guth and Insberg, 1990; Huff, Huff, and Thomas, 1992; Sharma and Chrisman, 1999; Cyert and March, 1963). The measure is created as a new scale with five-item developed from the definition and literature review.

*Corporate resource readiness.* Corporate resource readiness is assessed by the fruitfulness of both tangible and intangible factors for supporting the work of firm processes to achieve firm targets (Barney, 1991b; Muhanna, 2004). This construct is developed as a new scale from the definition, literature review, and adapted from Kittikunchotiwiut et al (2013) which includes three-item scale.

*Business environment complexity.* Business environment complexity is measured by the firm's perception concerning heterogeneity, diversity, instability, and uncertainty, which are external factors affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increasing in competitor numbers, new competitor's entry in the market, and technological change (Limpsurapong and Ussahawanitchakit, 2011; Prempre and Ussahawanitchakit, 2012; Luo, 2001; Zhou, Yim and Tse, 2005). This construct is developed as a new scale from the definition, literature review, and adapted from Limpsurapong and Ussahawanitchakit (2011) which includes four-item scale.

#### Moderating Variables

This research determines organizational well-roundedness and organizational learning capability, transformational orientation as the moderators of the relationships among each dimension of organizational creativity capability and its consequences. In this research, organizational well-roundedness is treated as a moderating variable which has a positive effect on the relationships among the five



dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system) and business practice effectiveness, organizational innovation success, and organizational excellence efficiency. While, organizational learning capability is treated as a moderating variable which has a positive effect on the relationships among the organizational creativity capability outcomes (i.e., business practice effectiveness, organizational innovation success, and organizational excellence efficiency), and firm performance. Besides, transformational orientation is treated as a moderating variable which has a positive effect on the relationships between the antecedent of organizational creativity capability and five dimensions of organizational creativity capability (new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system).

*Organizational well-roundedness.* An organization well-roundedness as the resources of the organization that involves a variety of aspects such as knowledge, skills and abilities related to the operation and management of the organization. It is assessed by applying knowledge and experience of organizational, identify weaknesses and recommend of strategy or improve organizational performance. The measure is created as a new scale with five -items developed from the definition and literature review.

*Organizational learning capability.* Organizational learning capability is defined as the ability of an organization to create and develop knowledge based on the commitment of the management systems perspective, knowledge absorption, knowledge transformation, knowledge transfer, and integration of all the processes in an organization and contribute to the effective implementation of both short and long term. It measured by Degree of create and improve knowledge, knowledge absorption, knowledge transformation, knowledge transfer, and integration of all the processes in an organization. This construct is developed as a new scale from the definition, literature review, and adapted from Sookaneknun and Ussahawanitchakit (2013) which includes three-item scale.

*Transformational orientation.* Transformational orientation as concept of organizational management, for change, is consistent with the flexibility of the organization to improve the policy, strategy, processes, practices, management, and



format structure so as appropriate situations and goals of organizations. It measured by flexible of administration and adjusting its work promptly in order to respond to changes of organizational happening all the time. The measure is created as a new scale with three -items developed from the definition and literature review.

#### Control Variables

*Firm age.* Firm age refers to the number of years a firm has been in operation, and the logic that informs their strategic behavior (Chuebang and Ussahawanitchakit, 2009). Also, different firm's age may present different organizational attributes and resource deployment (Chen and Huang, 2009). Firm age is measured by asking a closed question about the years in which the enterprise was founded. The measurement is an ordinal scale which is analyzed by multiple regression analysis. Therefore, the firm age is translated to a dummy variable. Thus, firm age is represented by a dummy variable, including 0 (ten years or less) and 1 (more than ten years).

*Firm size.* Firm size is defined as how large or small the firm is and, measured by the number of full-time employees in that firm, averaged over the current year (Judge and Zeithaml, 1992; Ussahawanitchakit, 2005). This research divided firms into two groups: small and medium scale, and large scale. Thus, firm size is represented by a dummy variable, including 0 (less than 50 persons) and 1 (51-100 persons, 101-150 persons and more than 150 persons).

#### Methods

The research collected the data by using a questionnaire mailed survey in which all constructs in the conceptual model are developed as new scales from a wide review of the literature, in order to create truthfulness and credibility. Moreover, two academic experts reviewed the instrument and adjust edit to the best possible scale measure. Following this further, the pre-test method is appropriately conducted to assert the validity and reliability of a questionnaire. In this case, the first set of thirty questionnaires that have been returned will be assigned to the pre-test, in order to verify the validity and reliability of each of the measures used in the questionnaire.



Consequently, these thirty questionnaires are included in the final data analysis for hypotheses and assumption testing of multiple regression analysis.

### Validity and Reliability

*Validity.* Validity is the degree to which a measure precisely represents the correct and accurate instrument (Hair and others, 2010). Especially, the validity testing of measurement in this research is accurately confirmed the concept or construct of study. Therefore, this research examinations the validity of instrument to confirm that a measure or set of measures accurately represents the concept of study. In this research, types of validity testing comprise face, content, and construct validity.

*The face and content validity.* Face validity is the extent to which the measure represents the scope of relevant content for the construct by individual adjudicators or experts (Trochim, 1999). Content validity is an inspection system to reflect the content universe to which the tool will be generalized. Both face and content validity are improved by a comprehensive evaluation of the literature questionnaires (Hair et al., 2010). Moreover, two professionals in academic research were requested to review and suggest necessary recommendations to review the instrument. In order to ensure that all constructs are sufficient to cover the contents of the variables (Appendix G). After those two experts designed the questionnaires, they were able to provide comments, improvements, and choose the best possible scale of measure corresponding with conceptual definitions.

*Construct validity.* Construct validity is defined as measure to confirm that it is consistent with the theoretical logic about the concept. It argues that if a measure behaves the way it is presumed to, the simplest form of intercorrelation with other variables, construct validity seems appear (Zikmund, 1997). The idea is that items which belong to similar theoretical concepts are supposed to be highly intercorrelated and they are expected to measure the concept of same variable, called convergent validity; whereas, different concepts of items should have low correlation with another item of dissimilar concept, called discriminant validity. So, each item must be loaded on a single factor only (Bosch et al., 2006). Therefore, exploratory factor analysis (EFA) is used in this research, to test the construct validity of all constructs by using an acceptable cut-off score at greater than 0.40 (Nunnally and Bernstein, 1994).



Table 5 shows the results of factor loadings of multi-item scales. It can be seen that each item of all variables is loaded on a single factor and the range of factor loadings is between 0.727-0.904. These values are greater than the cut-off score of 0.4 which indicate the acceptable construct validity (see also Appendix D). Moreover, each of the items in a questionnaire is subjectively assessed by two related academic experts to ensure the content validity (see Appendix G).

*Reliability.* Reliability refers to the degree to which measures are true from error and yield consistent results (Zikmund, 1997). Reliability indicates that similar results are obtained over time and across situations. Scale reliability is assessed by using Cronbach's alpha coefficients to ensure the internal consistency of the entire scale and individual items can be removed to improve reliability of the research instrument. The rationale for internal consistency is that individual item of the scale should all measure the same construct and they are expected to be highly intercorrelated (Hair et al., 2010). The general agreement for acceptable Cronbach's alpha coefficient should not be lower than 0.70 (Hair et al., 2006) and it is used as a criterion in this research. From Table 5, the findings of Cronbach's alpha coefficients are between 0.755-0.919 which exceeds the acceptable cut-off score. It can be concluded that the internal consistency of entire scale exists in this research (see also Appendix D).

Table 5 The Results of the Measure Validation

Constructs	Factor Loadings	Cronbach's Alpha
New Management Method (NMM)	.784 - .859	.882
Valuable Human Resource Development (VHR)	.829 - .843	.855
Novel Organizational Culture Formation (NOC)	.815 - .895	.826
Useful Operational Control Establishment (UOC)	.727 - .875	.831
Original Performance Evaluation System (OPE)	.814 - .857	.852
Business Practice Effectiveness (BPE)	.831 - .877	.868
Organizational Innovation Success(OIS)	.765 - .873	.755
Organizational Excellence Efficiency (OEE)	.736 - .861	.788
Firm Performance (FPF)	.760 - .893	.900



Table 5 (Continued)

Constructs	Factor Loadings	Cronbach's Alpha
Executive Proactive Vision (EPV)	.788 - .878	.900
Strategic Renewal Mindset (SRM)	.789 - .846	.886
Corporate Resource Readiness (CRR)	.794 - .851	.755
Business Environment Complexity (BEC)	.829 - .874	.879
Transformational Orientation (TFO)	.850 - .894	.840
Organizational Well-roundedness (OWR)	.859 - .904	.919
Organizational Learning Capability (OLC)	.823 - .892	.833

### Statistical Techniques

In this research, the basic assumptions of checking all the raw data for regression analysis using the ordinary least squares method (OLS) are the outlier, normality, linearity, autocorrelation, and homoscedasticity. These assumptions were tested and the results were acceptable. The basic assumptions were tested by the plotting of data including scatter plot, histogram, stem-and-leaf plot, normal Q-Q plot, detrended normal Q-Q plot, and box plot. All of these plots presented the evidences to support the appropriateness of regression model for the data. Moreover, the statistical testing was the Durbin-Watson test which was also used to test the autocorrelation. The Durbin-Watson values are ranged from 1.698 – 2.187. The results of basic assumptions testing are shown in Table 9, Table 11, and Table 13.

*Variance inflation factors (VIF's)* are used to test for the harshness of multicollinearity between the independent variables and Pearson's correlation. It offers an indication that measures in what way much the variance of an estimated regression coefficient is increased as a result of collinearity. For larger version VIF values indicate a high degree of multicollinearity among the independent variables. Altogether of values the VIF should be less than 10 were considered that the relationship between independent variables was not a problem (Hair et al., 2010; Stevens, 2002). The outcomes of regression analysis offer evidence that the VIF values of each regression





model are in the range of 1.139 – 5.071, well below the cut-off value of 10 recommended by Neter et al. (1985). Therefore, this VIF values special that there are no substantial multicollinearity problems encountered in this research.

*Correlation analysis* is the statistic to measure the strength of the linear dependence between two variables. There are two purposes of applying the Pearson's correlation, that is, to examine a bivariate-correlation and to explore the relationships between the variables, and to preliminarily check the presence of multicollinearity problem. The covariance of the two variables by the product of their standard deviation values is between +1 and –1, inclusively. Significantly, when the relationships among the independent variables are equal to or greater than 0.80, it is the first indication of a multicollinearity problem (Hair et al., 2010). The results of an investigation for the correlation matrix of all constructs (as shown in Table 7). As a result, found the associations between the independent variables are lower than 0.80 which mean that each independent variable is not correlated with all other independent variables at a high level. It is possible to show the multicollinearity problem. Hence, the initial assumption assumes that there are not multicollinearity problems in this research.

*Multiple regression analysis.* The ordinary least squares (OLS) regression analysis is used to test all hypotheses in a conceptual model. Regression analysis is appropriate to investigate the relationships among constructs which are based on data qualified as interval and categorical scales. From all proposed hypotheses, twenty statistical equations. Each equation conforms to the hypotheses development described in the previous chapter. The equations are depicted as shown below.

$$\textbf{Equation 1:} \quad BPE = \alpha_1 + \beta_1 NMM + \beta_2 VHR + \beta_3 NOC + \beta_4 UOC + \beta_5 OPE + \beta_6 FAE + \beta_7 FSI + \varepsilon_1$$

$$\textbf{Equation 2:} \quad BPE = \alpha_2 + \beta_8 NMM + \beta_9 VHR + \beta_{10} NOC + \beta_{11} UOC + \beta_{12} OPE + \beta_{13} OWR + \beta_{14} (NMM * OWR) + \beta_{15} (VHR * OWR) + \beta_{16} (NOC * OWR) + \beta_{17} (UOC * OWR) + \beta_{18} (OPE * OWR) + \beta_{19} FAE + \beta_{20} FSI + \varepsilon_2$$



$$\textbf{Equation 3:} \quad BPE = \alpha_3 + \beta_{21}OIS + \beta_{22}FAE + \beta_{23}FSI + \varepsilon_3$$

$$\textbf{Equation 4:} \quad OIS = \alpha_4 + \beta_{24}NMM + \beta_{25}VHR + \beta_{26}NOC + \beta_{27}UOC + \beta_{28}OPE + \beta_{29}FAE + \beta_{30}FSI + \varepsilon_4$$

$$\textbf{Equation 5:} \quad OIS = \alpha_5 + \beta_{31}NMM + \beta_{32}VHR + \beta_{33}NOC + \beta_{34}UOC + \beta_{35}OPE + \beta_{36}OWR + \beta_{37}(NMM*OWR) + \beta_{38}(VHR*OWR) + \beta_{39}(NOC*OWR) + \beta_{40}(UOC*OWR) + \beta_{41}(OPE*OWR) + \beta_{42}FAE + \beta_{43}FSI + \varepsilon_5$$

$$\textbf{Equation 6:} \quad OEE = \alpha_6 + \beta_{44}NMM + \beta_{45}VHR + \beta_{46}NOC + \beta_{47}UOC + \beta_{48}OPE + \beta_{49}FAE + \beta_{50}FSI + \varepsilon_6$$

$$\textbf{Equation 7:} \quad OEE = \alpha_7 + \beta_{51}NMM + \beta_{52}VHR + \beta_{53}NOC + \beta_{54}UOC + \beta_{55}OPE + \beta_{56}OWR + \beta_{57}(NMM*OWR) + \beta_{58}(VHR*OWR) + \beta_{59}(NOC*OWR) + \beta_{60}(UOC*OWR) + \beta_{61}(OPE*OWR) + \beta_{62}FAE + \beta_{63}FSI + \varepsilon_7$$

$$\textbf{Equation 8:} \quad OEE = \alpha_8 + \beta_{64}OIS + \beta_{65}FAE + \beta_{66}FSI + \varepsilon_8$$

$$\textbf{Equation 9:} \quad FPF = \alpha_9 + \beta_{67}BPE + \beta_{68}OIS + \beta_{69}OEE + \beta_{70}FAE + \beta_{71}FSI + \varepsilon_9$$

$$\textbf{Equation 10:} \quad FPF = \alpha_{10} + \beta_{72}BPE + \beta_{73}OIS + \beta_{74}OEE + \beta_{75}OLC + \beta_{76}(BPE*OLC) + \beta_{77}(OIS*OLC) + \beta_{78}(OEE*OLC) + \beta_{79}FAE + \beta_{80}FSI + \varepsilon_{10}$$

$$\textbf{Equation 11:} \quad NMM = \alpha_{11} + \beta_{81}EPV + \beta_{82}SRM + \beta_{83}CRR + \beta_{84}BEC + \beta_{85}FAE + \beta_{86}FSI + \varepsilon_{11}$$



$$\begin{aligned} \text{Equation 12: } NMM = & \alpha_{12} + \beta_{87}EPV + \beta_{88}SRM + \beta_{89}CRR + \beta_{90}BEC + \beta_{91}TFO + \\ & \beta_{92}(EPV*TFO) + \beta_{93}(SRM*TFO) + \beta_{94}(CRR*TFO) + \\ & \beta_{95}(BEC*TFO) + \beta_{96}FAE + \beta_{97}FSI + \varepsilon_{12} \end{aligned}$$

$$\begin{aligned} \text{Equation 13: } VHR = & \alpha_{13} + \beta_{98}EPV + \beta_{99}SRM + \beta_{100}CRR + \beta_{101}BEC + \beta_{102}FAE + \\ & \beta_{103}FSI + \varepsilon_{13} \end{aligned}$$

$$\begin{aligned} \text{Equation 14: } VHR = & \alpha_{14} + \beta_{104}EPV + \beta_{105}SRM + \beta_{106}CRR + \beta_{107}BEC + \beta_{108}TFO + \\ & \beta_{109}(EPV*TFO) + \beta_{110}(SRM*TFO) + \beta_{111}(CRR*TFO) + \\ & \beta_{112}(BEC*TFO) + \beta_{113}FAE + \beta_{114}FSI + \varepsilon_{14} \end{aligned}$$

$$\begin{aligned} \text{Equation 15: } NOC = & \alpha_{15} + \beta_{115}EPV + \beta_{116}SRM + \beta_{117}CRR + \beta_{118}BEC + \beta_{119}FAE + \\ & \beta_{120}FSI + \varepsilon_{15} \end{aligned}$$

$$\begin{aligned} \text{Equation 16: } NOC = & \alpha_{16} + \beta_{121}EPV + \beta_{122}SRM + \beta_{123}CRR + \beta_{124}BEC + \beta_{125}TFO + \\ & \beta_{126}(EPV*TFO) + \beta_{127}(SRM*TFO) + \beta_{128}(CRR*TFO) + \\ & \beta_{129}(BEC*TFO) + \beta_{130}FAE + \beta_{131}FSI + \varepsilon_{16} \end{aligned}$$

$$\begin{aligned} \text{Equation 17: } UOC = & \alpha_{17} + \beta_{132}EPV + \beta_{133}SRM + \beta_{134}CRR + \beta_{135}BEC + \beta_{136}FAE + \\ & \beta_{137}FSI + \varepsilon_{17} \end{aligned}$$

$$\begin{aligned} \text{Equation 18: } UOC = & \alpha_{18} + \beta_{138}EPV + \beta_{139}SRM + \beta_{140}CRR + \beta_{141}BEC + \beta_{142}TFO + \\ & \beta_{143}(EPV*TFO) + \beta_{144}(SRM*TFO) + \beta_{145}(CRR*TFO) + \\ & \beta_{146}(BEC*TFO) + \beta_{147}FAE + \beta_{148}FSI + \varepsilon_{18} \end{aligned}$$

$$\begin{aligned} \text{Equation 19: } OPE = & \alpha_{19} + \beta_{149}EPV + \beta_{150}SRM + \beta_{151}CRR + \beta_{152}BEC + \beta_{153}FAE + \\ & \beta_{154}FSI + \varepsilon_{19} \end{aligned}$$



**Equation 20:** 
$$OPE = \alpha_{20} + \beta_{155}EPV + \beta_{156}SRM + \beta_{156}CRR + \beta_{157}BEC + \beta_{158}TFO + \beta_{159}(EPV*TFO) + \beta_{160}(SRM*TFO) + \beta_{161}(CRR*TFO) + \beta_{162}(BEC*TFO) + \beta_{163}FAE + \beta_{164}FSI + \varepsilon_{20}$$

Where,

<i>NMM</i>	=	New Management Method
<i>VHR</i>	=	Valuable Human Resource Development
<i>NOC</i>	=	Novel Organizational Culture Formation
<i>UOC</i>	=	Useful Operational Control Establishment
<i>OPE</i>	=	Original Performance Evaluation System
<i>BPE</i>	=	Business Practice Effectiveness
<i>OIS</i>	=	Organizational Innovation Success
<i>OEE</i>	=	Organizational Excellence Efficiency
<i>FPF</i>	=	Firm Performance
<i>EPV</i>	=	Executive Proactive Vision
<i>SRM</i>	=	Strategic Renewal Mindset
<i>CRR</i>	=	Corporate Resource Readiness
<i>BEC</i>	=	Business Environment Complexity
<i>OWR</i>	=	Organizational Well-roundedness
<i>OLC</i>	=	Organizational Learning Capability
<i>TFO</i>	=	Transformational Orientation
<i>FAE</i>	=	<i>Firm Age</i>
<i>FSI</i>	=	Firm Size
$\varepsilon$	=	Error Term

## Summary

This chapter details the research methods of this research for gathering data and examining all constructs in the conceptual model to answer the research objectives and research questions. The contents engage the sample selection and data collection procedure including population and sample, data collection, and test of non-response bias. In fact, the 534 software businesses in Thailand are chosen as the sample. The



population and sample are chosen from the database of the Thailand Board of Investment drawn in January 2014. The data collection procedure is questionnaire mail survey to chief executive officer (CEO), president, managing director, or executive director of each tour firm in Thailand who are proposed to be key informants. Indeed, the descriptive, correlation, and the multiple regression analysis are processed to prove the 24 hypotheses. Moreover, the variable measurements are followed for each of all variables in the conceptual model. Table 6 details the variable measurements: the definition of each construct, operational variables, scale source, and sample questions and items as below. In addition, the instrumental verifications including tests of validity and reliability and the statistical analysis are presented. Accordingly, 20 equations are examined by statistical analysis in this chapter. The results of hypothesis testing are presented in the next chapter. In addition, next chapter describes respondent characteristics and descriptive statistics as well.



Table 6 The Definitions and Operational Variables of Constructs

Constructs	Definition	Operational Variables	Scale Source
<b>Dependent variable</b>			
Firm performance (FPF)	The perception of a firm concerning the outcomes of organizational capability towards the customer, the marketplace, and financial benefits.	Firm performance measures both financial performance and market performance, which are an organization's performance in their market segment over the past year, such as an increase in new customers, sales growth, market share, profitability, revenue growth, and return on investment.	Phokha and Ussahawanitchakit (2011)
<b>Independent Variable</b>			
New management method (NMM)	New management method relates to the ability of a firm to generate and develop new processes, new products, and new methods for operations.	To create new processes, and new methods of operations, promotion among staff of new concepts, new information and knowledge development, and support budget for creating new ideas.	New scale

Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Source
Valuable human resource development (VHR)	The firm's perception of the importance of human resource as a valuable asset. The staff will help the organization's operations more efficiently through knowledge, skills, talent, intellectual ability, and know-how that aligns with the organization's mission and strategic goals required to develop and release human expertise via development and training for increasing new knowledge, skills and the ability of employees.	Training and development for increasing new knowledge, skills and the ability of employees. Support staff with outstanding potential and ability by opportunities for career advancement.	New scale
Novel organizational culture formation(NOC)	The pattern of firm's beliefs in learning, exposure, exchange, and integration of new and beneficial things to improve the firm's operations, practices, and management in each function. It is value the organization employs to accept new ideas and processes which is important for organizations.	To support, promote and featured on perceiving and learning new issues and promotes in learning, exposure, exchange, and integration of new and beneficial things to the firm's operations.	New scale

Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Sources
Useful operational control establishment( UOC)	The firm's capability to focus on methods and develop a good tracking performance system to make the operation planned and effective.	To focus on the acquisition and selection methods and develop a good tracking performance system.	New scale
Original performance evaluation system (OPE)	Company is focused on the guidelines, approaches and methods of assessment measurement on operational suitability for the work to be successful, goal-achieved and efficient.	To commit and focus on the guidelines, approaches and methods of new assessment measurement on operational together with the recognized the importance of it.	New scale
<b>Consequent variable</b>			
Business practice effectiveness (BPE)	The upper-level achievement of an organization's operations regarding goal; criteria, mission, and vision of the organization (Ussahawanitchakit and Pongpearchan, 2010).	The level achievement of regarding goal; criteria, mission, and vision on organization operation.	Ussahawanitchakit and Pongpearchan, (2010).



Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Sources
Organizational Innovation Success (OIS)	The firm's ability to continuously produce, continuously service, sustain old customers, and attract new customers. Organization innovation is a strategy used with system technology, machinery, equipment, innovation, idea-generation, and opportunity-appreciation (Laforet and Tann, 2012; Ussahawanitchakit and Kittikunchotiwut, 2013).	To apply new way, new management technique, and develop new products/service to continuously and customers acceptance.	Kittikunchotiwut and Ussahawanitchakit (2013).
Organizational excellence efficiency (OEE)	Organizational goals achieved under the limited resources available, thereby reducing the time of the operation for efficiently and effectively fulfilling the needs of customers with accurate operational goals (Kumar and Gulati, 2010; Ostroff and Schmitt, 1993; Dew, 1994; Gaggl and Steindi, 2008).	Develops a different format, procedure, and product that customers require and respond to customer immediately. Uses firm's resources properly and reduce the missing consistent with the firm's target. Moreover, with high standard operations than other firms in the same industry.	New scale

Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Sources
<b>Antecedent variables</b>			
Executive proactive vision (EPV)	The personality of the CEO team with a forward-looking perspective involving introducing new products or services ahead of the competition, focusing on innovation, technology, newness, and dynamic technology	Firm's vision as proactive and forward to development product, utilization technology and innovation.	Phong-inwong and Ussahawanitchakit (2012).
Strategic renewal mindset (SRM)	The transformation of organizations through the renewal of key ideas on which they are built and the viability of organizations that have the capacity to frequently improve their alignment with internal and external demands. These include significant changes to an organization's business or corporate level strategy or structure.	To believe, focus, and promotes on continuous developing, improving, applying new technology, analyze and estimate business environment contributes to high capability.	New scale

Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Sources
Corporate resource readiness (CRR)	The fruitfulness of the both tangible and intangible factors to support the work of business processes to achieve corporate target.	Tangible and intangible resources such as information, resource, technique, know-how, and opportunity.	Kittikunchotiwut and Ussahawanitchakit (2013).
Business environment complexity (BEC)	The firm's perception concerning heterogeneity, diversity, instability, and uncertainty, which are external factors affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increasing of competitor numbers, new competitor's entry in the market, and technological change .	Degree of the change the external organizations affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increasing of competitor numbers, new competitor's entry in the market, and technological change	Limpsurapong and Ussahawanitchakit (2011)

Table 6 (Continued)

Constructs	Definition	Operational Variables	Scale Sources
<b>Moderating variables</b>			
Organizational well-roundedness (OWR)	The resources of the organization that involves a variety of aspects such as knowledge, skills and abilities related to the operation and management of the organization.	To apply knowledge and experience of organizational, identify weaknesses and recommend of strategy or improve organizational performance.	New scale
Organizational learning capability (OLC)	The organization's ability to create and improve knowledge based on managerial commitment, systems perspective, knowledge absorption, knowledge transformation, knowledge transfer, and integration of all the processes in an organization in the order to maintain effective operations in both the short and long-term.	Degree of create and improve knowledge, knowledge absorption, knowledge transformation, knowledge transfer, and integration of all the processes in an organization.	Sookaneknun and Ussahawanitchakit (2013)

Table 6 (Continued)

<b>Constructs</b>	<b>Definition</b>	<b>Operational Variables</b>	<b>Scale Sources</b>
Transformational orientation (TFO)	The concept of organizational management, for change, consistent with the flexibility of the organization to improve the policy, strategy, processes, practices, management, and format structure so as appropriate situations and goals of organizations.	Be flexible of administration and adjusting its work promptly in order to respond to changes of organizational happening all the time	New scale
<b>Control Variables</b>			
Firm age (FAE)	The measurement as the number of years that the firm is in operation.	Dummy variable 0 = below 10 years old, 1 = higher on equal to 10 years old.	Chuebang and Ussahawanitchakit, (2009)
Firm size (FIS)	The number of employees currently registered as full-time.	Dummy variable 0= 50 employees or less than, 1= more than 50 employees	Ussahawanitchakit (2005)



## **Organization of the Dissertation**

This research is organized in five chapters. Chapter one provides a brief overview consisting of motivation in the research, role of variables, theory, expected contribution, and methodology; purposes of the research, research questions, scope of the research, and organization of the research. Chapter two presents empirical and theoretical literature to provide a theoretical framework explaining a conceptual model and developing hypotheses. Chapter three describes a research methodology which includes sample selection, data collection procedure, a development of data-collected instruments, variable definitions, measurements, and statistical methods in hypotheses testing. Chapter four presents the results of the statistical analysis. Chapter five draws a conclusion, theoretical contributions, managerial implications, limitations, and direction for further research.



## **CHAPTER IV**

### **RESULTS AND DISCUSSION**

The previous chapter explains research methods which include the sample selection and procedure of data collection. Also, data analysis and hypothesis testing are described. Next, the organization of this chapter is organized as follows. Firstly, this chapter presents the response characteristics, the sample characteristics, and correlation analysis. Secondly, the hypothesis testing and the results are detailed. Finally, the summary of all hypotheses testing is given in Table 14.

#### **Respondent Characteristics**

##### **Respondent Characteristics**

The respondents are Chief Executive Officer (CEO) or managing director who has the most comprehensive knowledge regarding firm characteristics, corporate strategy, and firm performance. The respondent characteristics are described by the demographic characteristics, including gender, age, marital status, education level, average monthly income, working experience, and current position.

Table B1 (see Appendix B) shows the demographic characteristics of 104 respondents with returned mail surveys and presents in detail the demographic information as follows. Approximately 59.60 percent of respondents are female. The span of age of respondents is 30 - 40 years old (47.10 percent). The majority of respondents are single (50.00 percent). A total of 53.80 percent earned a higher than bachelor's degree or equal. Of the respondents, 34.60 percent have working experiences more than 15 years. The average monthly income of respondents is less than 50,000 Baht (36.50 percent). Finally, the majority of the respondents hold a position as managing director 50.00 percent.



### Firm Characteristics

In addition, Table C1 (see Appendix C) shows the particulars of the characteristics of the software businesses in Thailand. The maximum percentage of business characteristics are as follows: most forms of business are the limited/public company (89.40 percent). Addition, approximately 38.50 percent of firm respondents has been operating in a software business 5-10 years. The majority of the firm respondents have operating capital less than 25,000,000 Baht (41.30 percent). The most of firm respondents have an average annual income of more than 50,000,000 Baht (36.50 percent). In addition, 70.20 percent of the firm employs less than 50 full-time employees.

### Correlation Analysis

This research employs a bivariate correlation analysis of Pearson Correlation on all variables for two purposes. The first purpose is to explore the relationships among variables. Another purpose is to verify the multicollinearity problem. A multicollinearity problem exists when inter-correlation between independent variables exceeds 0.80 (Hair et al., 2006). In this research, the bivariate correlation procedure is subject to a two-tailed test of statistical significance at 3 levels as  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ . The results of the correlation analysis of all variables in this research are shown in Table 7.

From Table 7 it can be shown that the all of five dimensions of organizational creativity capability have significant positive relationships with business practice effectiveness, organizational innovation success, organizational excellence efficiency and firm performance ( $r = 0.368 - 0.789$ ,  $p < 0.01$ ). For the antecedents, these variables have significantly related to all dimensions of organizational creativity capability ( $r = 0.240$ ,  $p < 0.05 - 0.671$ ,  $p < 0.01$ ). The moderating effects of, organizational well-roundedness, organizational learning capability, and transformational orientation have correlations with all independent variables between  $0.189$ ,  $p < 0.10 - 0.641$ ,  $p < 0.01$ . In addition to the relationships among variables, the correlations between independent variables in the conceptual model are in the range of  $0.207 - 0.789$ ,  $p < 0$ .





Table 7 Descriptive Statistics and Correlation Matrix of Organizational Creativity Capability and all Constructs

Variables	NMM	VHR	NOC	UOC	OPE	BPE	OIS	OEE	FPF	EPV	SRM	CRR	BEC	OWR	OLC	TFO	FAE
Mean	3.95	3.90	4.33	4.15	3.94	3.92	4.05	4.29	4.07	4.02	4.15	4.27	4.13	4.08	4.18	4.18	N/A
S.D.	0.70	0.68	0.53	0.63	0.70	0.73	0.63	0.45	0.66	0.70	0.63	0.48	0.65	0.72	0.57	0.51	N/A
VHR	.784***																
NOC	.635***	.798***															
UOC	.561***	.578***	.731***														
OPE	.679***	.693***	.694***	.726***													
BPE	.787***	.789***	.701***	.583***	.686***												
OIS	.624***	.690***	.669***	.454***	.495***	.623***											
OEE	.368***	.476***	.460***	.404***	.561***	.522***	.360***										
FPF	.459***	.593***	.624***	.572***	.627***	.662***	.531***	.668***									
EPV	.547***	.638***	.671***	.613***	.597***	.712***	.625***	.589***	.793***								
SRM	.563***	.631***	.585***	.510***	.601***	.665***	.509***	.561***	.675***	.715***							
CRR	.374***	.420***	.373***	.328***	.455***	.397***	.354***	.486***	.440***	.347***	.298***						
BEC	.335***	.400***	.324***	.240***	.353***	.355***	.347***	.338***	.367***	.351***	.474***	.134					
OWR	.577***	.635***	.641***	.557***	.613***	.712***	.600***	.581***	.718***	.746***	.773***	.349***	.427***				
OLC	.546***	.420***	.317***	.232***	.309***	.501***	.507***	.189	.283***	.377***	.336***	.436***	.246***	.441***			
TFO	.565***	.471***	.409***	.317***	.421***	.484***	.413***	.177	.332***	.421***	.424***	.207***	.270***	.416***	.292***		
FAE	-.055	-.113	-.138	-.121	-.063	-.117	-.124	-.134	.006	-.039	-.040	-.067	-.060	-.061	-.053	-.029	
FIS	-.050	-.050	-.138	-.143	-.022	-.065	-.134	-.140	-.141	-.143	-.011	-.020	.043	-.143	-.094	.017	.337***

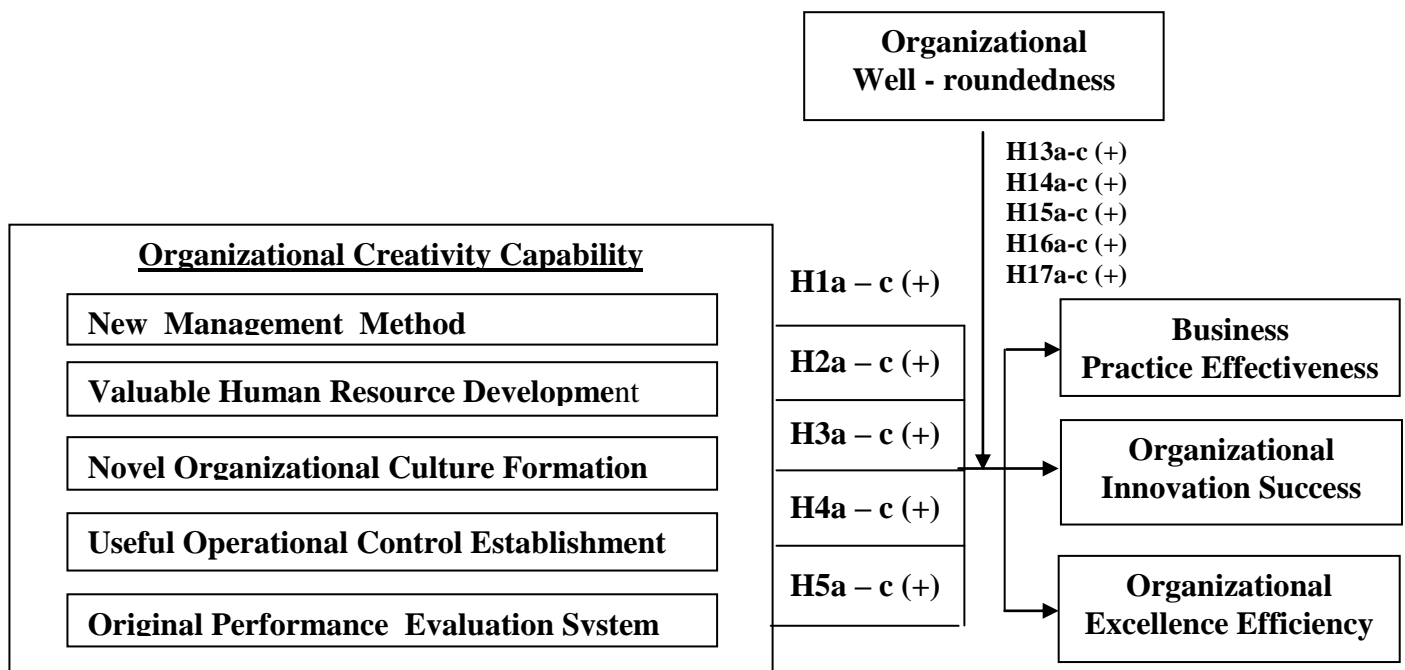
\*\*\* Correlation is significant at the 0.01 level (2-tailed)

\*\* Correlation is significant at the 0.05 level (2-tailed)

## Hypotheses Testing and Results

This research employs the Ordinary Least Squares (OLS) regression to investigate the hypothesized relationships. Also, the regression equation is a linear combination of the independent variables that best explains and predicts the dependent variable. Furthermore, two dummy variables of firm age and firm size are also included in the equation. There are twenty equations in this research. The results of descriptive statistics and hypothesis testing are discussed according to the regression equations as follows:

Figure 5 The Relationships among Each Dimension of Organizational Creativity Capability, Its Consequences, and the Moderating Role of Organizational Well-roundedness



The Relationships among Each Dimension of Organizational Creativity Capability, Its Consequences, and the Moderating Role of Organizational Well-roundedness

Figure 5 shows the relationships among organizational creativity capability and its consequences which are proposed in Hypotheses 1(a-c)-5(a-c). The relationship in each hypothesis is proposed in a positive direction. These hypotheses can be transformed into the regression equation in Model 1, 4, and 6. In addition, the moderating role of organizational well-roundedness is proposed to positively influence on the relationships among each of five dimensions of organizational creativity capability, which are presented in Hypotheses 13(a-c)-17 (a-c). According to these hypotheses, regression equations in Model 2, 5, and 7 are developed.

Table 8 Descriptive Statistics and Correlation Matrix of Organizational Creativity Capability, Its Consequences, and Organizational Well-roundedness

Variable s	NMM	VHR	NOC	UOC	OPE	BPE	OIS	OEE	OWR
Mean	3.95	3.90	4.33	4.15	3.94	3.92	4.05	4.29	4.08
S.D.	0.70	0.68	0.53	0.63	0.70	0.73	0.63	0.45	0.72
VHR	.784***								
NOC	.635***	.798***							
UOC	.561***	.578***	.731***						
OPE	.679***	.693***	.694***	.726***					
BPE	.787***	.789***	.701***	.583***	.686***				
OIS	.624***	.690***	.669***	.454***	.495***	.623***			
OEE	.368***	.476***	.460***	.404***	.561***	.522***	.360***		
OWR	.577***	.635***	.641***	.557***	.613***	.712***	.600***	.581***	
FAE	-.055	-.113	-.138	-.121	-.063	-.117	-.124	-.134	-.061
FIS	-.050	-.050	-.138	-.143	-.022	-.065	-.134	-.140	-.143

Table 8 indicates the correlations among each dimension of organizational creativity capability and its consequences. For the first dimension, the results identify the positive correlation between new management method and business practice



effectiveness ( $r = 0.787$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.624$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.368$ ,  $p < 0.01$ ). For the second dimension, valuable human resource development is significantly and positively correlated to business practice effectiveness ( $r = 0.789$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.690$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.476$ ,  $p < 0.01$ ). For the third dimension, novel organizational culture formation is significantly and positively correlated to business practice effectiveness ( $r = 0.701$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.669$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.460$ ,  $p < 0.01$ ). For the fourth dimension, useful operational control establishment has a significant and positive correlation with business practice effectiveness ( $r = 0.583$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.454$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.404$ ,  $p < 0.01$ ). For the fifth dimension, original performance evaluation system has a significant and positive correlation with business practice effectiveness ( $r = 0.686$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.495$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.561$ ,  $p < 0.01$ ). In this research, new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, original performance evaluation system, and organizational well-roundedness are treated as independent variables, which the results of the correlation analysis show that the inter-correlation coefficient are 0.561 -0.798 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 9 also points out the maximum value of VIF is 5.071, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of multicollinearity problems.

The results of the OLS regression analysis are explained in Table 9. Firstly, the results indicates that the new management method (the first dimension) insignificant and positively related to two outcomes: business practice effectiveness ( $H1a: \beta_1 = 0.428$ ,  $p < 0.01$ ), organizational innovation success ( $H1b: \beta_{24} = 0.261$ ,  $p < 0.05$ ). In terms of new management method, according to Hargadon (2002), the new management method is greater the diversity of sources the firm has more likely it is that the insight gained from these sources are recombined in creative and valuable ways to try new management techniques. Thus, the new management method is defined as an ability of a



firm to try new management ideas and methods. Moreover, new management methods search for new ideas to combine these with existing knowledge and new techniques which lead to business effectiveness (McNelly, 2009). Likewise, Macduffie (1995) mentions that new management methods aim to create either superior outputs or organizational innovation. *Thus, Hypotheses 1a and 1b are supported.*

Table 9 Results of the Relationships Organizational Creativity Capability and Its Consequences and Organizational Well-roundedness

Independent Variables	Dependents Variables					
	BPE		OIS		OEE	
	Equation 1	Equation 2	Equation 4	Equation 5	Equation 6	Equation 7
NMM(H1a-c)	<b>.428***</b> (.089)	<b>.437***</b> (.087)	<b>.261**</b> (.118)	<b>.207*</b> (.117)	-.180 (.139)	.111 (.131)
VHR(H2a-c)	<b>.296***</b> (.111)	<b>.201*</b> (.109)	<b>.273*</b> (.147)	<b>.276*</b> (.147)	.253 (.174)	.099 (.164)
NOC(H3a-c)	.105 (.105)	.076 (.104)	<b>.401***</b> (.138)	<b>.304**</b> (.141)	.035 (.164)	-.003 (.157)
UOC (H4a-c)	.015 (.088)	-.003 (.087)	-.093 (.116)	-.123 (.117)	-.075 (.137)	-.057 (.130)
OPE (H5a-c)	.106 (.090)	.007 (.091)	-.041 (.162)	-.054 (.123)	<b>.532***</b> (.141)	<b>.326**</b> (.137)
OWR		<b>.263***</b> (.070)		<b>.257***</b> (.094)		<b>.377***</b> (.105)
NMM*OWR(H13a-c)		-.041 (.093)		-.081 (.126)		-.084 (.140)
VHR*OWR(H14a-c)		-.008 (.102)		.125 (.138)		.088 (.154)
NOC*OWR(H15a-c)		.132 (.116)		-.178 (.157)		<b>.294*</b> (.174)
UOC*OWR(H16a-c)		-.139 (.086)		<b>.194 *</b> (.117)		<b>.450***</b> (.130)
OPE*OWR(H17a-c)		.005		.080		<b>.204*</b>



Table 9 (Continued)

Independent Variables	Dependents Variables					
	BPE		OIS		OEE	
	Equation 1	Equation 2	Equation 4	Equation 5	Equation 6	Equation 7
<b>FIA</b>		(.075)		(.101)		<b>(.112)</b>
	-.080	-.136	-.013	-.024	-.101	-.165
	(.117)	(.111)	(.156)	(.151)	(.184)	(.167)
<b>FIS</b>	.007	.037	-.160	-.072	-.248	-.292
	(.122)	(.117)	(.162)	(.159)	(.192)	(.176)
<b>Adjusted R<sup>2</sup></b>	<b>.721</b>	<b>.760</b>	<b>.512</b>	<b>.560</b>	<b>.314</b>	<b>.456</b>
<b>Durbin-Watson</b>	<b>1.922</b>	<b>1.810</b>	<b>2.187</b>	<b>1.947</b>	<b>2.060</b>	<b>1.963</b>
<b>Maximum VIF</b>	<b>4.533</b>	<b>5.071</b>	<b>4.533</b>	<b>5.071</b>	<b>4.533</b>	<b>5.071</b>

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Moreover, the new management method is not significantly related to organizational excellence efficiency (H1c:  $\beta_{44} = -0.180$ ,  $p > 0.10$ ). Even though the unique management method differentiates firms from other competing firms, it is complex, high cost, and difficult tangibly evaluates the quality. As a consequence, it may not significantly affect excellence efficiency of business (De Brentani, 1995). **Thus, Hypotheses 1c is not supported.**

Secondly, it is found that valuable human resource development (the second dimension) is significantly and positively related to business practice effectiveness (H2a:  $\beta_2 = 0.296$ ,  $p < 0.01$ ), organizational innovation success (H2b:  $\beta_{25} = 0.273$ ,  $p < 0.10$ ). This is consistent with Dakhli and De Clercq (2004) suggests that the value of intangible assets, such as human capital, have a strong support for the positive relationship between human capital value and innovation. Moreover, Bayo-Moriones and Merino-Diaz De Cerio (2004) and Wright and Snell (2005) found that human capital value improves productivity, and thus, create additional competency development. The value of human capital increases multifold when all employees learn and follow the best practices (Murthy and Abeysekera, 2007). These findings are consistent with Way and Johnson (2005) who found that the results indicate a strong relation between strategic management human resource management and organizational



strategies (e.g., human resource management policies, practices, systems, etc.), and organizational effectiveness. **Thus, Hypotheses 2a and 2b are supported.**

Moreover, the valuable human resource development is not significantly related to organizational excellence efficiency ( $H2c: \beta_{45} = 0.253, p > 0.10$ ). In terms of valuable human resource development, according to Marimuthu et, al. (2009) proposes that human capital investment has various activities which improve the quality (productivity) of the worker. On the one hand, human capital investment has complex, long-term, and high cost. As a consequence, it may not significantly affect excellence efficiency of business. **Thus, Hypothesis 2c is not supported.**

Thirdly, the findings suggest that novel organizational culture formation (the third dimension) has significant relationships with organizational innovation success ( $H3c: \beta_{26} = 0.401, p < 0.01$ ). This is consistent with Martins and Terblanche (2003) found that corporate culture had a significant to moderate the organizational members in generate creativities and new innovation within organization. The elements that determine the corporate culture and facilitate creation and innovation comprise strategy, structure, instrument, and communication. The attributes of these elements must clarity and focus on creation and innovation relate to the goals and objective of the firms.

**Thus, Hypothesis 3b is supported.** Also, novel organizational culture formation has not significant relationships with business practice effectiveness ( $H3a: \beta_3 = 0.105, p > 0.10$ ), and organizational excellence efficiency ( $H3c: \beta_{46} = 0.035, p > 0.10$ ).

Organizational culture is an important issue because it is the critical factor controlling an organization's capacity, effectiveness, survival and success or fail of organizational (Schein, 2004; McShane and Von Glinow, 2003). With regard to novel organizational culture formation may be not cause practice effectiveness and excellence efficiency of organizational because new organizational culture might not inappropriate and inconsistent with the goals or objectives of the organization. **Thus, Hypotheses 3a and 3c are not supported.**

Fourthly, the findings suggest that useful operational control establishment (the third dimension) has no significant relationships with all three consequences, including business practice effectiveness ( $H4a: \beta_4 = 0.015, p > 0.10$ ), organizational innovation success ( $H4b: \beta_{27} = -0.093, p > 0.10$ ), and organizational excellence efficiency ( $H4c: \beta_{47} = -0.075, p > 0.10$ ). May be due to operational controlling may break new ideas of



employees in the firm or interrupt work processes of the firm. This is consistent with prior research found that the controlling had a negative effect on creative capability, which firms without creative competency, the innovation, efficiency, and effectiveness of the firms cannot established congruent with Jeacle and Carter (2012). **Thus, Hypotheses 4a , 4b and 4c are not supported.**

Finally, the research reveals that the original performance evaluation system is significantly and positively associated with organizational excellence efficiency ( $\beta_{48} = 0.532, p < 0.01$ ). Moreover, performance evaluation is very important in an organization because it supports frame phenomena in ways that effect our observations and explanations of them, which in turn, affect decisions and actions (Johns, 2006). **Thus, Hypotheses 5c is supported.** However, original performance evaluation system has no significant relationship with business practice effectiveness ( $H5a:\beta_5 = 0.106, p > 0.10$ ), and organizational innovation success ( $H5b:\beta_{28} = -0.041, p > 0.10$ ). However, the organizational output measurement has diversity of measure such as financials, customers, resource utilization, business processes which are not clearly in evaluation (Chenhall, 2005). On the other hand, in the appraisal does not directly affect to the innovation and effectiveness in short-term. The assessment must take feedback of evaluation output for improving. **Thus, Hypotheses 5a and 5b are not supported.**

Additionally, the results of control variables indicate that firm age and firm size are not related to all dimensions of organizational creativity capability. It can be interpreted that a longer period of time in a business and a higher number of employees do not significantly affect the level of business practice effectiveness, organizational innovation success, and organizational excellence efficiency.

#### The Moderating Role of Organizational Well-roundedness

From the findings in Table 9, the moderating effect of organizational well-roundedness on the relationships among each of five dimensions of organizational creativity capability and three consequences are as follows. Organizational well-roundedness has no significant moderating effects on the relationships among new management method and all of three outcomes: business practice effectiveness ( $H13a:\beta_{14} = -0.041, p > 0.10$ ), organizational innovation success ( $H13b:\beta_{37} = -0.081, p > 0.10$ ), and organizational excellence efficiency ( $H13c:\beta_{57} = -0.084, p > 0.10$ ). **Thus, Hypotheses 13a, 13b, and 13c are not supported.**





In addition, organizational well-roundedness has no significant moderating effects on the relationships among valuable human resource development and all of three outcomes: business practice effectiveness (H14a:  $\beta_{15} = -0.008$ ,  $p > 0.10$ ), organizational innovation success (H14b:  $\beta_{38} = 0.125$ ,  $p > 0.10$ ), and organizational excellence efficiency (H14c:  $\beta_{58} = 0.088$ ,  $p > 0.10$ ). **Thus, Hypotheses 14a, 14b, and 14c are not supported.**

In addition, organizational well-roundedness has no significant moderating effects on the relationships among novel organizational culture formation and two outcomes : business practice effectiveness (H15a:  $\beta_{16} = 0.132$ ,  $p > 0.10$ ), and organizational innovation success (H15b:  $\beta_{39} = -0.178$ ,  $p > 0.10$ ). **Thus, Hypotheses 15a and 15b are not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among novel organizational culture formation and organizational excellence efficiency ( $\beta_{59} = 0.294$ ,  $p < 0.10$ ). **Thus, Hypothesis 15c is supported.**

Next, the results also present the non-significance of the moderating effects of organizational well-rounded on the relationship between useful operational control establishment and business practice effectiveness (H16a:  $\beta_{17} = -0.139$ ,  $p > 0.10$ ). **Thus, Hypothesis 16a is not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among useful operational control establishment and two outcomes: organizational innovation success (H16b:  $\beta_{40} = 0.194$ ,  $p < 0.10$ ), and organizational excellence efficiency (H16c:  $\beta_{60} = 0.450$ ,  $p < 0.01$ ). **Thus, Hypotheses 16b and 16c are supported.** Similarly, organizational well-roundedness has no significant moderating effects on the relationships between original performance evaluation system and two outcomes: business practice effectiveness (H17a:  $\beta_{18} = 0.005$ ,  $p > 0.10$ ), and organizational innovation success (H17b:  $\beta_{41} = 0.080$ ,  $p > 0.10$ ). **Thus, Hypotheses 17a and 17b are not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among original performance evaluation system and organizational excellence efficiency (H17c:  $\beta_{61} = 0.204$ ,  $p < 0.10$ ). **Thus, Hypothesis 17c is supported.**

Summarize of the moderating effect of organizational well-roundedness on the relationships between each of five dimensions of organizational creativity capability

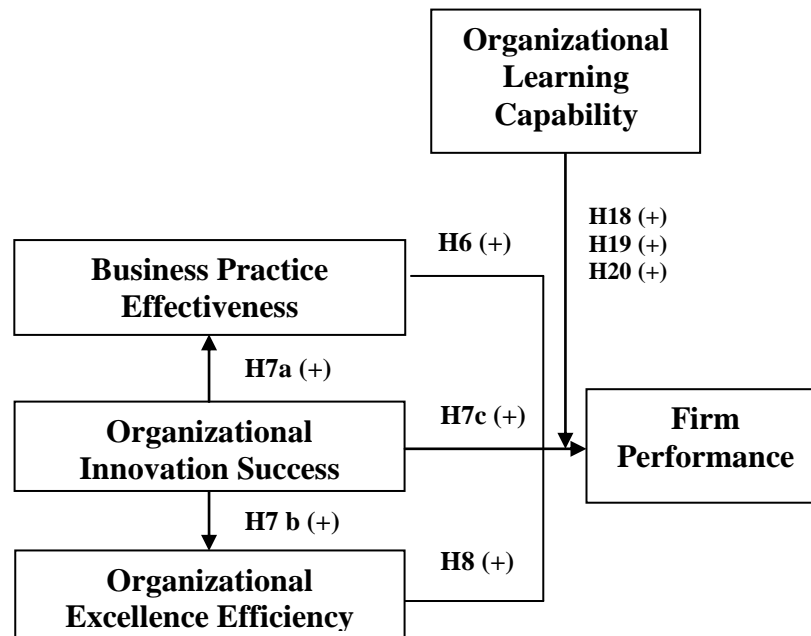


and three consequences are as follows. The moderating effect testing consists of two parts. The first one is organizational well-roundedness plays a significant and positive moderating role (***Hypotheses 15c, 16b, 16c and 17c are supported***) This result, according prior research suggests that organizational well-roundedness encourages organizations to attain its target (Ford and Staples, 2006; Theriou and Chatzoglou, 2008). Moreover, organizational well-roundedness is the activity that is performed to produce goods or services by changing inputs into outputs (Ghrai, 2011) is able to apply in the development of work process (Cintrón, Rabelo and Housel, 2008), design, new products and new services (Xu and Bernard, 2011; Zhang, 2010). Most especially, organization well-roundedness is more focused on enhancing firm effectiveness and efficiency through process improvement, planning, and operations (Mentzer, Stank and Esper, 2008). In contrast, the organizational well-roundedness plays a no significant moderating role (***Hypotheses 13a, 13b, 13c, 14a, 14b, 14c, 15a, 15b, 16a, 17a and 17b are not supported***) The well-roundedness involves a variety of aspects knowledge (customer requirement, technology), skills, expertise and other competencies related to operational management of organizational. However, the organization may be breadth well-roundedness but not depth. The organization cannot see the problem or drawback clearly that could not decrease mistake in work operations, and improve efficiency in developing new products or services (Ambos, Ambos and Schlegelmilch 2006; Chen and Huang, 2009).

The Relationships among Business Practice Effectiveness, Organizational Innovation Success, Organizational Excellence Efficiency, Firm Performance, and Organizational Learning Capability as a moderator



Figure 6 The Relationships among Outcomes of Organizational Creativity  
Capability, Firm Performance and Organizational Learning  
Capability



According to Figure 6 the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency , and firm performance are shown. The moderating role of organizational learning capability is also presented. This research proposes the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency , firm performance in positive directions which are in Hypotheses 6-8. These hypotheses are transformed to the regression equations 3, 8, and 9. Furthermore, the moderating effects of organizational learning capability on those relationships are also proposed in positive directions which are indicated in Hypotheses 18-20, and in regression equation 10.



Table 10 Descriptive Statistics and Correlation Matrix of three Outcomes of Organizational Creativity Capability, Firm Performance and Organizational Learning Capability

Variables	BPE	OIS	OEE	FPF	OLC
<b>Mean</b>	3.92	4.05	4.29	4.07	4.18
<b>S.D.</b>	0.73	0.63	0.45	0.66	0.57
<b>OIS</b>	.623***				
<b>OEE</b>	.522***	.360***			
<b>FPF</b>	.662***	.531***	.668***		
<b>OLC</b>	.501***	.507***	.189	.283***	
<b>FAE</b>	-.117	-.124	-.134	.006	-.053
<b>FIS</b>	-.065	-.134	-.140	-.141	-.094

Note: \*\*\*  $p < 0.01$

Table 10 illustrates the correlations among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. As can be seen from Table 10, the results demonstrate the positive correlation between business practice effectiveness and organizational innovation success ( $r = 0.623$ ,  $p < 0.01$ ), organizational excellence efficiency ( $r = 0.522$ ,  $p < 0.01$ ), and firm performance ( $r = 0.662$ ,  $p < 0.01$ ). Likewise, organizational innovation success is significantly and positively correlated to organizational excellence efficiency ( $r = 0.360$ ,  $p < 0.01$ ), and firm performance ( $r = 0.531$ ,  $p < 0.01$ ). Moreover, organizational excellence efficiency has a significant and positive correlation with firm performance ( $r = 0.668$ ,  $p < 0.01$ ). For the organizational learning capability as a moderator, it has a significant and positive correlation with business practice effectiveness ( $r = 0.501$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.507$ ,  $p < 0.01$ ), organizational excellence efficiency ( $r = 0.189$ ,  $p < 0.10$ ), and firm performance ( $r = 0.283$ ,  $p < 0.01$ ). In this research, business practice effectiveness, organizational innovation success, organizational excellence efficiency, and organizational learning capability are treated as independent variables, which the results of the correlation analysis show that the



inter-correlation coefficient are 0.189 -0.623 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 11 also suggests the maximum value of VIF is 2.475, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of the multicollinearity problems.

Table 11 Results of the Relationships among Outcomes of Organizational Creativity Capability, Firm Performance, and Organizational Learning Capability

Independent Variables	Dependents Variables			
	BPE	OEE	FPF	
	Equation 3	Equation 8	Equation 9	Equation 10
<b>BPE<sub>(H6)</sub></b>			<b>.341***</b> (.087)	<b>.379***</b> (.099)
<b>OIS<sub>(H7a-c)</sub></b>	<b>.621***</b> (.079)	<b>.342***</b> (.094)	<b>.168**</b> (.080)	<b>.184**</b> (.087)
<b>OEE<sub>(H8)</sub></b>			<b>.438***</b> (.074)	<b>.417***</b> (.076)
<b>OLC</b>				-.067 (.084)
<b>BPE*OLC<sub>(H18)</sub></b>				.043 (.089)
<b>OIS*OLC<sub>(H19)</sub></b>				.007 (.080)
<b>OEE*OLC<sub>(H20)</sub></b>				-.066 (.077)
<b>FAE</b>	-.109 (.175)	-.143 (.208)	<b>.327 **</b> (.140)	<b>.342 **</b> (.144)
<b>FSI</b>	.078 (.181)	-.154 (.215)	-.191 (.145)	-.221 (.149)
<b>Adjusted R<sup>2</sup></b>	<b>.373</b>	<b>.117</b>	<b>.601</b>	<b>.593</b>
<b>Durbin-Watson</b>	<b>2.080</b>	<b>1.928</b>	<b>2.053</b>	<b>2.140</b>
<b>Maximum VIF</b>	<b>1.139</b>	<b>1.139</b>	<b>1.974</b>	<b>2.475</b>

Note: \*\* p < 0.05, \*\*\* p < 0.01



For the hypothesis testing, the results of OLS regression analysis are identified in Table 11. Surprisingly, it was found that business practice effectiveness is and positively related to firm performance ( $H6:\beta_{67} = 0.341, p < 0.01$ ). This result provides that firms with practice effectiveness tend to gain greater firm performance. In addition, this result is consistent with the evidence of previous studies which found that the effectiveness related to the firm's strategy to generate a sustainable business growth (Bolat and Yilmaz, 2009; Mouzas, 2006). Moreover, the effectiveness has an impact on the overall performance (Kumar and Gulati, 2010). Furthermore, based on the resource-based view, performance is a result of the firm's capability and resource (Barney, 1991; Holcomb and Hitt, 2007). Consequently, partners' knowledge is acquired by implements strategic outsourcing is the capability (Barney, 1991) which tends to acquire good performance. Furthermore, the effectiveness has an influence on the overall performance (Kumar and Gulati, 2010). **Thus, Hypothesis 6 is supported.**

Moreover, the analyses indicate that organizational innovation success is significant and positively related to business practice effectiveness ( $H7a:\beta_{21} = 0.621, p < 0.01$ ), organizational excellence efficiency ( $H7b:\beta_{64} = 0.342, p < 0.01$ ), and firm performance ( $H7c:\beta_{68} = 0.168, p < 0.05$ ). This is consistent with Haelermans and White (2012) who found that innovations are positively related to efficiency. Moreover, they found that profiling, informative, process and education chain innovations are significantly related to efficiency. This demonstrated how a particular organization was able to support flexibility and innovation as well as efficiency (Newell et al., 2003). This is consistent with the study of Naidoo and Vikash (2010) who suggested that innovation is a form of incremental innovation, focusing between innovations as improvements in product design, placement, promotion or pricing, and the likelihood of survival. In addition, Tohidi and Jabbari (2012) found that innovation is the success key for organizations. For these reasons, it is appropriate to support the earlier finding in which organization innovation success has a relationship to efficiency, effectiveness, and the goal of the business. **Thus, Hypotheses 7a, 7b, and 7c are supported.**

The finding indicates that only organizational excellence efficiency is significantly and positively related to firm performance ( $H8:\beta_{69} = 0.438, p < 0.01$ ). This is consistent with Chan (2003), has defined efficiency in the literature of management



as the utilization of resources (labor, machine, capacity, and energy), and using resources for their best use of money and time, and accordingly leading to increased business performance. **Thus, Hypothesis 8 is supported.**

Additionally, the results of control variables indicate that firm age is related to firm performance ( $\beta_{70} = 0.327$ ,  $p < 0.05$ ). It can be interpreted that a longer period of time in a business do significantly affect the level of the firm performance and firm size is not related to firm performance. It can be interpreted that a higher number of employees do not significantly affect the level of the firm performance.

#### The Moderating Role of Organizational Learning Capability

The organizational learning capability has no moderating effect on the relationships among business practice effectiveness (H18:  $\beta_{76} = 0.043$ ,  $p > 0.10$ ), organizational innovation success (H19:  $\beta_{77} = 0.007$ ,  $p > 0.10$ ), organizational excellence efficiency (H20:  $\beta_{78} = -0.066$ ,  $p > 0.10$ ), and firm performance. In most prior research, organizational learning capability has an effect on firm value. This is consistent with Dawes (2007) propose that organizational learning can support the firm run more effectively and achieve its goals (Huang and Chu, 2010). Moreover, Madsen and Desai (2010) suggested that learning of organizational as emphases on knowledge transfer and integration so as to have effective operations in both the short and long-term. However, in this research, organizational learning capability had no significant effect on the relationships between the business practice effectiveness, organizational innovation success, and organizational excellence efficiency and firm performance. For this reason, the organization has little support on the financial investment (Morales et al., 2007), commitment, opposition to the transformation (Vakola, 2000), and the type of communication has an influence on organizational learning capability, which an informal effect more than a formal one (Dawes, 2007). In addition, Lenard (2003) proposes that organizational learning capability cannot effect in the shot-time but it has effect in the long-time. **Thus, Hypotheses 18, 19, and 20 are not supported.**



The Relationships among the Antecedents, Organizational Creativity  
Capability, and the Moderating Role of Transformational Orientation

Figure 7 The Relationships among Antecedents of Organizational Creativity  
Capability, and Transformational Orientation

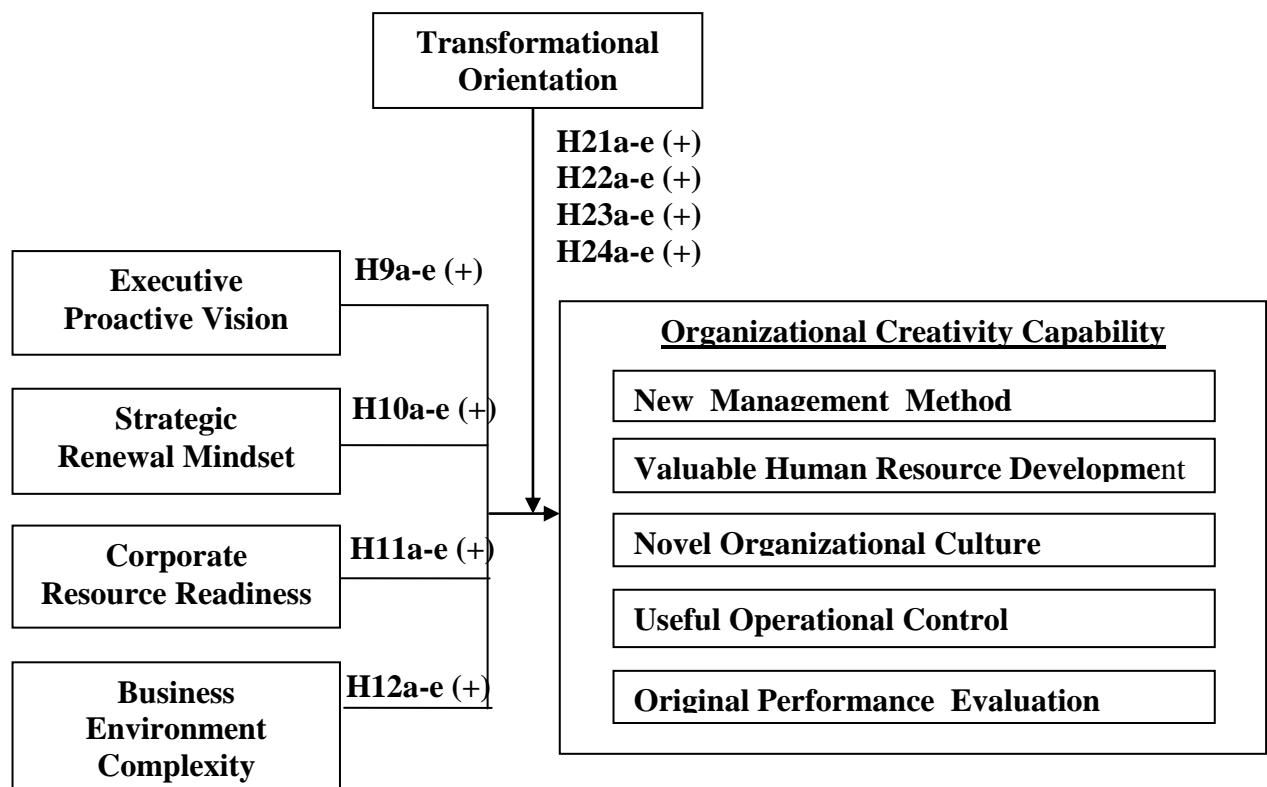


Figure 7 illustrates the relationships among four antecedents: executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity and organizational creativity capability which are proposed in Hypotheses 9(a-e) - 12(a-e). The relationship in each hypothesis is proposed in a positive direction. These hypotheses can be transformed into the regression equation in Model 11, 13, 15, 17 and 19. In addition, the moderating role of transformational orientation is proposed to positively influence the relationships among antecedents and each of five dimensions of organizational creativity capability which are presented in Hypotheses 21(a-e) - 24 (a-e). According to these hypotheses, regression equations in Model 12, 14, 16, 18 and 20 are developed.







Table 12 Descriptive Statistics and Correlation Matrix of Each Dimension of Organizational Creativity Capability,  
Its Antecedences, and Transformational Orientation

Variables	NMM	VHR	NOC	UOC	OPE	EPV	SRM	CRR	BEC	TFO
Mean	3.95	3.90	4.33	4.15	3.94	4.02	4.15	4.27	4.13	4.18
S.D.	0.70	0.68	0.53	0.63	0.70	0.70	0.63	0.48	0.65	0.51
VHR	.784***									
NOC	.635***	.798***								
UOC	.561***	.578***	.731***							
OPE	.679***	.693***	.694***	.726***						
EPV	.547***	.638***	.671***	.613***	.597***					
SRM	.563***	.631***	.585***	.510***	.601***	.715***				
CRR	.374***	.420***	.373***	.328***	.455***	.347***	.298***			
BEC	.335***	.400***	.324***	.240***	.353***	.351***	.474***	.134		
TFO	.565***	.471***	.409***	.317***	.421***	.421***	.424***	.207***	.270***	
FAE	-.055	-.113	-.138	-.121	-.063	-.039	-.040	-.067	-.060	-.029
FIS	-.050	-.050	-.138	-.143	-.022	-.143	-.011	-.020	.043	.017

Note: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 12 describes the correlations among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each of five dimensions of organizational creativity capability. It can be seen that all antecedents have a positive correlation with all dimensions of organizational creativity capability. In details, firstly, executive proactive vision is correlated with new management method ( $r = 0.547, p < 0.01$ ), valuable human resource development ( $r = 0.638, p < 0.01$ ), novel organizational culture formation ( $r = 0.671, p < 0.01$ ), useful operational control establishment ( $r = 0.613, p < 0.01$ ), and original performance evaluation system ( $r = 0.597, p < 0.01$ ). Secondly, strategic renewal mindset is correlated with new management method ( $r = 0.563, p < 0.01$ ), valuable human resource development ( $r = 0.631, p < 0.01$ ), novel organizational culture formation ( $r = 0.585, p < 0.01$ ), useful operational control establishment ( $r = 0.510, p < 0.01$ ), and original performance evaluation system ( $r = 0.601, p < 0.01$ ). Thirdly, corporate resource readiness is correlated with new management method ( $r = 0.374, p < 0.01$ ), valuable human resource development ( $r = 0.420, p < 0.01$ ), novel organizational culture formation ( $r = 0.373, p < 0.01$ ), useful operational control establishment ( $r = 0.328, p < 0.01$ ), and original performance evaluation system ( $r = 0.455, p < 0.01$ ). Lastly, business environment complexity is correlated with new management method ( $r = 0.335, p < 0.01$ ), valuable human resource development ( $r = 0.400, p < 0.01$ ), novel organizational culture formation ( $r = 0.324, p < 0.01$ ), useful operational control establishment ( $r = 0.240, p < 0.05$ ), and original performance evaluation system ( $r = 0.353, p < 0.01$ ). ). In this research, executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and transformational orientation are treated as independent variables, which the results of the correlation analysis show that the inter-correlation coefficient are 0.134 -0.715 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 13 also suggests the maximum value of VIF is 3.207, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of multicollinearity problems.



Table 13 Results of the Relationships among Each of Five Dimensions of Organizational Creativity Capability, Its Antecedents, and Transformational Orientation

Independent Variables	Dependents Variables									
	NMM		VHR		NOC		UOC		OPE	
	Equation 11	Equation 12	Equation 13	Equation 14	Equation 15	Equation 16	Equation 17	Equation 18	Equation 19	Equation 20
EPV(H9a-e)	<b>.238**</b> (.118)	.176 (.111)	<b>.330***</b> (.104)	<b>.314***</b> (.104)	<b>.464***</b> (.106)	<b>.457***</b> (.109)	<b>.461***</b> (.116)	<b>.476***</b> (.118)	<b>.277**</b> (.109)	<b>.254 **</b> (.111)
SRM (H10a-e)	<b>.295**</b> (.121)	.174 (.117)	<b>.274 **</b> (.107)	.176 (.110)	<b>.181*</b> (.109)	.106 (.115)	.146 (.120)	.078 (.125)	<b>.284**</b> (.112)	<b>.218 *</b> (.117)
CRR (H11a-e)	<b>.191**</b> (.085)	<b>.215***</b> (.082)	<b>.203***</b> (.075)	<b>.245***</b> (.077)	<b>.144*</b> (.077)	<b>.171**</b> (.080)	<b>.130*</b> (.072)	<b>.161*</b> (.087)	<b>.261***</b> (.078)	<b>.255 ***</b> (.082)
BEC (H12a-e)	.086 (.090)	.077 (.085)	.112 (.080)	.115 (.080)	.053 (.081)	.067 (.084)	-.009 (.089)	.026 (.091)	.083 (.083)	.101 (.085)
TFO		<b>.303***</b> (.089)		<b>0.139*</b> (.083)		.073 (.088)		-.039 (.095)		.111 (.089)
EPV*TFO (H21a-e)		.005 (.137)		.103 (.128)		.043 (.134)		-.112 (.146)		.077 (.136)
SRM*TFO(H22a-e)		-.123 (.121)		-.182 (.113)		-.152 (.118)		-.106 (.129)		-.165 (.120)
CRR*TFO(H23a-e)		.093 (.066)		.104 (.065)		.057 (.065)		.097 (.071)		-.044 (.066)

Table 13 (Continued)

Independent Variables	Dependents Variables									
	NMM		VHR		NOC		UOC		OPE	
	Equation 11	Equation 12	Equation 13	Equation 14	Equation 15	Equation 16	Equation 17	Equation 18	Equation 19	Equation 20
<b>BEC*TFO(H24a-e)</b>		.050 (.081).		.033 (.075)		.056 (.079)		.099 (.086)		.072 (.080)
<b>FIA</b>	-.027 (.178)	-.041 (.165)	-.161 (.158)	-.180 (.154)	-.182 (.161)	-.199 (.162)	-.156 (.176)	-.197 (.176)	-.061 (.164)	-.054 (.165)
<b>FIS</b>	-.019 (.187)	-.036 (.178)	.055 (.166)	.051 (.166)	-.087 (.169)	-.099 (.174)	-.103 (.185)	-.070 (.190)	.070 (.172)	.003 (.177)
<b>Adjusted R<sup>2</sup></b>	<b>.360</b>	<b>.457</b>	<b>.495</b>	<b>.525</b>	<b>.475</b>	<b>.476</b>	<b>.373</b>	<b>.381</b>	<b>.454</b>	<b>.460</b>
<b>Durbin-Watson</b>	<b>1.984</b>	<b>1.894</b>	<b>1.698</b>	<b>1.766</b>	<b>2.018</b>	<b>2.062</b>	<b>2.067</b>	<b>2.140</b>	<b>1.781</b>	<b>1.740</b>
<b>Maximum VIF</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

The results of OLS regression analysis are explained in Table 13. Firstly, the results indicate that executive proactive vision has significantly and positively related to all five dimensions of organizational creativity capability : new management method (H9a: $\beta_{81} = 0.238$ ,  $p < 0.05$ ), valuable human resource development(H9b: $\beta_{98} = 0.330$ ,  $p < 0.01$ ), novel organizational culture formation (H9c: $\beta_{115} = 0.464$ ,  $p < 0.01$ ), useful operational control establishment (H9d: $\beta_{132} = 0.461$ ,  $p < 0.01$ ), and original performance evaluation system (H9e: $\beta_{149} = 0.277$ ,  $p < 0.05$ ). According to, the executive who is the most important of transaction of business that moved the organization toward their goal by the proactive vision of executive to contribute stimulate creativity (Strickland and Towler, 2010). The results indicate that executive proactive vision as a viewed guideline or an idealized goal to clarify of the firm's operations with a forward-looking perspective involving introducing new products or services ahead of the competition, focusing on innovation, technology, newness, and dynamic technology. Moreover, it analyses and understands environmental change (Larwood et. al., 1995; Lumpkin and Dess, 2001; Phong-inwong and Ussahawanitchakit, 2012). **Thus, Hypotheses 9a, 9b, 9c, 9d, and 9e are supported.**

Secondly, the findings from this research describe that, strategic renewal mindset is significantly and positively related to new management method (H10a: $\beta_{82} = 0.295$ ,  $p < 0.05$ ),valuable human resource development (H10b: $\beta_{99} = 0.274$ ,  $p < 0.05$ ), novel organizational culture formation (H10c: $\beta_{116} = 0.181$ ,  $p < 0.10$ ), and original performance evaluation system (H10e: $\beta_{150} = 0.284$ ,  $p < 0.05$ ). When firms have strategic renewal mindset, they are likely to recognize the importance of modify strategic, creating novel and useful ideas which generate new creativity (Perry-Smith and Shalley, 2003). As a result, they are able to explore, create, and develop capability of organization. Moreover, Slater et al (2010) found that firms with greater capability to create something is more successful in responding to their environments and developing new capabilities that lead to competitive advantage and superior performance. Hence, firms with higher strategic renewal mindset appear to have greater creativity capability. **Thus, Hypotheses 10a, 10b, 10c, 10e are supported.** However, the relationships among strategic renewal mindset and useful operational control establishment were not found(H10d: $\beta_{133} = 0.007$ ,  $p > 0.10$ ). **Thus, Hypothesis 10d is not supported.**



Thirdly, the analyses indicate that corporate resource readiness has a significant and positive relationship with four outcomes: related to new management method (H11a:  $\beta_{83} = 0.191$ ,  $p < 0.05$ ), valuable human resource development (H11b:  $\beta_{100} = 0.203$ ,  $p < 0.01$ ), novel organizational culture formation (H11c:  $\beta_{117} = 0.144$ ,  $p < 0.10$ ), useful operational control establishment (H11d:  $\beta_{134} = 0.130$ ,  $p < 0.10$ ), and original performance evaluation system (H11e:  $\beta_{151} = 0.261$ ,  $p < 0.01$ ).

The resource-based view (RBV) is a tool for considering the strategic resources available to a business. The fundamental principle of the RBV is the basis for a competitive advantage of a firm which bundles valuable resources for the firm's disposal (Rumelt, 1984; Wernerfelt, 1984). The resource-based view explains that a firm uses internal resources and capabilities for building sources for the purpose of competitive advantage (Barney, 1991). Resources include all firm assets, capabilities, organizational processes, attributes, information, experience, knowledge, and technology. In a resource-based perspective, resources can be tangible, intangible and personnel-based (Grant, 1991). Likewise, these abilities comprise at least three dimensions: physical assets, technologies and skills required to use them; human resources and organizational capabilities such as culture and values; and the intangible resources of reputation and radical expertise. However, if the firms have the resources in readiness and potentiality, this advantage will support the firms to create new opportunity. Based on the integrative concept of RBV and readiness for change, firm resource readiness refers to a firm's ability to allocate the existence of a firm's resources to maximize benefits, and the adequacy of a firm's resource can compete with competitors (Tzokas et al., 1997). In addition, Takeno (2001) indicates that utilizing the shared resource, the updated information should also be gained and shared by processes including information-sharing, resource-sharing, techniques and know-how sharing, and opportunity-sharing. Firm resource readiness has been shared over the firm where the capability to create new products, new services, and new processes will increase (Barner, 1997; Kratzer et al., 2008). **Thus, Hypotheses 11a, 11b, 11c, 11d, and 11e are supported.**

Finally, there is not significant relationships among business environment complexity and five dimensions of organizational creativity capability : new management method (H12a:  $\beta_{84} = 0.086$ ,  $p > 0.10$ ), valuable human resource



development ( $H12b: \beta_{101} = 0.112, p > 0.10$ ), novel organizational culture formation ( $H12c: \beta_{118} = 0.086, p > 0.10$ ), useful operational control establishment ( $H12d: \beta_{135} = -0.009, p > 0.10$ ), and original performance evaluation system ( $H12e: \beta_{152} = 0.083, p > 0.10$ ). Owing to, business environment complexity as the firm's perception concerns heterogeneity, diversity, instability, and uncertainty, which are external factors affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increase of competitor numbers, new competitors' entry into the market, and technological change (Limpsurapong and Ussahawanitchakit, 2011; Prempre and Ussahawanitchakit, 2012; Luo, 2001; Zhou, Yim and Tse, 2005) factors beyond the firm's control (Lissack and Gunz, 2005). Business environment with homogeneous industries face the same external environment such as changing customer requirement or technological change in the same. Although the few corporate has superior performance in the other firm that factors effect on firm differentiate performance such as evaluation capability, resource development and dominant competence which lead to high performance in firm. (Barney and Hesterly, 2006; Dess, 2007) Therefore, business environment complexity has no significant affect organizational creativity capability. ***Thus, Hypotheses 12a, 12b, 12c, 12d, 12e are not supported.***

Additionally, the results of control variables indicate that firm age and firm size are not related to all Antecedences of organizational creativity capability. It can be interpreted that a longer period of time in a business and a higher number of employees do not significantly affect the level of all dimensions of organizational creativity capability.

#### The Moderating Role of Transformational Orientation

From the findings in Table 13, the moderating effect of transformational orientation on the relationships between executive proactive vision has not positively significant on new management method ( $H21a: \beta_{92} = 0.005, p > 0.10$ ), valuable human resource development ( $H21b: \beta_{109} = 0.103, p > 0.10$ ), novel organizational culture formation ( $H21c: \beta_{126} = 0.043, p > 0.10$ ), useful operational control establishment ( $H21d: \beta_{143} = -0.112, p > 0.10$ ), and original performance evaluation system ( $H21e: \beta_{159} = 0.077, p > 0.10$ ). Moreover, the moderating effect of transformational orientation on the relationships between strategic renewal mindset has not positively significant on





new management method (H22a: $\beta_{93} = -0.123$ ,  $p > 0.10$ ), valuable human resource development (H22b: $\beta_{110} = -0.182$ ,  $p > 0.10$ ), novel organizational culture formation (H22c: $\beta_{127} = -0.152$ ,  $p > 0.10$ ), useful operational control establishment (H22d: $\beta_{144} = -0.106$ ,  $p > 0.10$ ), and original performance evaluation system (H22e: $\beta_{160} = -0.165$ ,  $p > 0.10$ ). Furthermore, the moderating effect of transformational orientation on the relationships between corporate resource readiness has not positively significant on new management method (H23a: $\beta_{94} = 0.093$ ,  $p > 0.10$ ), valuable human resource development (H23b: $\beta_{111} = -0.104$ ,  $p > 0.10$ ), novel organizational culture formation (H23c: $\beta_{128} = 0.057$ ,  $p > 0.10$ ), useful operational control establishment (H23d: $\beta_{145} = 0.097$ ,  $p > 0.10$ ), and original performance evaluation system (H23e: $\beta_{161} = -0.044$ ,  $p > 0.10$ ). In addition, the moderating effect of transformational orientation on the relationships between business environment complexity has not positively significant on new management method (H24a: $\beta_{95} = 0.050$ ,  $p > 0.10$ ), valuable human resource development (H24b: $\beta_{112} = 0.033$ ,  $p > 0.10$ ), novel organizational culture formation (H24c: $\beta_{129} = 0.056$ ,  $p > 0.10$ ), useful operational control establishment (H24d: $\beta_{146} = 0.099$ ,  $p > 0.10$ ), and original performance evaluation system (H24e: $\beta_{161} = 0.072$ ,  $p > 0.10$ ). Possibility, operational environment affect employee creativity that leads to competence in organizational creativity. On the other hand if operational environment has been resisted organizational creativity, it will not happen. Transformational orientation consists of the first one structural such as the new CEO, combining line of command, the second one behavioral change which transformational behavior or the practices of the organization and personal in organization such as customer focus or annual performance measurement, the third one technological change which internal and external in organization such as management in call center system, defect tracking system or e-mail system that entire change cause operating force. That's all operational environment affect employee creativity that leads to competence in organizational creativity. ***Thus, Hypotheses 21a-21e, 22a-22e, 23a-23e, and 24a-24e are not supported.***



## Summary

This chapter describes the results of data analysis in this research. There are two main parts. The first part indicates the respondent and sample characteristics. These characteristics are explained by a percentage. Also, correlations among all variables are analyzed and presented as a correlation matrix and are explained by using descriptive statistics such as mean and standard deviation. Another part points out the results and discussions of hypotheses testing in combination with specific correlation analysis and multiple regression analysis. The results reveal that new management method and valuable human resource development, treated as dimension 1 and 2 respectively, are important determinants to yield higher business practice effectiveness, and organizational innovation success. Interestingly, it can be stated that organizational well-roundedness is the additional influence of some dimensions of organizational creativity capability to earn greater positive outcomes. On the other hand, the business practice effectiveness, organizational innovation success, and organizational excellence, efficiency have a strong positive relationship with firm performance. On the part of the antecedents of organizational creativity capability, executive proactive vision and corporate resource readiness seems to be the most influential determinant of organizational creativity capability. For the moderating role of organizational learning capability and transformational orientation, they do not play a moderating role. To summarize, Hypotheses 6, 7, 8, 9, and 11 are significantly supported, Hypotheses 1, 2, 3, 5, 10, 15, 16, and 17 are partially supported, and Hypotheses 4, 12, 13, 14, 18, 19, 20, 21, 22, 23, and 24 are not significantly supported. This research provides the summary of the results of hypotheses testing as presented in Table 14.

The next chapter illustrates the conclusion of the research which provides a summary of the entire research. Additionally, the contributions, limitations, and research directions for further research are also discussed.



Table 14 A Summary of the Results of Hypotheses Testing

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H1a	New management method has a positive influence on business practice effectiveness.	Supported
H1b	New management method has a positive influence on organizational innovation success.	Supported
H1c	New management method has a positive influence on organizational excellence efficiency.	Not Supported
H2a	Valuable human resource development has a positive influence on business practice effectiveness.	Supported
H2b	Valuable human resource development has a positive influence on organizational innovation success.	Supported
H2c	Valuable human resource development has a positive influence on organizational excellence efficiency.	Not Supported
H3a	Novel organizational culture formation has a positive influence on business practice effectiveness.	Not Supported
H3b	Novel organizational culture formation has a positive influence on organizational innovation success.	Supported
H3c	Novel organizational culture formation has a positive influence on organizational excellence efficiency.	Not Supported
H4a	Useful operational control establishment has a positive influence on business practice effectiveness.	Not Supported
H4b	Useful operational control establishment has a positive influence on organizational innovation success.	Not Supported
H4c	Useful operational control establishment has a positive influence on organizational excellence efficiency.	Not Supported
H5a	Original performance evaluation system has a positive influence on business practice effectiveness.	Not Supported
H5b	Original performance evaluation system has a positive influence on organizational innovation success.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H5c	Original performance evaluation system has a positive influence on organizational excellence efficiency.	Supported
H6	Business practice effectiveness has a positive influence on firm performance.	Supported
H7a	Organizational innovation success has a positive influence on business practice effectiveness.	Supported
H7b	Organizational innovation success has a positive influence on organizational excellence efficiency.	Supported
H7c	Organizational innovation success has a positive influence on firm performance.	Supported
H8	Organizational excellence efficiency has a positive influence on firm performance.	Supported
H9a	Executive proactive vision has a positive influence on new management method.	Supported
H9b	Executive proactive vision has a positive influence on valuable human resource development.	Supported
H9c	Executive proactive vision has a positive influence on novel organizational culture formation.	Supported
H9d	Executive proactive vision has a positive influence on useful operational control establishment.	Supported
H9e	Executive proactive vision has a positive influence on original performance evaluation system.	Supported
H10a	Strategic renewal mindset has a positive influence on new management method.	Supported
H10b	Strategic renewal mindset has a positive influence on valuable human resource development.	Supported
H10c	Strategic renewal mindset has a positive influence on novel organizational culture formation.	Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H10d	Strategic renewal mindset has a positive influence on useful operational control establishment.	Not Supported
H10e	Strategic renewal mindset has a positive influence on original performance evaluation system.	Supported
H11a	Corporate resource readiness has a positive influence on new management method.	Supported
H11b	Corporate resource readiness has a positive influence on valuable human resource development.	Supported
H11c	Corporate resource readiness has a positive influence on novel organizational culture formation.	Supported
H11d	Corporate resource readiness has a positive influence on useful operational control establishment.	Supported
H11e	Corporate resource readiness has a positive influence on original performance evaluation system.	Supported
H12a	Business environment complexity has a positive influence on new management method.	Not Supported
H12b	Business environment complexity has a positive influence on valuable human resource development.	Not Supported
H12c	Business environment complexity has a positive influence on novel organizational culture formation.	Not Supported
H12d	Business environment complexity has a positive influence on useful operational control establishment.	Not Supported
H12e	Business environment complexity has a positive influence on original performance evaluation system.	Not Supported
H13a	Organizational well-roundedness will positively moderate the relationship between new management method and business practice effectiveness.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H13b	Organizational well-roundedness will positively moderate the relationship between new management method and organizational innovation success.	Not Supported
H13c	Organizational well-roundedness will positively moderate the relationship between new management method and organizational excellence efficiency.	Not Supported
H14a	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and business practice effectiveness.	Not Supported
H14b	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational innovation success.	Not Supported
H14c	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational excellence efficiency.	Not Supported
H15a	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and business practice effectiveness.	Not Supported
H15b	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational innovation success.	Not Supported
H15c	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational excellence efficiency.	Supported
H16a	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and business practice effectiveness.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H16b	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational innovation success.	Supported
H16c	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational excellence efficiency.	Supported
H17a	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and business practice effectiveness.	Supported
H17b	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational innovation success.	Not Supported
H17c	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational excellence efficiency.	Not Supported
H18	Organizational learning capability will positively moderate the relationship between organizational innovation success and firm performance.	Not Supported
H19	Organizational learning capability will positively moderate the relationship between business practice effectiveness and firm performance.	Not Supported
H20	Organizational learning capability will positively moderate the relationship between organizational excellence efficiency and firm performance.	Not Supported
H21a	Transformational orientation will positively moderate the relationship between executive proactive vision and new management method.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H21b	Transformational orientation will positively moderate the relationship between executive proactive vision and valuable human resource development.	Not Supported
H21c	Transformational orientation will positively moderate the relationship between executive proactive vision and novel organizational culture formation.	Not Supported
H21d	Transformational orientation will positively moderate the relationship between executive proactive vision and useful operational control establishment.	Not Supported
H21e	Transformational orientation will positively moderate the relationship between executive proactive vision and original performance evaluation system.	Not Supported
H22a	Transformational orientation will positively moderate the relationship between strategic renewal mindset and new management method.	Not Supported
H22b	Transformational orientation will positively moderate the relationship between strategic renewal mindset and valuable human resource development.	Not Supported
H22c	Transformational orientation will positively moderate the relationship between strategic renewal mindset and novel organizational culture formation.	Not Supported
H22d	Transformational orientation will positively moderate the relationship between strategic renewal mindset and useful operational control establishment.	Not Supported
H22e	Transformational orientation will positively moderate the relationship between strategic renewal mindset and original performance evaluation system.	Not Supported





Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H23a	Transformational orientation will positively moderate the relationship between corporate resource readiness and new management method.	Not Supported
H23b	Transformational orientation will positively moderate the relationship between corporate resource readiness and valuable human resource development.	Not Supported
H23c	Transformational orientation will positively moderate the relationship between corporate resource readiness and novel organizational culture formation.	Not Supported
H23d	Transformational orientation will positively moderate the relationship between corporate resource readiness and useful operational control establishment.	Not Supported
H23e	Transformational orientation will positively moderate the relationship between corporate resource readiness and original performance evaluation system.	Not Supported
H24a	Transformational orientation will positively moderate the relationship between business environment complexity and new management method.	Not Supported
H24b	Transformational orientation will positively moderate the relationship between business environment complexity and valuable human resource development.	Supported
H24c	Transformational orientation will positively moderate the relationship between business environment complexity and novel organizational culture formation.	Not Supported
H24d	Transformational orientation will positively moderate the relationship between business environment complexity and useful operational control establishment.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H24e	Transformational orientation will positively moderate the relationship between business environment complexity and original performance evaluation system.	Not Supported



## **CHAPTER IV**

### **RESULTS AND DISCUSSION**

The previous chapter explains research methods which include the sample selection and procedure of data collection. Also, data analysis and hypothesis testing are described. Next, the organization of this chapter is organized as follows. Firstly, this chapter presents the response characteristics, the sample characteristics, and correlation analysis. Secondly, the hypothesis testing and the results are detailed. Finally, the summary of all hypotheses testing is given in Table 14.

#### **Respondent Characteristics**

##### **Respondent Characteristics**

The respondents are Chief Executive Officer (CEO) or managing director who has the most comprehensive knowledge regarding firm characteristics, corporate strategy, and firm performance. The respondent characteristics are described by the demographic characteristics, including gender, age, marital status, education level, average monthly income, working experience, and current position.

Table B1 (see Appendix B) shows the demographic characteristics of 104 respondents with returned mail surveys and presents in detail the demographic information as follows. Approximately 59.60 percent of respondents are female. The span of age of respondents is 30 - 40 years old (47.10 percent). The majority of respondents are single (50.00 percent). A total of 53.80 percent earned a higher than bachelor's degree or equal. Of the respondents, 34.60 percent have working experiences more than 15 years. The average monthly income of respondents is less than 50,000 Baht (36.50 percent). Finally, the majority of the respondents hold a position as managing director 50.00 percent.



### Firm Characteristics

In addition, Table C1 (see Appendix C) shows the particulars of the characteristics of the software businesses in Thailand. The maximum percentage of business characteristics are as follows: most forms of business are the limited/public company (89.40 percent). Addition, approximately 38.50 percent of firm respondents has been operating in a software business 5-10 years. The majority of the firm respondents have operating capital less than 25,000,000 Baht (41.30 percent). The most of firm respondents have an average annual income of more than 50,000,000 Baht (36.50 percent). In addition, 70.20 percent of the firm employs less than 50 full-time employees.

### Correlation Analysis

This research employs a bivariate correlation analysis of Pearson Correlation on all variables for two purposes. The first purpose is to explore the relationships among variables. Another purpose is to verify the multicollinearity problem. A multicollinearity problem exists when inter-correlation between independent variables exceeds 0.80 (Hair et al., 2006). In this research, the bivariate correlation procedure is subject to a two-tailed test of statistical significance at 3 levels as  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ . The results of the correlation analysis of all variables in this research are shown in Table 7.

From Table 7 it can be shown that the all of five dimensions of organizational creativity capability have significant positive relationships with business practice effectiveness, organizational innovation success, organizational excellence efficiency and firm performance ( $r = 0.368 - 0.789$ ,  $p < 0.01$ ). For the antecedents, these variables have significantly related to all dimensions of organizational creativity capability ( $r = 0.240$ ,  $p < 0.05 - 0.671$ ,  $p < 0.01$ ). The moderating effects of, organizational well-roundedness, organizational learning capability, and transformational orientation have correlations with all independent variables between  $0.189$ ,  $p < 0.10 - 0.641$ ,  $p < 0.01$ . In addition to the relationships among variables, the correlations between independent variables in the conceptual model are in the range of  $0.207 - 0.789$ ,  $p < 0$ .



Table 7 Descriptive Statistics and Correlation Matrix of Organizational Creativity Capability and all Constructs

Variables	NMM	VHR	NOC	UOC	OPE	BPE	OIS	OEE	FPF	EPV	SRM	CRR	BEC	OWR	OLC	TFO	FAE
Mean	3.95	3.90	4.33	4.15	3.94	3.92	4.05	4.29	4.07	4.02	4.15	4.27	4.13	4.08	4.18	4.18	N/A
S.D.	0.70	0.68	0.53	0.63	0.70	0.73	0.63	0.45	0.66	0.70	0.63	0.48	0.65	0.72	0.57	0.51	N/A
VHR	.784***																
NOC	.635***	.798***															
UOC	.561***	.578***	.731***														
OPE	.679***	.693***	.694***	.726***													
BPE	.787***	.789***	.701***	.583***	.686***												
OIS	.624***	.690***	.669***	.454***	.495***	.623***											
OEE	.368***	.476***	.460***	.404***	.561***	.522***	.360***										
FPF	.459***	.593***	.624***	.572***	.627***	.662***	.531***	.668***									
EPV	.547***	.638***	.671***	.613***	.597***	.712***	.625***	.589***	.793***								
SRM	.563***	.631***	.585***	.510***	.601***	.665***	.509***	.561***	.675***	.715***							
CRR	.374***	.420***	.373***	.328***	.455***	.397***	.354***	.486***	.440***	.347***	.298***						
BEC	.335***	.400***	.324***	.240***	.353***	.355***	.347***	.338***	.367***	.351***	.474***	.134					
OWR	.577***	.635***	.641***	.557***	.613***	.712***	.600***	.581***	.718***	.746***	.773***	.349***	.427***				
OLC	.546***	.420***	.317***	.232***	.309***	.501***	.507***	.189	.283***	.377***	.336***	.436***	.246***	.441***			
TFO	.565***	.471***	.409***	.317***	.421***	.484***	.413***	.177	.332***	.421***	.424***	.207***	.270***	.416***	.292***		
FAE	-.055	-.113	-.138	-.121	-.063	-.117	-.124	-.134	.006	-.039	-.040	-.067	-.060	-.061	-.053	-.029	
FIS	-.050	-.050	-.138	-.143	-.022	-.065	-.134	-.140	-.141	-.143	-.011	-.020	.043	-.143	-.094	.017	.337***

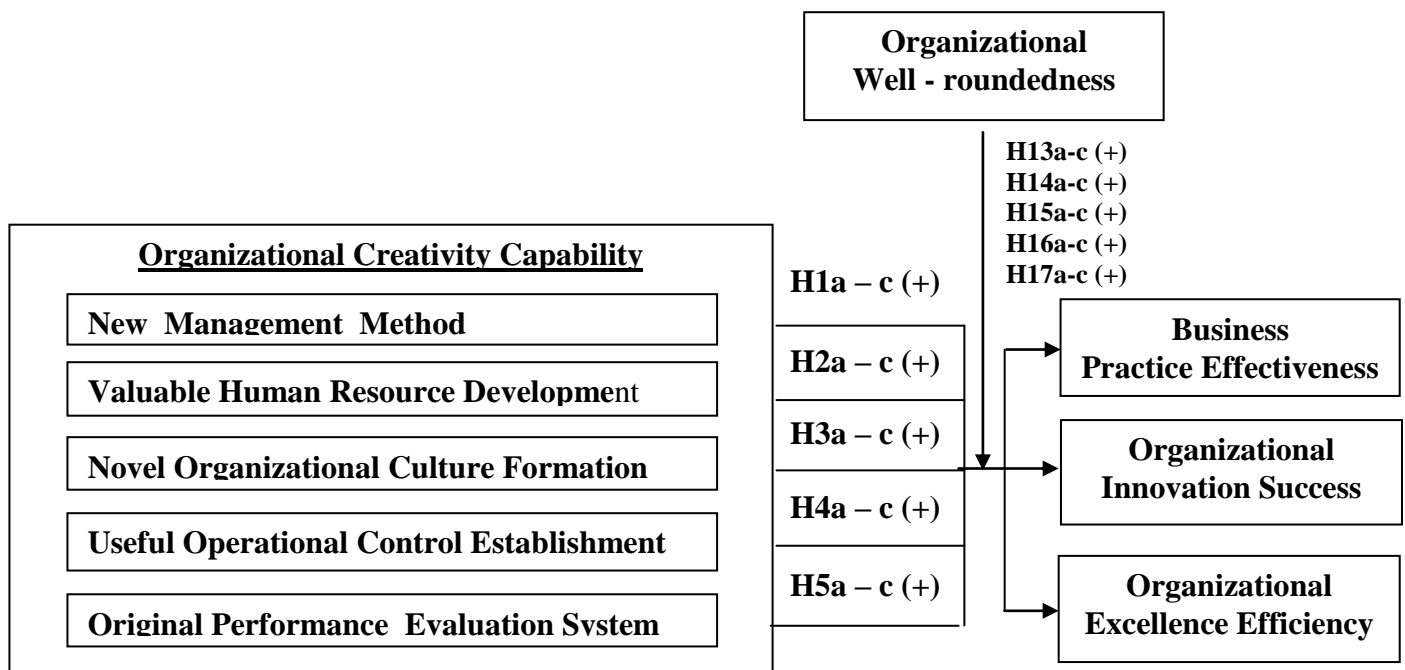
\*\*\* Correlation is significant at the 0.01 level (2-tailed)

\*\* Correlation is significant at the 0.05 level (2-tailed)

## Hypotheses Testing and Results

This research employs the Ordinary Least Squares (OLS) regression to investigate the hypothesized relationships. Also, the regression equation is a linear combination of the independent variables that best explains and predicts the dependent variable. Furthermore, two dummy variables of firm age and firm size are also included in the equation. There are twenty equations in this research. The results of descriptive statistics and hypothesis testing are discussed according to the regression equations as follows:

Figure 5 The Relationships among Each Dimension of Organizational Creativity Capability, Its Consequences, and the Moderating Role of Organizational Well-roundedness



The Relationships among Each Dimension of Organizational Creativity Capability, Its Consequences, and the Moderating Role of Organizational Well-roundedness

Figure 5 shows the relationships among organizational creativity capability and its consequences which are proposed in Hypotheses 1(a-c)-5(a-c). The relationship in each hypothesis is proposed in a positive direction. These hypotheses can be transformed into the regression equation in Model 1, 4, and 6. In addition, the moderating role of organizational well-roundedness is proposed to positively influence on the relationships among each of five dimensions of organizational creativity capability, which are presented in Hypotheses 13(a-c)-17 (a-c). According to these hypotheses, regression equations in Model 2, 5, and 7 are developed.

Table 8 Descriptive Statistics and Correlation Matrix of Organizational Creativity Capability, Its Consequences, and Organizational Well-roundedness

Variable s	NMM	VHR	NOC	UOC	OPE	BPE	OIS	OEE	OWR
Mean	3.95	3.90	4.33	4.15	3.94	3.92	4.05	4.29	4.08
S.D.	0.70	0.68	0.53	0.63	0.70	0.73	0.63	0.45	0.72
VHR	.784***								
NOC	.635***	.798***							
UOC	.561***	.578***	.731***						
OPE	.679***	.693***	.694***	.726***					
BPE	.787***	.789***	.701***	.583***	.686***				
OIS	.624***	.690***	.669***	.454***	.495***	.623***			
OEE	.368***	.476***	.460***	.404***	.561***	.522***	.360***		
OWR	.577***	.635***	.641***	.557***	.613***	.712***	.600***	.581***	
FAE	-.055	-.113	-.138	-.121	-.063	-.117	-.124	-.134	-.061
FIS	-.050	-.050	-.138	-.143	-.022	-.065	-.134	-.140	-.143

Table 8 indicates the correlations among each dimension of organizational creativity capability and its consequences. For the first dimension, the results identify the positive correlation between new management method and business practice



effectiveness ( $r = 0.787$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.624$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.368$ ,  $p < 0.01$ ). For the second dimension, valuable human resource development is significantly and positively correlated to business practice effectiveness ( $r = 0.789$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.690$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.476$ ,  $p < 0.01$ ). For the third dimension, novel organizational culture formation is significantly and positively correlated to business practice effectiveness ( $r = 0.701$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.669$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.460$ ,  $p < 0.01$ ). For the fourth dimension, useful operational control establishment has a significant and positive correlation with business practice effectiveness ( $r = 0.583$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.454$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.404$ ,  $p < 0.01$ ). For the fifth dimension, original performance evaluation system has a significant and positive correlation with business practice effectiveness ( $r = 0.686$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.495$ ,  $p < 0.01$ ), and organizational excellence efficiency ( $r = 0.561$ ,  $p < 0.01$ ). In this research, new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, original performance evaluation system, and organizational well-roundedness are treated as independent variables, which the results of the correlation analysis show that the inter-correlation coefficient are 0.561 -0.798 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 9 also points out the maximum value of VIF is 5.071, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of multicollinearity problems.

The results of the OLS regression analysis are explained in Table 9. Firstly, the results indicates that the new management method (the first dimension) insignificant and positively related to two outcomes: business practice effectiveness ( $H1a: \beta_1 = 0.428$ ,  $p < 0.01$ ), organizational innovation success ( $H1b: \beta_{24} = 0.261$ ,  $p < 0.05$ ). In terms of new management method, according to Hargadon (2002), the new management method is greater the diversity of sources the firm has more likely it is that the insight gained from these sources are recombined in creative and valuable ways to try new management techniques. Thus, the new management method is defined as an ability of a





firm to try new management ideas and methods. Moreover, new management methods search for new ideas to combine these with existing knowledge and new techniques which lead to business effectiveness (McNelly, 2009). Likewise, Macduffie (1995) mentions that new management methods aim to create either superior outputs or organizational innovation. *Thus, Hypotheses 1a and 1b are supported.*

Table 9 Results of the Relationships Organizational Creativity Capability and Its Consequences and Organizational Well-roundedness

Independent Variables	Dependents Variables					
	BPE		OIS		OEE	
	Equation 1	Equation 2	Equation 4	Equation 5	Equation 6	Equation 7
NMM(H1a-c)	<b>.428***</b> (.089)	<b>.437***</b> (.087)	<b>.261**</b> (.118)	<b>.207*</b> (.117)	-.180 (.139)	.111 (.131)
VHR(H2a-c)	<b>.296***</b> (.111)	<b>.201*</b> (.109)	<b>.273*</b> (.147)	<b>.276*</b> (.147)	.253 (.174)	.099 (.164)
NOC(H3a-c)	.105 (.105)	.076 (.104)	<b>.401***</b> (.138)	<b>.304**</b> (.141)	.035 (.164)	-.003 (.157)
UOC (H4a-c)	.015 (.088)	-.003 (.087)	-.093 (.116)	-.123 (.117)	-.075 (.137)	-.057 (.130)
OPE (H5a-c)	.106 (.090)	.007 (.091)	-.041 (.162)	-.054 (.123)	<b>.532***</b> (.141)	<b>.326**</b> (.137)
OWR		<b>.263***</b> (.070)		<b>.257***</b> (.094)		<b>.377***</b> (.105)
NMM*OWR(H13a-c)		-.041 (.093)		-.081 (.126)		-.084 (.140)
VHR*OWR(H14a-c)		-.008 (.102)		.125 (.138)		.088 (.154)
NOC*OWR(H15a-c)		.132 (.116)		-.178 (.157)		<b>.294*</b> (.174)
UOC*OWR(H16a-c)		-.139 (.086)		<b>.194 *</b> (.117)		<b>.450***</b> (.130)
OPE*OWR(H17a-c)		.005		.080		<b>.204*</b>



Table 9 (Continued)

Independent Variables	Dependents Variables					
	BPE		OIS		OEE	
	Equation 1	Equation 2	Equation 4	Equation 5	Equation 6	Equation 7
<b>FIA</b>		(.075)		(.101)		<b>(.112)</b>
	-.080	-.136	-.013	-.024	-.101	-.165
	(.117)	(.111)	(.156)	(.151)	(.184)	(.167)
<b>FIS</b>	.007	.037	-.160	-.072	-.248	-.292
	(.122)	(.117)	(.162)	(.159)	(.192)	(.176)
<b>Adjusted R<sup>2</sup></b>	<b>.721</b>	<b>.760</b>	<b>.512</b>	<b>.560</b>	<b>.314</b>	<b>.456</b>
<b>Durbin-Watson</b>	<b>1.922</b>	<b>1.810</b>	<b>2.187</b>	<b>1.947</b>	<b>2.060</b>	<b>1.963</b>
<b>Maximum VIF</b>	<b>4.533</b>	<b>5.071</b>	<b>4.533</b>	<b>5.071</b>	<b>4.533</b>	<b>5.071</b>

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Moreover, the new management method is not significantly related to organizational excellence efficiency (H1c:  $\beta_{44} = -0.180$ ,  $p > 0.10$ ). Even though the unique management method differentiates firms from other competing firms, it is complex, high cost, and difficult tangibly evaluates the quality. As a consequence, it may not significantly affect excellence efficiency of business (De Brentani, 1995). **Thus, Hypotheses 1c is not supported.**

Secondly, it is found that valuable human resource development (the second dimension) is significantly and positively related to business practice effectiveness (H2a:  $\beta_2 = 0.296$ ,  $p < 0.01$ ), organizational innovation success (H2b:  $\beta_{25} = 0.273$ ,  $p < 0.10$ ). This is consistent with Dakhli and De Clercq (2004) suggests that the value of intangible assets, such as human capital, have a strong support for the positive relationship between human capital value and innovation. Moreover, Bayo-Moriones and Merino-Diaz De Cerio (2004) and Wright and Snell (2005) found that human capital value improves productivity, and thus, create additional competency development. The value of human capital increases multifold when all employees learn and follow the best practices (Murthy and Abeysekera, 2007). These findings are consistent with Way and Johnson (2005) who found that the results indicate a strong relation between strategic management human resource management and organizational



strategies (e.g., human resource management policies, practices, systems, etc.), and organizational effectiveness. **Thus, Hypotheses 2a and 2b are supported.**

Moreover, the valuable human resource development is not significantly related to organizational excellence efficiency ( $H2c: \beta_{45} = 0.253, p > 0.10$ ). In terms of valuable human resource development, according to Marimuthu et, al. (2009) proposes that human capital investment has various activities which improve the quality (productivity) of the worker. On the one hand, human capital investment has complex, long-term, and high cost. As a consequence, it may not significantly affect excellence efficiency of business. **Thus, Hypothesis 2c is not supported.**

Thirdly, the findings suggest that novel organizational culture formation (the third dimension) has significant relationships with organizational innovation success ( $H3c: \beta_{26} = 0.401, p < 0.01$ ). This is consistent with Martins and Terblanche (2003) found that corporate culture had a significant to moderate the organizational members in generate creativities and new innovation within organization. The elements that determine the corporate culture and facilitate creation and innovation comprise strategy, structure, instrument, and communication. The attributes of these elements must clarity and focus on creation and innovation relate to the goals and objective of the firms.

**Thus, Hypothesis 3b is supported.** Also, novel organizational culture formation has not significant relationships with business practice effectiveness ( $H3a: \beta_3 = 0.105, p > 0.10$ ), and organizational excellence efficiency ( $H3c: \beta_{46} = 0.035, p > 0.10$ ).

Organizational culture is an important issue because it is the critical factor controlling an organization's capacity, effectiveness, survival and success or fail of organizational (Schein, 2004; McShane and Von Glinow, 2003). With regard to novel organizational culture formation may be not cause practice effectiveness and excellence efficiency of organizational because new organizational culture might not inappropriate and inconsistent with the goals or objectives of the organization. **Thus, Hypotheses 3a and 3c are not supported.**

Fourthly, the findings suggest that useful operational control establishment (the third dimension) has no significant relationships with all three consequences, including business practice effectiveness ( $H4a: \beta_4 = 0.015, p > 0.10$ ), organizational innovation success ( $H4b: \beta_{27} = -0.093, p > 0.10$ ), and organizational excellence efficiency ( $H4c: \beta_{47} = -0.075, p > 0.10$ ). May be due to operational controlling may break new ideas of



employees in the firm or interrupt work processes of the firm. This is consistent with prior research found that the controlling had a negative effect on creative capability, which firms without creative competency, the innovation, efficiency, and effectiveness of the firms cannot established congruent with Jeacle and Carter (2012). **Thus, Hypotheses 4a , 4b and 4c are not supported.**

Finally, the research reveals that the original performance evaluation system is significantly and positively associated with organizational excellence efficiency ( $\beta_{48} = 0.532, p < 0.01$ ). Moreover, performance evaluation is very important in an organization because it supports frame phenomena in ways that effect our observations and explanations of them, which in turn, affect decisions and actions (Johns, 2006). **Thus, Hypotheses 5c is supported.** However, original performance evaluation system has no significant relationship with business practice effectiveness ( $H5a:\beta_5 = 0.106, p > 0.10$ ), and organizational innovation success ( $H5b:\beta_{28} = -0.041, p > 0.10$ ). However, the organizational output measurement has diversity of measure such as financials, customers, resource utilization, business processes which are not clearly in evaluation (Chenhall, 2005). On the other hand, in the appraisal does not directly affect to the innovation and effectiveness in short-term. The assessment must take feedback of evaluation output for improving. **Thus, Hypotheses 5a and 5b are not supported.**

Additionally, the results of control variables indicate that firm age and firm size are not related to all dimensions of organizational creativity capability. It can be interpreted that a longer period of time in a business and a higher number of employees do not significantly affect the level of business practice effectiveness, organizational innovation success, and organizational excellence efficiency.

#### The Moderating Role of Organizational Well-roundedness

From the findings in Table 9, the moderating effect of organizational well-roundedness on the relationships among each of five dimensions of organizational creativity capability and three consequences are as follows. Organizational well-roundedness has no significant moderating effects on the relationships among new management method and all of three outcomes: business practice effectiveness ( $H13a:\beta_{14} = -0.041, p > 0.10$ ), organizational innovation success ( $H13b:\beta_{37} = -0.081, p > 0.10$ ), and organizational excellence efficiency ( $H13c:\beta_{57} = -0.084, p > 0.10$ ). **Thus, Hypotheses 13a, 13b, and 13c are not supported.**



In addition, organizational well-roundedness has no significant moderating effects on the relationships among valuable human resource development and all of three outcomes: business practice effectiveness (H14a:  $\beta_{15} = -0.008$ ,  $p > 0.10$ ), organizational innovation success (H14b:  $\beta_{38} = 0.125$ ,  $p > 0.10$ ), and organizational excellence efficiency (H14c:  $\beta_{58} = 0.088$ ,  $p > 0.10$ ). **Thus, Hypotheses 14a, 14b, and 14c are not supported.**

In addition, organizational well-roundedness has no significant moderating effects on the relationships among novel organizational culture formation and two outcomes : business practice effectiveness (H15a:  $\beta_{16} = 0.132$ ,  $p > 0.10$ ), and organizational innovation success (H15b:  $\beta_{39} = -0.178$ ,  $p > 0.10$ ). **Thus, Hypotheses 15a and 15b are not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among novel organizational culture formation and organizational excellence efficiency ( $\beta_{59} = 0.294$ ,  $p < 0.10$ ). **Thus, Hypothesis 15c is supported.**

Next, the results also present the non-significance of the moderating effects of organizational well-rounded on the relationship between useful operational control establishment and business practice effectiveness (H16a:  $\beta_{17} = -0.139$ ,  $p > 0.10$ ). **Thus, Hypothesis 16a is not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among useful operational control establishment and two outcomes: organizational innovation success (H16b:  $\beta_{40} = 0.194$ ,  $p < 0.10$ ), and organizational excellence efficiency (H16c:  $\beta_{60} = 0.450$ ,  $p < 0.01$ ). **Thus, Hypotheses 16b and 16c are supported.** Similarly, organizational well-roundedness has no significant moderating effects on the relationships between original performance evaluation system and two outcomes: business practice effectiveness (H17a:  $\beta_{18} = 0.005$ ,  $p > 0.10$ ), and organizational innovation success (H17b:  $\beta_{41} = 0.080$ ,  $p > 0.10$ ). **Thus, Hypotheses 17a and 17b are not supported.** Furthermore, organizational well-roundedness plays a significant and positive moderating role as hypothesized on only the relationships among original performance evaluation system and organizational excellence efficiency (H17c:  $\beta_{61} = 0.204$ ,  $p < 0.10$ ). **Thus, Hypothesis 17c is supported.**

Summarize of the moderating effect of organizational well-roundedness on the relationships between each of five dimensions of organizational creativity capability

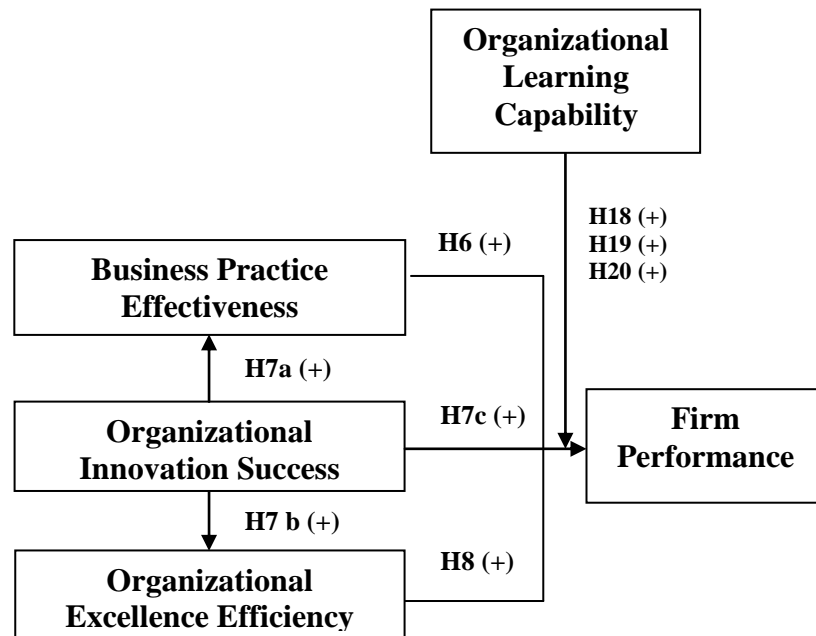


and three consequences are as follows. The moderating effect testing consists of two parts. The first one is organizational well-roundedness plays a significant and positive moderating role (***Hypotheses 15c, 16b, 16c and 17c are supported***) This result, according prior research suggests that organizational well-roundedness encourages organizations to attain its target (Ford and Staples, 2006; Theriou and Chatzoglou, 2008). Moreover, organizational well-roundedness is the activity that is performed to produce goods or services by changing inputs into outputs (Ghrai, 2011) is able to apply in the development of work process (Cintrón, Rabelo and Housel, 2008), design, new products and new services (Xu and Bernard, 2011; Zhang, 2010). Most especially, organization well-roundedness is more focused on enhancing firm effectiveness and efficiency through process improvement, planning, and operations (Mentzer, Stank and Esper, 2008). In contrast, the organizational well-roundedness plays a no significant moderating role (***Hypotheses 13a, 13b, 13c, 14a, 14b, 14c, 15a, 15b, 16a, 17a and 17b are not supported***) The well-roundedness involves a variety of aspects knowledge (customer requirement, technology), skills, expertise and other competencies related to operational management of organizational. However, the organization may be breadth well-roundedness but not depth. The organization cannot see the problem or drawback clearly that could not decrease mistake in work operations, and improve efficiency in developing new products or services (Ambos, Ambos and Schlegelmilch 2006; Chen and Huang, 2009).

The Relationships among Business Practice Effectiveness, Organizational Innovation Success, Organizational Excellence Efficiency, Firm Performance, and Organizational Learning Capability as a moderator



Figure 6 The Relationships among Outcomes of Organizational Creativity  
Capability, Firm Performance and Organizational Learning  
Capability



According to Figure 6 the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency , and firm performance are shown. The moderating role of organizational learning capability is also presented. This research proposes the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency , firm performance in positive directions which are in Hypotheses 6-8. These hypotheses are transformed to the regression equations 3, 8, and 9. Furthermore, the moderating effects of organizational learning capability on those relationships are also proposed in positive directions which are indicated in Hypotheses 18-20, and in regression equation 10.



Table 10 Descriptive Statistics and Correlation Matrix of three Outcomes of Organizational Creativity Capability, Firm Performance and Organizational Learning Capability

Variables	BPE	OIS	OEE	FPF	OLC
<b>Mean</b>	3.92	4.05	4.29	4.07	4.18
<b>S.D.</b>	0.73	0.63	0.45	0.66	0.57
<b>OIS</b>	.623***				
<b>OEE</b>	.522***	.360***			
<b>FPF</b>	.662***	.531***	.668***		
<b>OLC</b>	.501***	.507***	.189	.283***	
<b>FAE</b>	-.117	-.124	-.134	.006	-.053
<b>FIS</b>	-.065	-.134	-.140	-.141	-.094

Note: \*\*\*  $p < 0.01$

Table 10 illustrates the correlations among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance. As can be seen from Table 10, the results demonstrate the positive correlation between business practice effectiveness and organizational innovation success ( $r = 0.623$ ,  $p < 0.01$ ), organizational excellence efficiency ( $r = 0.522$ ,  $p < 0.01$ ), and firm performance ( $r = 0.662$ ,  $p < 0.01$ ). Likewise, organizational innovation success is significantly and positively correlated to organizational excellence efficiency ( $r = 0.360$ ,  $p < 0.01$ ), and firm performance ( $r = 0.531$ ,  $p < 0.01$ ). Moreover, organizational excellence efficiency has a significant and positive correlation with firm performance ( $r = 0.668$ ,  $p < 0.01$ ). For the organizational learning capability as a moderator, it has a significant and positive correlation with business practice effectiveness ( $r = 0.501$ ,  $p < 0.01$ ), organizational innovation success ( $r = 0.507$ ,  $p < 0.01$ ), organizational excellence efficiency ( $r = 0.189$ ,  $p < 0.10$ ), and firm performance ( $r = 0.283$ ,  $p < 0.01$ ). In this research, business practice effectiveness, organizational innovation success, organizational excellence efficiency, and organizational learning capability are treated as independent variables, which the results of the correlation analysis show that the





inter-correlation coefficient are 0.189 -0.623 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 11 also suggests the maximum value of VIF is 2.475, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of the multicollinearity problems.

Table 11 Results of the Relationships among Outcomes of Organizational Creativity Capability, Firm Performance, and Organizational Learning Capability

Independent Variables	Dependents Variables			
	BPE	OEE	FPF	
	Equation 3	Equation 8	Equation 9	Equation 10
<b>BPE<sub>(H6)</sub></b>			<b>.341***</b> (.087)	<b>.379***</b> (.099)
<b>OIS<sub>(H7a-c)</sub></b>	<b>.621***</b> (.079)	<b>.342***</b> (.094)	<b>.168**</b> (.080)	<b>.184**</b> (.087)
<b>OEE<sub>(H8)</sub></b>			<b>.438***</b> (.074)	<b>.417***</b> (.076)
<b>OLC</b>				-.067 (.084)
<b>BPE*OLC<sub>(H18)</sub></b>				.043 (.089)
<b>OIS*OLC<sub>(H19)</sub></b>				.007 (.080)
<b>OEE*OLC<sub>(H20)</sub></b>				-.066 (.077)
<b>FAE</b>	-.109 (.175)	-.143 (.208)	<b>.327 **</b> (.140)	<b>.342 **</b> (.144)
<b>FSI</b>	.078 (.181)	-.154 (.215)	-.191 (.145)	-.221 (.149)
<b>Adjusted R<sup>2</sup></b>	<b>.373</b>	<b>.117</b>	<b>.601</b>	<b>.593</b>
<b>Durbin-Watson</b>	<b>2.080</b>	<b>1.928</b>	<b>2.053</b>	<b>2.140</b>
<b>Maximum VIF</b>	<b>1.139</b>	<b>1.139</b>	<b>1.974</b>	<b>2.475</b>

Note: \*\* p < 0.05, \*\*\* p < 0.01



For the hypothesis testing, the results of OLS regression analysis are identified in Table 11. Surprisingly, it was found that business practice effectiveness is and positively related to firm performance ( $H6:\beta_{67} = 0.341, p < 0.01$ ). This result provides that firms with practice effectiveness tend to gain greater firm performance. In addition, this result is consistent with the evidence of previous studies which found that the effectiveness related to the firm's strategy to generate a sustainable business growth (Bolat and Yilmaz, 2009; Mouzas, 2006). Moreover, the effectiveness has an impact on the overall performance (Kumar and Gulati, 2010). Furthermore, based on the resource-based view, performance is a result of the firm's capability and resource (Barney, 1991; Holcomb and Hitt, 2007). Consequently, partners' knowledge is acquired by implements strategic outsourcing is the capability (Barney, 1991) which tends to acquire good performance. Furthermore, the effectiveness has an influence on the overall performance (Kumar and Gulati, 2010). **Thus, Hypothesis 6 is supported.**

Moreover, the analyses indicate that organizational innovation success is significant and positively related to business practice effectiveness ( $H7a:\beta_{21} = 0.621, p < 0.01$ ), organizational excellence efficiency ( $H7b:\beta_{64} = 0.342, p < 0.01$ ), and firm performance ( $H7c:\beta_{68} = 0.168, p < 0.05$ ). This is consistent with Haelermans and White (2012) who found that innovations are positively related to efficiency. Moreover, they found that profiling, informative, process and education chain innovations are significantly related to efficiency. This demonstrated how a particular organization was able to support flexibility and innovation as well as efficiency (Newell et al., 2003). This is consistent with the study of Naidoo and Vikash (2010) who suggested that innovation is a form of incremental innovation, focusing between innovations as improvements in product design, placement, promotion or pricing, and the likelihood of survival. In addition, Tohidi and Jabbari (2012) found that innovation is the success key for organizations. For these reasons, it is appropriate to support the earlier finding in which organization innovation success has a relationship to efficiency, effectiveness, and the goal of the business. **Thus, Hypotheses 7a, 7b, and 7c are supported.**

The finding indicates that only organizational excellence efficiency is significantly and positively related to firm performance ( $H8:\beta_{69} = 0.438, p < 0.01$ ). This is consistent with Chan (2003), has defined efficiency in the literature of management



as the utilization of resources (labor, machine, capacity, and energy), and using resources for their best use of money and time, and accordingly leading to increased business performance. **Thus, Hypothesis 8 is supported.**

Additionally, the results of control variables indicate that firm age is related to firm performance ( $\beta_{70} = 0.327$ ,  $p < 0.05$ ). It can be interpreted that a longer period of time in a business do significantly affect the level of the firm performance and firm size is not related to firm performance. It can be interpreted that a higher number of employees do not significantly affect the level of the firm performance.

#### The Moderating Role of Organizational Learning Capability

The organizational learning capability has no moderating effect on the relationships among business practice effectiveness (H18:  $\beta_{76} = 0.043$ ,  $p > 0.10$ ), organizational innovation success (H19:  $\beta_{77} = 0.007$ ,  $p > 0.10$ ), organizational excellence efficiency (H20:  $\beta_{78} = -0.066$ ,  $p > 0.10$ ), and firm performance. In most prior research, organizational learning capability has an effect on firm value. This is consistent with Dawes (2007) propose that organizational learning can support the firm run more effectively and achieve its goals (Huang and Chu, 2010). Moreover, Madsen and Desai (2010) suggested that learning of organizational as emphases on knowledge transfer and integration so as to have effective operations in both the short and long-term. However, in this research, organizational learning capability had no significant effect on the relationships between the business practice effectiveness, organizational innovation success, and organizational excellence efficiency and firm performance. For this reason, the organization has little support on the financial investment (Morales et al., 2007), commitment, opposition to the transformation (Vakola, 2000), and the type of communication has an influence on organizational learning capability, which an informal effect more than a formal one (Dawes, 2007). In addition, Lenard (2003) proposes that organizational learning capability cannot effect in the shot-time but it has effect in the long-time. **Thus, Hypotheses 18, 19, and 20 are not supported.**



The Relationships among the Antecedents, Organizational Creativity  
Capability, and the Moderating Role of Transformational Orientation

Figure 7 The Relationships among Antecedents of Organizational Creativity  
Capability, and Transformational Orientation

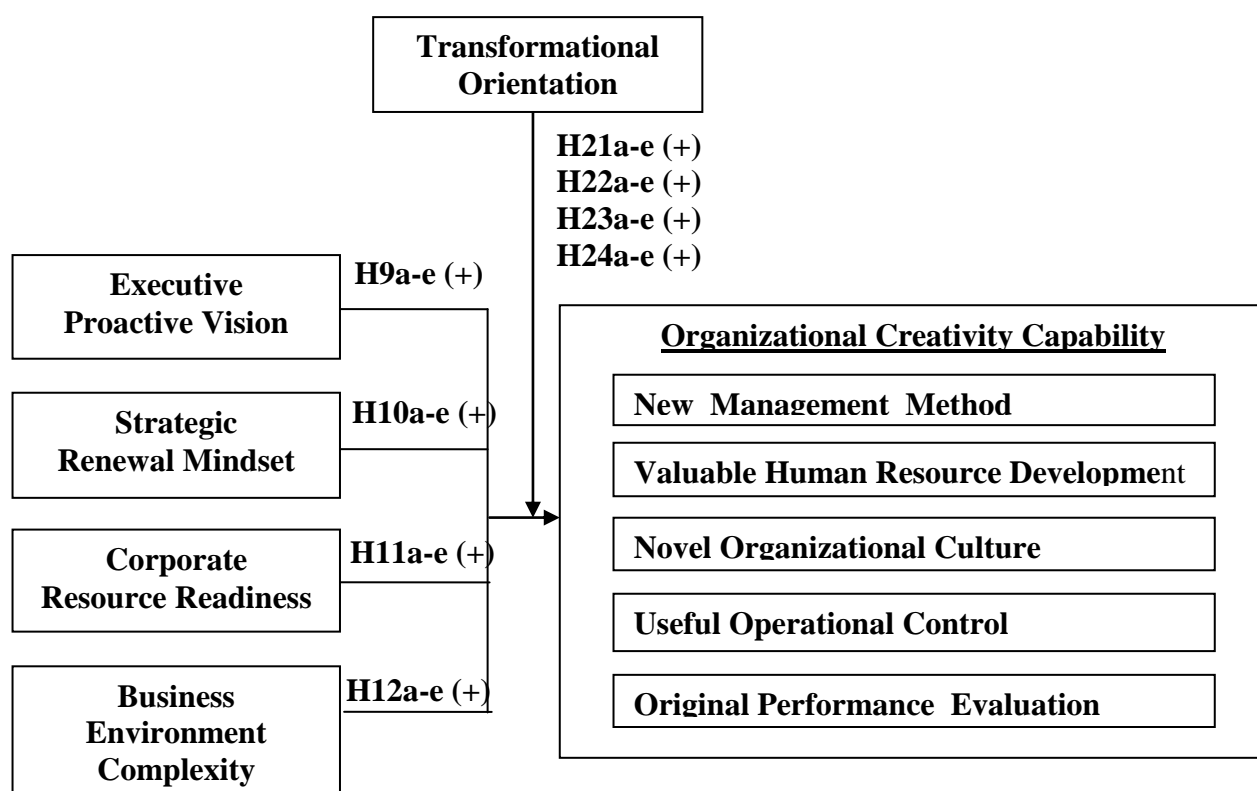


Figure 7 illustrates the relationships among four antecedents: executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity and organizational creativity capability which are proposed in Hypotheses 9(a-e) - 12(a-e). The relationship in each hypothesis is proposed in a positive direction. These hypotheses can be transformed into the regression equation in Model 11, 13, 15, 17 and 19. In addition, the moderating role of transformational orientation is proposed to positively influence the relationships among antecedents and each of five dimensions of organizational creativity capability which are presented in Hypotheses 21(a-e) - 24 (a-e). According to these hypotheses, regression equations in Model 12, 14, 16, 18 and 20 are developed.





Table 12 Descriptive Statistics and Correlation Matrix of Each Dimension of Organizational Creativity Capability,  
Its Antecedences, and Transformational Orientation

Variables	NMM	VHR	NOC	UOC	OPE	EPV	SRM	CRR	BEC	TFO
Mean	3.95	3.90	4.33	4.15	3.94	4.02	4.15	4.27	4.13	4.18
S.D.	0.70	0.68	0.53	0.63	0.70	0.70	0.63	0.48	0.65	0.51
VHR	.784***									
NOC	.635***	.798***								
UOC	.561***	.578***	.731***							
OPE	.679***	.693***	.694***	.726***						
EPV	.547***	.638***	.671***	.613***	.597***					
SRM	.563***	.631***	.585***	.510***	.601***	.715***				
CRR	.374***	.420***	.373***	.328***	.455***	.347***	.298***			
BEC	.335***	.400***	.324***	.240***	.353***	.351***	.474***	.134		
TFO	.565***	.471***	.409***	.317***	.421***	.421***	.424***	.207***	.270***	
FAE	-.055	-.113	-.138	-.121	-.063	-.039	-.040	-.067	-.060	-.029
FIS	-.050	-.050	-.138	-.143	-.022	-.143	-.011	-.020	.043	.017

Note: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 12 describes the correlations among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each of five dimensions of organizational creativity capability. It can be seen that all antecedents have a positive correlation with all dimensions of organizational creativity capability. In details, firstly, executive proactive vision is correlated with new management method ( $r = 0.547, p < 0.01$ ), valuable human resource development ( $r = 0.638, p < 0.01$ ), novel organizational culture formation ( $r = 0.671, p < 0.01$ ), useful operational control establishment ( $r = 0.613, p < 0.01$ ), and original performance evaluation system ( $r = 0.597, p < 0.01$ ). Secondly, strategic renewal mindset is correlated with new management method ( $r = 0.563, p < 0.01$ ), valuable human resource development ( $r = 0.631, p < 0.01$ ), novel organizational culture formation ( $r = 0.585, p < 0.01$ ), useful operational control establishment ( $r = 0.510, p < 0.01$ ), and original performance evaluation system ( $r = 0.601, p < 0.01$ ). Thirdly, corporate resource readiness is correlated with new management method ( $r = 0.374, p < 0.01$ ), valuable human resource development ( $r = 0.420, p < 0.01$ ), novel organizational culture formation ( $r = 0.373, p < 0.01$ ), useful operational control establishment ( $r = 0.328, p < 0.01$ ), and original performance evaluation system ( $r = 0.455, p < 0.01$ ). Lastly, business environment complexity is correlated with new management method ( $r = 0.335, p < 0.01$ ), valuable human resource development ( $r = 0.400, p < 0.01$ ), novel organizational culture formation ( $r = 0.324, p < 0.01$ ), useful operational control establishment ( $r = 0.240, p < 0.05$ ), and original performance evaluation system ( $r = 0.353, p < 0.01$ ). ). In this research, executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and transformational orientation are treated as independent variables, which the results of the correlation analysis show that the inter-correlation coefficient are 0.134 -0.715 which, don't exceed 0.8 (Hair et al., 2010). In addition to the correlations, Table 13 also suggests the maximum value of VIF is 3.207, which is lower than the cut-off score of 10 (Hair et al., 2006). Both correlations and VIF ensure the non-existence of multicollinearity problems.



Table 13 Results of the Relationships among Each of Five Dimensions of Organizational Creativity Capability, Its Antecedents, and Transformational Orientation

Independent Variables	Dependents Variables									
	NMM		VHR		NOC		UOC		OPE	
	Equation 11	Equation 12	Equation 13	Equation 14	Equation 15	Equation 16	Equation 17	Equation 18	Equation 19	Equation 20
EPV(H9a-e)	<b>.238**</b> (.118)	.176 (.111)	<b>.330***</b> (.104)	<b>.314***</b> (.104)	<b>.464***</b> (.106)	<b>.457***</b> (.109)	<b>.461***</b> (.116)	<b>.476***</b> (.118)	<b>.277**</b> (.109)	<b>.254 **</b> (.111)
SRM (H10a-e)	<b>.295**</b> (.121)	.174 (.117)	<b>.274 **</b> (.107)	.176 (.110)	<b>.181*</b> (.109)	.106 (.115)	.146 (.120)	.078 (.125)	<b>.284**</b> (.112)	<b>.218 *</b> (.117)
CRR (H11a-e)	<b>.191**</b> (.085)	<b>.215***</b> (.082)	<b>.203***</b> (.075)	<b>.245***</b> (.077)	<b>.144*</b> (.077)	<b>.171**</b> (.080)	<b>.130*</b> (.072)	<b>.161*</b> (.087)	<b>.261***</b> (.078)	<b>.255 ***</b> (.082)
BEC (H12a-e)	.086 (.090)	.077 (.085)	.112 (.080)	.115 (.080)	.053 (.081)	.067 (.084)	-.009 (.089)	.026 (.091)	.083 (.083)	.101 (.085)
TFO		<b>.303***</b> (.089)		<b>0.139*</b> (.083)		.073 (.088)		-.039 (.095)		.111 (.089)
EPV*TFO (H21a-e)		.005 (.137)		.103 (.128)		.043 (.134)		-.112 (.146)		.077 (.136)
SRM*TFO(H22a-e)		-.123 (.121)		-.182 (.113)		-.152 (.118)		-.106 (.129)		-.165 (.120)
CRR*TFO(H23a-e)		.093 (.066)		.104 (.065)		.057 (.065)		.097 (.071)		-.044 (.066)



Table 13 (Continued)

Independent Variables	Dependents Variables									
	NMM		VHR		NOC		UOC		OPE	
	Equation 11	Equation 12	Equation 13	Equation 14	Equation 15	Equation 16	Equation 17	Equation 18	Equation 19	Equation 20
<b>BEC*TFO(H24a-e)</b>		.050 (.081).		.033 (.075)		.056 (.079)		.099 (.086)		.072 (.080)
<b>FIA</b>	-.027 (.178)	-.041 (.165)	-.161 (.158)	-.180 (.154)	-.182 (.161)	-.199 (.162)	-.156 (.176)	-.197 (.176)	-.061 (.164)	-.054 (.165)
<b>FIS</b>	-.019 (.187)	-.036 (.178)	.055 (.166)	.051 (.166)	-.087 (.169)	-.099 (.174)	-.103 (.185)	-.070 (.190)	.070 (.172)	.003 (.177)
<b>Adjusted R<sup>2</sup></b>	<b>.360</b>	<b>.457</b>	<b>.495</b>	<b>.525</b>	<b>.475</b>	<b>.476</b>	<b>.373</b>	<b>.381</b>	<b>.454</b>	<b>.460</b>
<b>Durbin-Watson</b>	<b>1.984</b>	<b>1.894</b>	<b>1.698</b>	<b>1.766</b>	<b>2.018</b>	<b>2.062</b>	<b>2.067</b>	<b>2.140</b>	<b>1.781</b>	<b>1.740</b>
<b>Maximum VIF</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>	<b>2.352</b>	<b>3.207</b>

Note: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

The results of OLS regression analysis are explained in Table 13. Firstly, the results indicate that executive proactive vision has significantly and positively related to all five dimensions of organizational creativity capability : new management method (H9a: $\beta_{81} = 0.238$ ,  $p < 0.05$ ), valuable human resource development(H9b: $\beta_{98} = 0.330$ ,  $p < 0.01$ ), novel organizational culture formation (H9c: $\beta_{115} = 0.464$ ,  $p < 0.01$ ), useful operational control establishment (H9d: $\beta_{132} = 0.461$ ,  $p < 0.01$ ), and original performance evaluation system (H9e: $\beta_{149} = 0.277$ ,  $p < 0.05$ ). According to, the executive who is the most important of transaction of business that moved the organization toward their goal by the proactive vision of executive to contribute stimulate creativity (Strickland and Towler, 2010). The results indicate that executive proactive vision as a viewed guideline or an idealized goal to clarify of the firm's operations with a forward-looking perspective involving introducing new products or services ahead of the competition, focusing on innovation, technology, newness, and dynamic technology. Moreover, it analyses and understands environmental change (Larwood et. al., 1995; Lumpkin and Dess, 2001; Phong-inwong and Ussahawanitchakit, 2012). **Thus, Hypotheses 9a, 9b, 9c, 9d, and 9e are supported.**

Secondly, the findings from this research describe that, strategic renewal mindset is significantly and positively related to new management method (H10a: $\beta_{82} = 0.295$ ,  $p < 0.05$ ),valuable human resource development (H10b: $\beta_{99} = 0.274$ ,  $p < 0.05$ ), novel organizational culture formation (H10c: $\beta_{116} = 0.181$ ,  $p < 0.10$ ), and original performance evaluation system (H10e: $\beta_{150} = 0.284$ ,  $p < 0.05$ ). When firms have strategic renewal mindset, they are likely to recognize the importance of modify strategic, creating novel and useful ideas which generate new creativity (Perry-Smith and Shalley, 2003). As a result, they are able to explore, create, and develop capability of organization. Moreover, Slater et al (2010) found that firms with greater capability to create something is more successful in responding to their environments and developing new capabilities that lead to competitive advantage and superior performance. Hence, firms with higher strategic renewal mindset appear to have greater creativity capability. **Thus, Hypotheses 10a, 10b, 10c, 10e are supported.** However, the relationships among strategic renewal mindset and useful operational control establishment were not found(H10d: $\beta_{133} = 0.007$ ,  $p > 0.10$ ). **Thus, Hypothesis 10d is not supported.**



Thirdly, the analyses indicate that corporate resource readiness has a significant and positive relationship with four outcomes: related to new management method (H11a:  $\beta_{83} = 0.191$ ,  $p < 0.05$ ), valuable human resource development (H11b:  $\beta_{100} = 0.203$ ,  $p < 0.01$ ), novel organizational culture formation (H11c:  $\beta_{117} = 0.144$ ,  $p < 0.10$ ), useful operational control establishment (H11d:  $\beta_{134} = 0.130$ ,  $p < 0.10$ ), and original performance evaluation system (H11e:  $\beta_{151} = 0.261$ ,  $p < 0.01$ ).

The resource-based view (RBV) is a tool for considering the strategic resources available to a business. The fundamental principle of the RBV is the basis for a competitive advantage of a firm which bundles valuable resources for the firm's disposal (Rumelt, 1984; Wernerfelt, 1984). The resource-based view explains that a firm uses internal resources and capabilities for building sources for the purpose of competitive advantage (Barney, 1991). Resources include all firm assets, capabilities, organizational processes, attributes, information, experience, knowledge, and technology. In a resource-based perspective, resources can be tangible, intangible and personnel-based (Grant, 1991). Likewise, these abilities comprise at least three dimensions: physical assets, technologies and skills required to use them; human resources and organizational capabilities such as culture and values; and the intangible resources of reputation and radical expertise. However, if the firms have the resources in readiness and potentiality, this advantage will support the firms to create new opportunity. Based on the integrative concept of RBV and readiness for change, firm resource readiness refers to a firm's ability to allocate the existence of a firm's resources to maximize benefits, and the adequacy of a firm's resource can compete with competitors (Tzokas et al., 1997). In addition, Takeno (2001) indicates that utilizing the shared resource, the updated information should also be gained and shared by processes including information-sharing, resource-sharing, techniques and know-how sharing, and opportunity-sharing. Firm resource readiness has been shared over the firm where the capability to create new products, new services, and new processes will increase (Barner, 1997; Kratzer et al., 2008). **Thus, Hypotheses 11a, 11b, 11c, 11d, and 11e are supported.**

Finally, there is not significant relationships among business environment complexity and five dimensions of organizational creativity capability : new management method (H12a:  $\beta_{84} = 0.086$ ,  $p > 0.10$ ), valuable human resource



development (H12b: $\beta_{101} = 0.112$ ,  $p > 0.10$ ), novel organizational culture formation (H12c: $\beta_{118} = 0.086$ ,  $p > 0.10$ ), useful operational control establishment (H12d: $\beta_{135} = -0.009$ ,  $p > 0.10$ ), and original performance evaluation system (H12e: $\beta_{152} = 0.083$ ,  $p > 0.10$ ). Owing to, business environment complexity as the firm's perception concerns heterogeneity, diversity, instability, and uncertainty, which are external factors affecting the operation and strategies of the organization. Examples are the changing of customer preferences, market demand diversity, increase of competitor numbers, new competitors' entry into the market, and technological change (Limpsurapong and Ussahawanitchakit, 2011; Prempre and Ussahawanitchakit, 2012; Luo, 2001; Zhou, Yim and Tse, 2005) factors beyond the firm's control (Lissack and Gunz, 2005). Business environment with homogeneous industries face the same external environment such as changing customer requirement or technological change in the same. Although the few corporate has superior performance in the other firm that factors effect on firm differentiate performance such as evaluation capability, resource development and dominant competence which lead to high performance in firm. (Barney and Hesterly, 2006; Dess, 2007) Therefore, business environment complexity has no significant affect organizational creativity capability. ***Thus, Hypotheses 12a, 12b, 12c, 12d, 12e are not supported.***

Additionally, the results of control variables indicate that firm age and firm size are not related to all Antecedences of organizational creativity capability. It can be interpreted that a longer period of time in a business and a higher number of employees do not significantly affect the level of all dimensions of organizational creativity capability.

#### The Moderating Role of Transformational Orientation

From the findings in Table 13, the moderating effect of transformational orientation on the relationships between executive proactive vision has not positively significant on new management method (H21a: $\beta_{92} = 0.005$ ,  $p > 0.10$ ), valuable human resource development (H21b: $\beta_{109} = 0.103$ ,  $p > 0.10$ ), novel organizational culture formation (H21c: $\beta_{126} = 0.043$ ,  $p > 0.10$ ), useful operational control establishment (H21d: $\beta_{143} = -0.112$ ,  $p > 0.10$ ), and original performance evaluation system (H21e: $\beta_{159} = 0.077$ ,  $p > 0.10$ ). Moreover, the moderating effect of transformational orientation on the relationships between strategic renewal mindset has not positively significant on



new management method (H22a: $\beta_{93} = -0.123$ ,  $p > 0.10$ ), valuable human resource development (H22b: $\beta_{110} = -0.182$ ,  $p > 0.10$ ), novel organizational culture formation (H22c: $\beta_{127} = -0.152$ ,  $p > 0.10$ ), useful operational control establishment (H22d: $\beta_{144} = -0.106$ ,  $p > 0.10$ ), and original performance evaluation system (H22e: $\beta_{160} = -0.165$ ,  $p > 0.10$ ). Furthermore, the moderating effect of transformational orientation on the relationships between corporate resource readiness has not positively significant on new management method (H23a: $\beta_{94} = 0.093$ ,  $p > 0.10$ ), valuable human resource development (H23b: $\beta_{111} = -0.104$ ,  $p > 0.10$ ), novel organizational culture formation (H23c: $\beta_{128} = 0.057$ ,  $p > 0.10$ ), useful operational control establishment (H23d: $\beta_{145} = 0.097$ ,  $p > 0.10$ ), and original performance evaluation system (H23e: $\beta_{161} = -0.044$ ,  $p > 0.10$ ). In addition, the moderating effect of transformational orientation on the relationships between business environment complexity has not positively significant on new management method (H24a: $\beta_{95} = 0.050$ ,  $p > 0.10$ ), valuable human resource development (H24b: $\beta_{112} = 0.033$ ,  $p > 0.10$ ), novel organizational culture formation (H24c: $\beta_{129} = 0.056$ ,  $p > 0.10$ ), useful operational control establishment (H24d: $\beta_{146} = 0.099$ ,  $p > 0.10$ ), and original performance evaluation system (H24e: $\beta_{161} = 0.072$ ,  $p > 0.10$ ). Possibility, operational environment affect employee creativity that leads to competence in organizational creativity. On the other hand if operational environment has been resisted organizational creativity, it will not happen. Transformational orientation consists of the first one structural such as the new CEO, combining line of command, the second one behavioral change which transformational behavior or the practices of the organization and personal in organization such as customer focus or annual performance measurement, the third one technological change which internal and external in organization such as management in call center system, defect tracking system or e-mail system that entire change cause operating force. That's all operational environment affect employee creativity that leads to competence in organizational creativity. ***Thus, Hypotheses 21a-21e, 22a-22e, 23a-23e, and 24a-24e are not supported.***



## Summary

This chapter describes the results of data analysis in this research. There are two main parts. The first part indicates the respondent and sample characteristics. These characteristics are explained by a percentage. Also, correlations among all variables are analyzed and presented as a correlation matrix and are explained by using descriptive statistics such as mean and standard deviation. Another part points out the results and discussions of hypotheses testing in combination with specific correlation analysis and multiple regression analysis. The results reveal that new management method and valuable human resource development, treated as dimension 1 and 2 respectively, are important determinants to yield higher business practice effectiveness, and organizational innovation success. Interestingly, it can be stated that organizational well-roundedness is the additional influence of some dimensions of organizational creativity capability to earn greater positive outcomes. On the other hand, the business practice effectiveness, organizational innovation success, and organizational excellence, efficiency have a strong positive relationship with firm performance. On the part of the antecedents of organizational creativity capability, executive proactive vision and corporate resource readiness seems to be the most influential determinant of organizational creativity capability. For the moderating role of organizational learning capability and transformational orientation, they do not play a moderating role. To summarize, Hypotheses 6, 7, 8, 9, and 11 are significantly supported, Hypotheses 1, 2, 3, 5, 10, 15, 16, and 17 are partially supported, and Hypotheses 4, 12, 13, 14, 18, 19, 20, 21, 22, 23, and 24 are not significantly supported. This research provides the summary of the results of hypotheses testing as presented in Table 14.

The next chapter illustrates the conclusion of the research which provides a summary of the entire research. Additionally, the contributions, limitations, and research directions for further research are also discussed.



Table 14 A Summary of the Results of Hypotheses Testing

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H1a	New management method has a positive influence on business practice effectiveness.	Supported
H1b	New management method has a positive influence on organizational innovation success.	Supported
H1c	New management method has a positive influence on organizational excellence efficiency.	Not Supported
H2a	Valuable human resource development has a positive influence on business practice effectiveness.	Supported
H2b	Valuable human resource development has a positive influence on organizational innovation success.	Supported
H2c	Valuable human resource development has a positive influence on organizational excellence efficiency.	Not Supported
H3a	Novel organizational culture formation has a positive influence on business practice effectiveness.	Not Supported
H3b	Novel organizational culture formation has a positive influence on organizational innovation success.	Supported
H3c	Novel organizational culture formation has a positive influence on organizational excellence efficiency.	Not Supported
H4a	Useful operational control establishment has a positive influence on business practice effectiveness.	Not Supported
H4b	Useful operational control establishment has a positive influence on organizational innovation success.	Not Supported
H4c	Useful operational control establishment has a positive influence on organizational excellence efficiency.	Not Supported
H5a	Original performance evaluation system has a positive influence on business practice effectiveness.	Not Supported
H5b	Original performance evaluation system has a positive influence on organizational innovation success.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H5c	Original performance evaluation system has a positive influence on organizational excellence efficiency.	Supported
H6	Business practice effectiveness has a positive influence on firm performance.	Supported
H7a	Organizational innovation success has a positive influence on business practice effectiveness.	Supported
H7b	Organizational innovation success has a positive influence on organizational excellence efficiency.	Supported
H7c	Organizational innovation success has a positive influence on firm performance.	Supported
H8	Organizational excellence efficiency has a positive influence on firm performance.	Supported
H9a	Executive proactive vision has a positive influence on new management method.	Supported
H9b	Executive proactive vision has a positive influence on valuable human resource development.	Supported
H9c	Executive proactive vision has a positive influence on novel organizational culture formation.	Supported
H9d	Executive proactive vision has a positive influence on useful operational control establishment.	Supported
H9e	Executive proactive vision has a positive influence on original performance evaluation system.	Supported
H10a	Strategic renewal mindset has a positive influence on new management method.	Supported
H10b	Strategic renewal mindset has a positive influence on valuable human resource development.	Supported
H10c	Strategic renewal mindset has a positive influence on novel organizational culture formation.	Supported





Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H10d	Strategic renewal mindset has a positive influence on useful operational control establishment.	Not Supported
H10e	Strategic renewal mindset has a positive influence on original performance evaluation system.	Supported
H11a	Corporate resource readiness has a positive influence on new management method.	Supported
H11b	Corporate resource readiness has a positive influence on valuable human resource development.	Supported
H11c	Corporate resource readiness has a positive influence on novel organizational culture formation.	Supported
H11d	Corporate resource readiness has a positive influence on useful operational control establishment.	Supported
H11e	Corporate resource readiness has a positive influence on original performance evaluation system.	Supported
H12a	Business environment complexity has a positive influence on new management method.	Not Supported
H12b	Business environment complexity has a positive influence on valuable human resource development.	Not Supported
H12c	Business environment complexity has a positive influence on novel organizational culture formation.	Not Supported
H12d	Business environment complexity has a positive influence on useful operational control establishment.	Not Supported
H12e	Business environment complexity has a positive influence on original performance evaluation system.	Not Supported
H13a	Organizational well-roundedness will positively moderate the relationship between new management method and business practice effectiveness.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H13b	Organizational well-roundedness will positively moderate the relationship between new management method and organizational innovation success.	Not Supported
H13c	Organizational well-roundedness will positively moderate the relationship between new management method and organizational excellence efficiency.	Not Supported
H14a	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and business practice effectiveness.	Not Supported
H14b	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational innovation success.	Not Supported
H14c	Organizational well-roundedness will positively moderate the relationship between valuable human resource development and organizational excellence efficiency.	Not Supported
H15a	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and business practice effectiveness.	Not Supported
H15b	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational innovation success.	Not Supported
H15c	Organizational well-roundedness will positively moderate the relationship between novel organizational culture formation and organizational excellence efficiency.	Supported
H16a	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and business practice effectiveness.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H16b	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational innovation success.	Supported
H16c	Organizational well-roundedness will positively moderate the relationship between useful operational control establishment and organizational excellence efficiency.	Supported
H17a	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and business practice effectiveness.	Supported
H17b	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational innovation success.	Not Supported
H17c	Organizational well-roundedness will positively moderate the relationship between original performance evaluation system and organizational excellence efficiency.	Not Supported
H18	Organizational learning capability will positively moderate the relationship between organizational innovation success and firm performance.	Not Supported
H19	Organizational learning capability will positively moderate the relationship between business practice effectiveness and firm performance.	Not Supported
H20	Organizational learning capability will positively moderate the relationship between organizational excellence efficiency and firm performance.	Not Supported
H21a	Transformational orientation will positively moderate the relationship between executive proactive vision and new management method.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H21b	Transformational orientation will positively moderate the relationship between executive proactive vision and valuable human resource development.	Not Supported
H21c	Transformational orientation will positively moderate the relationship between executive proactive vision and novel organizational culture formation.	Not Supported
H21d	Transformational orientation will positively moderate the relationship between executive proactive vision and useful operational control establishment.	Not Supported
H21e	Transformational orientation will positively moderate the relationship between executive proactive vision and original performance evaluation system.	Not Supported
H22a	Transformational orientation will positively moderate the relationship between strategic renewal mindset and new management method.	Not Supported
H22b	Transformational orientation will positively moderate the relationship between strategic renewal mindset and valuable human resource development.	Not Supported
H22c	Transformational orientation will positively moderate the relationship between strategic renewal mindset and novel organizational culture formation.	Not Supported
H22d	Transformational orientation will positively moderate the relationship between strategic renewal mindset and useful operational control establishment.	Not Supported
H22e	Transformational orientation will positively moderate the relationship between strategic renewal mindset and original performance evaluation system.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H23a	Transformational orientation will positively moderate the relationship between corporate resource readiness and new management method.	Not Supported
H23b	Transformational orientation will positively moderate the relationship between corporate resource readiness and valuable human resource development.	Not Supported
H23c	Transformational orientation will positively moderate the relationship between corporate resource readiness and novel organizational culture formation.	Not Supported
H23d	Transformational orientation will positively moderate the relationship between corporate resource readiness and useful operational control establishment.	Not Supported
H23e	Transformational orientation will positively moderate the relationship between corporate resource readiness and original performance evaluation system.	Not Supported
H24a	Transformational orientation will positively moderate the relationship between business environment complexity and new management method.	Not Supported
H24b	Transformational orientation will positively moderate the relationship between business environment complexity and valuable human resource development.	Supported
H24c	Transformational orientation will positively moderate the relationship between business environment complexity and novel organizational culture formation.	Not Supported
H24d	Transformational orientation will positively moderate the relationship between business environment complexity and useful operational control establishment.	Not Supported



Table 14 (Continued)

<b>Hypothesis</b>	<b>Description of Hypothesized Relationships</b>	<b>Results</b>
H24e	Transformational orientation will positively moderate the relationship between business environment complexity and original performance evaluation system.	Not Supported



## **CHAPTER V**

### **CONCLUSION**

The previous chapter reveals respondent characteristics, descriptive statistics, correlation matrix, and the results of hypotheses testing. Therefore, this chapter aims to describe the conclusion, the theoretical and managerial contributions, limitations and suggestions for further research.

This research investigates the relationships among organizational creativity capability, business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance of software businesses in Thailand. Besides, executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity are assigned as the antecedents of organizational creativity capability. The moderating effects of organizational well-roundedness, organizational learning capability, and transformational orientation are also tested. Meanwhile organizational well-roundedness is designed to moderate the relationships among each of five dimensions of organizational creativity capability and its consequences: business practice effectiveness, organizational innovation success, and organizational excellence efficiency. Also, organizational learning capability is proposed to moderate the relationships among those three outcomes and firm performance. In terms of transformational orientation, it is assigned to have a moderating influence on the relationships among the antecedents and each of five dimensions of organizational creativity capability.

It can be stated that the key research question is “how does organizational creativity capability relate to firm performance?” In details, there are seven specific research questions as follows: 1) how does each of five dimensions of organizational creativity capability have an influence on business practice effectiveness, organizational innovation success, and organizational excellence efficiency? 2) How does organizational innovation success have an influence on business practice effectiveness, and organizational excellence efficiency? 3) How do business practice effectiveness, organizational innovation success, and organizational excellence efficiency have an



influence on firm performance? 4) How do executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity have an influence on each dimension of organizational creativity capability? 5) How does transformational orientation moderate the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each dimension of organizational creativity capability? 6) How does organizational well-roundedness moderate the relationships among each dimension of organizational creativity capability, business practice effectiveness, organizational innovation success, and organizational excellence efficiency? And, 7) How does organizational learning capability moderate the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance?

This research applies three theories to draw the conceptual model, including the resource-advantage theory, the contingency theory, and organizational learning theory. For research investigation, software businesses in Thailand are selected as the research population due to the concern of organizational creativity capability. The sample of this research is obtained from the list of the database of the BOI in Thailand, which is accessed in February, 2014. For data collection, a mailing questionnaire was employed to gather data and 535 questionnaires were sent to chief executive officers/managing partners who are key informants. For statistical analysis, the multiple regressions are used to analyze the data. It can be concluded that the majority of the hypotheses tested is partially supported. The results of each hypothesis according to each specific research question are described as follows:

According to the first specific research question, the results indicate that the new management method has positive relationships with business practice effectiveness, and organizational innovation success. Moreover, valuable human resource development has positive relationships with business practice effectiveness and organizational innovation success. In addition, novel organizational culture formation is positively related to only organizational innovation success. Interestingly, the original performance evaluation system has the positive relationships with organizational excellence efficiency. For the second specific research question, the result shows that organizational innovation success has a positive relationship with business practice





effectiveness and organizational excellence efficiency. For the third specific research question, the finding presents that business practice effectiveness, organizational innovation success, and organizational excellence efficiency has a positive relationship with firm performance.

With reference to the fourth specific research question, it was found that executive proactive vision and corporate resource readiness have positive relationships with new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. As can be seen from the findings, strategic renewal mindsets positively associated with new management method, valuable human resource development, novel organizational culture formation, and original performance evaluation system.

According to the fifth specific research question, organizational well-roundedness has a significant moderating role on the relationships among novel organizational culture and organizational excellence efficiency. In addition, organizational well-roundedness plays a significant moderating role on the relationships useful operational control establishment and organizational innovation success, and organizational excellence efficiency. Furthermore, organizational well-roundedness plays a significant moderating role on the relationships among original performance evaluation system and organizational excellence efficiency. With reference to the sixth specific research question, on the other hand, there are no significant moderating effects of organizational learning capability on the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance.

For the seventh specific research question, there are no significant moderating effects of transformational orientation on relationships among the antecedents of organizational creativity capability and dimension of organizational creativity capability

In conclusion, The results are summarized and shown in Table 15 below.



Table 15 A Summary of Results in All Research Questions

Research Questions	Hypothesis	Results	Conclusion
<b><u>Specific Research Question</u></b> (1) How does each of five dimensions of organizational creativity capability relate to business practice effectiveness, organizational innovation success, and organizational excellence efficiency?	H1a-c H2a-c H3a-c H4a-c H5a-c	- New management method has positive relationships with business practice effectiveness, and organizational innovation success. - Valuable human resource development has positive relationships with business practice effectiveness, and organizational innovation success. - Novel organizational culture formation is positively related to only organizational innovation success. - Useful operational control establishment is not significantly related to all three organizational outcomes. - The original performance evaluation system has the positive relationships with organizational excellence efficiency.	Partially supported
(2) How does organizational innovation success relate to business practice effectiveness and organizational excellence efficiency?	H7a, H7b	Organizational innovation success has a positive relationship with business practice effectiveness and organizational excellence efficiency.	Strongly supported



Table 15 (Continued)

Research Questions	Hypothesis	Results	Conclusion
(3) How do business practice effectiveness, organizational innovation success, and organizational excellence efficiency relate to firm performance?	H6, H7c, H8	- Business practice effectiveness, organizational innovation success, and organizational excellence efficiency have positive relationship with firm performance.	Strongly supported
(4) How do executive proactive vision, strategic renewal mindset, corporate resource readiness, and business environment complexity relate to each of five dimensions of organizational creativity capability?	H9a-e H10a-e H11a-e H12a-e	- Executive proactive vision and corporate resource readiness have positive relationships with new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. - Strategic renewal mindset is positively associated with new management method, valuable human resource development, novel organizational culture formation, and original performance evaluation system. - Business environment complexity is not significantly related to all five dimensions of organizational creativity capability.	Partially Supported



Table 15 (Continued)

Research Questions	Hypotheses	Results	Conclusion
(5) How does organizational well-roundedness moderate the relationships among each of five dimensions of organizational creativity capability, business practice effectiveness, organizational innovation success, and organizational excellence efficiency?	H13a-c H14a-c H15a-c H16a-c H17a-c	<p>- Organizational well-roundedness plays a significant moderating role on the relationships among novel organizational culture and organizational excellence efficiency.</p> <p>- Organizational well-roundedness has a significant moderating role on the relationships useful operational control establishment and organizational innovation success, and organizational excellence efficiency.</p> <p>- Organizational well-roundedness plays a significant moderating role on the relationships among original performance evaluation system and organizational excellence efficiency.</p>	Partially Supported
(6) How does organizational learning capability moderate the relationships among business practice	H18 H19 H20	-There are no significant moderating effects of organizational learning capability on the relationships among business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance.	Not Supported

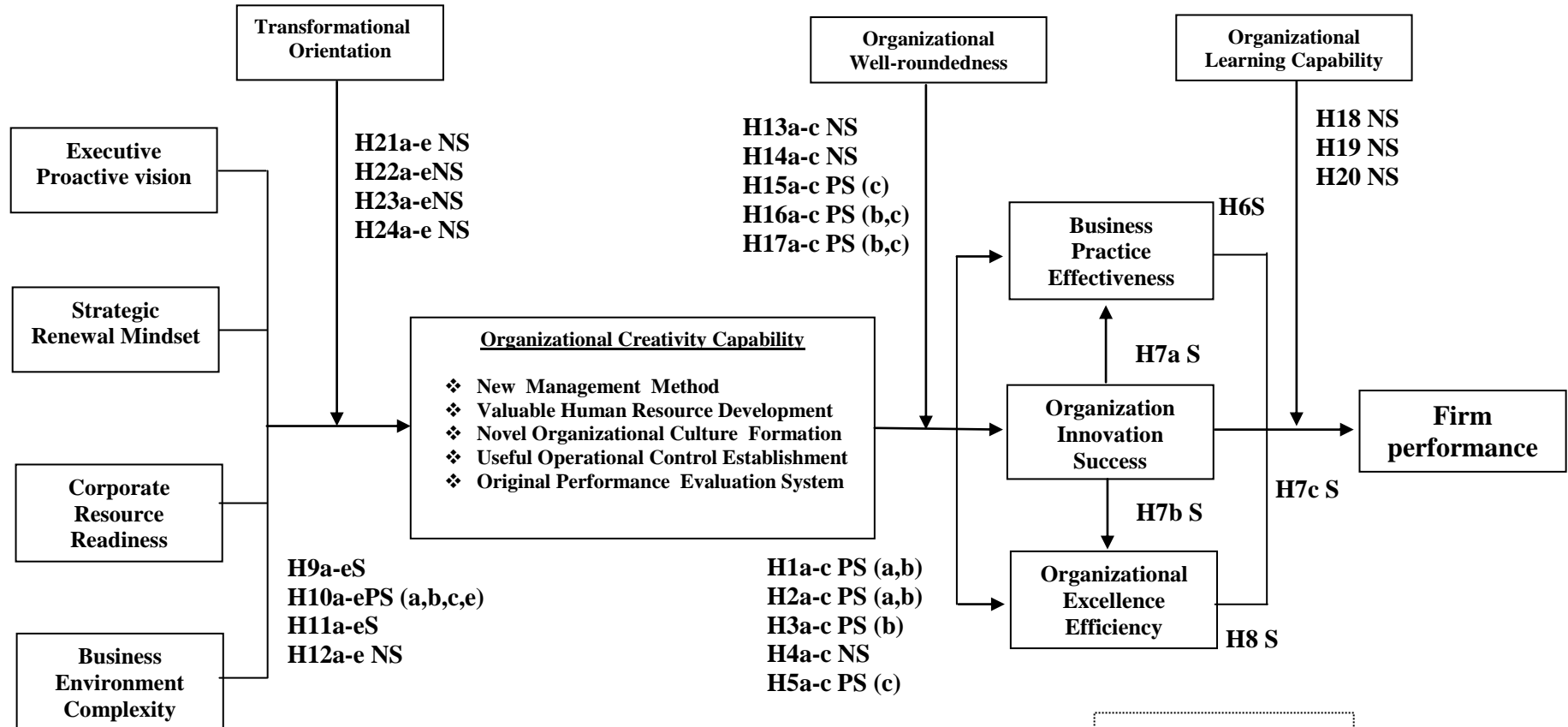


Table 15 (Continued)

Research Questions	Hypothesis	Results	Conclusion
effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance?			
(7) How does transformational orientation moderate the relationships among executive proactive vision, strategic renewal mindset, corporate resource readiness, business environment complexity, and each dimension of organizational creativity capability?	H21a-e H22a-e H23a-e H24a-e	-There are no significant moderating effects of transformational orientation on the relationships among antecedents of organizational creativity capability and dimension of organizational creativity capability	Not Supported



Figure 8 A Summary of the Results of the Hypotheses Testing



Note:

(S) = Hypotheses Supported

(PS) = Hypotheses Partial Supported and supported hypotheses are shown in parentheses

(NS) = Hypotheses Not Supported

Control Variables:

- Firm Age
- Firm Size



## Theoretical and Managerial Contributions

### Theoretical Contribution

This research proposes the understanding of the relationships among new dimensions of organizational creativity capability, antecedent variables, and its consequences via transformational orientation, organizational well-roundedness, and organizational learning capability as moderators. Moreover, this research makes three contributions to the literature of organizational creativity capability. Firstly, this research proposes five dimensions of organizational creativity capability, namely, new management method, valuable human resource development, novel organizational culture formation, useful operational control establishment, and original performance evaluation system. Organizational creativity capability has expanded the understanding of new ideas and new technical development of new methods which allow a business to achieve competitive advantage. Secondly, organizational creativity capability is examined in terms of quantitative methods by collecting data from software businesses in Thailand that are chosen because the software businesses are an expression of creativity, involving the creation of something new and useful. Thirdly, this research makes an important contribution to theory by expanding the resource-advantage theory, the contingency theory and organizational learning theory utilized to establish hypotheses linking each construct in this research. The resource-advantage theory is applied to explain the phenomenon and creates a value source for the firm. Resources include all firm assets, capabilities, organizational processes, attributes, information, experience, knowledge, and technology. Additionally, resources comprise tangible and intangible assets. Tangible resources are assets that can be quantified. Production equipment, manufacturing plants, financial resources, and technological resources are examples of tangible resources. In main, intangible resources are assets that are unobservable such as human capital, knowledge, skill and experience. The contingency theory explains the ability of culture and environment for both internal and external organizations such as employees, customers, competitions, suppliers, and public. Likewise, consideration in terms of the factors influenced the organizational creativity capability and used to explain moderating variables, including transformational orientation, organizational well-roundedness, and organizational learning capability.



### Managerial Contributions

The research results have managerial implications for practitioners (including firm owners, executives, and managers) who are responsible for strategic planning in capability development of organizational. Firstly, this research helps the firm executives to identify and justify the key components of organizational creativity capability that may be more critical in a rigorously competitive. The findings of this research suggest components of organizational creativity capability (including new management method, valuable human resource development, novel organizational culture formation, and original performance evaluation system) which are the key components for enhancing the outcomes (business practice effectiveness, organizational innovation success, organizational excellence efficiency, and firm performance). Especially, the executives should concentrate on new management method, and valuable human resource development, because it is the crucial factors for organizational creativity capability. New management method is the guild line for new product, process, and ideas that contribute to innovation success, and practice effectiveness of the firm. Moreover, valuable human resource development is established from new knowledge, skill, and training development, which increase the abilities of the employees.

From a practical and managerial contribution, many important insights can be gained from this research. This research can facilitate CEO's (executives and managers), particularly in software businesses, to understand how their firm can create capability propositions, enhance competitive advantage, and achieve firm performance over their competitors. Enlargement competitiveness of firms is becoming a foundation for firms to survive. Therefore, organizational creativity capability had become an important issue for managers in the business sector. In the context of the business sector, intense competition can stimulate many firms to attempt to search for effective strategies so as to generate new capability propositions to attract the demands, and deliver superior value to all market groups. The CEO's should effectively acquire, manage, and utilize the components of organizational creativity capability in order to possess sustained competitive advantage and success.

Finally, the firms that have more executive proactive vision, perceived strategic renewal mindset, and perceived corporate resource readiness can develop and





## **BIBLIOGRAPHY**



## BIBLIOGRAPHY

- Abernethy, M.A. and Brownell, P. (2004). Management Control Systems in Research and Development Organizations: The Role of Accounting, Behavior and Personnel Control. *Accounting, Organizations and Society*, 22(3-4), 233-248.
- Achabal, D.D., McIntyre, S. H. and Heineke, J.M. (1984). Issues and Perspectives on Retail Productivity. *Journal of Retailing*, 60(3), 107-127
- Adams, J.L. (1991). Creativity and Control: Innovation In The Organizational Context. *Design Management Journal (Former Series)*, 2(3), 8-13,
- Alegre, J. and Chiva, R. (2008). Assessing the Impact Of Organizational Learning Capability On Product Innovation Performance. *An Empirical Test Technovation*, 28(6), 315-326.
- Amabile, T.M. (1983). *The Social Psychology of Creativity*. New York: Springer Verlag.
- Ambos, T.C., Ambos, B. and Schlegelmilch, B. B. (2006). Learning from the Periphery: An Empirical Investigation Of Headquarters' Benefits From Reverse Knowledge Transfer. *International Business Review*, 15(3), 294-312.
- Amit, R. and Schoemaker, P.J.H. (1993). Strategic Assets and Organizational Rent. *Strategic Management Journal*, 14(1), 33-46.
- Anderson, S. W. and Lanen, W. N. (1999). Economic Transition: Strategy and The Evolution of Management Accounting Practices, The Case of India. *Accounting, Organizations and Society*, 24(5/6), 379-412.
- Armstrong, J. S. and Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research*, 14(3), 396-402.
- Arthurs, J. D. and Busenitz, L. W. (2006). Dynamic Capabilities and Venture Performance: The Effect of Venture Capitalist. *Journal of Business Venturing*, 21(2), 195-215.
- Atuahene-Gima, K., Slater, S. F. and Olson, E. M. (2005). The Contingent Value of Responsive and Proactive Market Orientations for New Product Program Performance. *Journal of Product Innovation Management*, 22(6), 464-482.
- Audretsch, D. B. (1995). *Innovation and Industry Evolution..* Cambridge, MA: MIT Press.



- Badri, M. A. and Davis, D. (2000). Operations Strategy: Environmental Uncertainty and Performance: A Path Analytic. *Model of Industries in Developing Countries OMEGA*, 28(2), 155-173.
- Baker, W. E. and Sinkula, J. M. (1999). The Synergistic Effect of Market Orientation and Learning Orientation on Organizational Performance. *Journal of the Academy of Marketing Science*, 27(4), 411-427.
- Balakrishnan, J., Eliasson, J. B. and Sweet, T. R. C. (2007). Factors Affecting the Evolution of Manufacturing in Canada: An Historical Perspective. *Journal of Operations Management Research Review*, 25(2), 260-283.
- Ballout, H. I. (2007). Career Success: The Effects of Human Capital: Person-Environment Fit and Organizational Support. *Journal of Managerial Psychology*, 22(8), 741–765.
- Barczak, G., Hultink, E. J. and Sultan, F. (2008). Antecedents and Consequences of Information Technology Usage in NPD: A Comparison of Dutch and U.S. Companies. *The Journal of Product Innovation Management*, 25(6), 620-631.
- Barner, S. J. (1997). *Creativity in the Workplace: The Creativity Professional's Perspective*. Lincoln: University of Nebraska.
- Barnett, C. M. (1996). *The Effects of Creativity and Perceived Support on Organizational Commitment*. California: California State University, Long Beach: United State.
- Barney, J. B. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science*, 32(10), 1231-1241.
- Barney, J. B. (1991). Firm Resources And Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. B. and Hesterly, W. S. (2006). *Strategic Management and Competitive Advantage*: Pearson prentice hall: Englewood cliffs, NJ.
- Barringer, B. R. and Harrison, J. S. (2000). Walking a Tightrope: Creating Value Through Interorganizational Relationships. *Journal of Management*, 26(3), 367-403.
- Baum, J. A. C., Li, S. X. and Usher, J. M. (2000). Making the Next Move: How Experiential and Vicarious Learning Shape the Locations of Chains' Acquisitions. *Administrative Science Quarterly*, 45(4), 766-801.



- Bayo-Moriones, A. and Merino-Díaz de Cerio, F.(2004). Employee Involvement: Its Interaction with Advanced Manufacturing Technologies: Quality Management and Inter-firm Collaboration. *Human Factors and Ergonomics in Manufacturing and Service Industries*,14(2), 117-134.
- Becker, G. S. (1962). Investment in Human Capital: A Theoretical Analysis. *The Journal of Political Economy*, 70(5), 9-49.
- Bergeron, C. (2004). Build a Talent Strategy to Achieve Your Desired Business Results. *Handbook of Business Strategy*, 5, 133–140.
- Bettis, R. A. and Prahalad, C.K. (1995). The Dominant Logic: Retrospective and Extension. *Strategic Management Journal*, 16, 5-14.
- Bharadwaj, S. and Menon, A. (2000). Making Innovation Happen in Organizations: Individual Creativity Mechanisms: Organizational Creativity Mechanisms or Both. *Journal of Product Innovation Management*, 17(6) ,424-434.
- Birkinshaw, J. (2000). Network Relationships Inside and Outside the Firm, And the Development of Capabilities. In J. Birkinshaw and P. Hagstrom (Editors). *The Flexible firm: Capability Management in Network Organization*. Oxford: Oxford University Press.
- Bolat, T. and Yilmaz., O. (2009). The Relationship Between Outsourcing and Organizational Performance is it Myth or Reality for the Hotel Sector?. *International Journal of Contemporary Hospitality Management*,21(1),7- 23.
- Brush, B. I. (2008). Global Nurse Migration Today, *Journal of Nursing Scholarship*, 40(1), 20-25.
- Burns, G. and Napier, B. (1994). Linking Creativity: Common Vision: and Customer Connection: Synergy for Organizational Competitiveness. *National Productivity Review*, 13(4), 587-600.
- Busenitz, L. W., Gómez ,C. and Spencer, J. W. (2000) . Country Institutional Profiles: Unlocking Entrepreneurial Phenomena. *Academy of Management Journal*, 43(5) , 994-1003.
- Butler, T. W., Leong , G. K. and Everett, L. N. (1996).The Operations Management Role in Hospital Strategic Planning. *Journal of Operations Management*, 14(2), 137-156.



- Cabrera, Á., Cabrera, E. F. and Barajas, S. (2001). The Key Role of Organizational Culture in a Multi-System View of Technology-Driven Change. *International Journal of Information Management*, 21(3), 245-261.
- Cadez, S. and Guilding, C. (2008). An Exploratory Investigation of an Integrated Contingency Model Of Strategic Management Accounting. *Accounting, Organizations and Society*, 33(7), 836-863.
- Camison, C. and Fores, B. (2010). Knowledge Absorptive Capacity, New Insights for its Conceptualization and Measurement. *Journal of Business Research*, 63(7), 707-715.
- Caselli, R. J. (2009). Creativity, An Organizational Schema. *Cognitive and Behavioral Neurology*, 22(3), 143-154.
- Cebeci, U. (2009). Fuzzy AHP-based Decision Support System for Selecting ERP Systems in Textile Industry by Using Balanced Scorecard. *Expert Systems with Applications*, 36(5), 8900-8909.
- Chakrabarti, A. K. (1990). Innovation and Productivity, An Analysis of the Chemical, Textiles and Machine Tool Industries in the U.S, *Research Policy*, 19(3), 257-269.
- Chen, C. J. and Huang, J. W. (2009). Strategic Human Resource Practices and Innovation Performance-the Mediating Role of Knowledge Management Capacity. *Journal of Business Research*, 62(1), 104-114.
- Chen, F., Hsu, T. and Tzeng, G., (2011). A balanced Scorecard Approach to Establish a Performance Evaluation and Relationship Model for Hot Spring Hotels Based on a Hybrid Mcdm Model Combining Dematel and Anp. *International Journal of Hospitality Management*, 30(4), 908-932.
- Chenhall, R. H. and Euske, K. J. (2007). The Role of Management Control Systems in Planned Organizational Change: An Analysis of Two Organizations. *Accounting, Organizations and Society*, 32(7-8), 601-637.
- Chenhall, R. H., (2003). Management Control Systems Design Within is Organizational Context: Findings from Contingency-Based Research and Directions for the Future. *Accounting, Organizations and Society*, 28(2/ 3), 127-168.



- Chenhall, R. H. (2005). Integrative Strategic Performance Measurement Systems, Strategic Alignment of Manufacturing: Learning and Strategic Outcomes: an Exploratory Study. *Accounting, Organizations and Society*, 30(5), 395-422.
- Chenhall, R.H. and Langfield-Smith, K. (1998). Factors Influencing the Role of Management Accounting in the Development of Performance Measures within Organizational Change Programs. *Management Accounting Research*, 9(4), 361-386.
- Choi, B.G. (1999). *Organizational Relations and Managerial Behaviors of Cultural Nonprofit Organizations in Korea: Autonomy, Creativity, Legitimacy and Managerial Orientations*. New York: Syracuse University.
- Chuang and Liao. (2010). Strategic Human Resource Management in Service Context, Taking Care of Business by *Taking Care of Employees and Customers*, *Pers Psychol.* 63(1), 153-196.
- Chuebang, P. and Ussahawanitchakit, P. (2009). Corporate innovation: Creative performance, and sustainable growth, an empirical research exporting gems and jewelry business in thailand. *International Journal of Strategic Management*, 9(1), 30-49.
- Cohen, J, Cohen, P, West, S. G. and Aiken, Leona S. (2003). *Applied Multiple Regression/Correlation Analysis For The Behavioral Sciences*. 3Edition. Mahwah, New Jersey: L. Erlbaum Associates.
- Cohen, W. M. and Levinthal, D. A. (1989). Innovation and Learning, The Two Faces of R&D. *The Economic Journal*, 99(397), 569-596.
- Cohen, W. M. and Levinthal, D. A. (1990). Absorptive Capacity, A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Collins, D.M. (1991). *Releasing Potential, an Investigation of the Use of Theater Sports for Developing Selected Creativity Skills In Human Resource Development Professional*. Nashville TN: Vanderbilt University.
- Collins, J. and Porras, J. (1991). Organizational Vision and Visionary Organization. *California Management Review*, 34(1), 30-53.
- Connor, K.R. and Prahalad, C.K. (1996). A Resource-Based Theory of the Firm, Knowledge Versus Opportunism. *Organization Science*, 7(5), 477-501.



- Cook, T. E. (1998). *Governing with the News: The News Media as a Political Institution*. Chicago: University of Chicago Press.
- Cooke, R. A. and Szumal, J. L. (2000). *Using the Organizational Culture Inventory to Understand the Operating Cultures of Organizations*. Thousand Oaks: CA: Sage.
- Coste, T. G. (1996). *Group creativity: Divergence and Convergence in Technological Design*. Michigan: Michigan Technological University.
- Crossan, M. and Berdrow, I. (2003). Organizational Learning and Strategic Renewal. *Strategic Management Journal*, 24(11), 1087-1105.
- Cyert, R. M. and March, J. G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs: NJ, 2.
- Daft, R. L. (2007). *Understanding the Theory and Design of Organizations*. Moson, OH: Thomson South-Western.
- Dakhli, M. and D. De Clercq. (2004). Human Capital: Social Capital and Innovation: a Multi-Country Study. *Entrepreneurship and Regional Development*, 16(2), 107-128.
- Damanpour, F. (1991). Organizational Innovation A Meta-Analysis of Effects of Determinants and Moderators. *Academy of Management Journal*, 34(3), 555-590.
- Danneels, E. (2002). The Dynamics of Product Innovation and Firm Competences. *Strategic Management Journal*, 23(12), 1095-1121.
- Dawes, P. L., Lee, D. Y. and Midgley, D. (2007). Organizational Learning in High-Technology Purchase Situations: The Antecedents and Consequences of the Participation of External IT Consultants. *Industrial Marketing Management*, 36, 285-299.
- Day, G.S. and Nedungadi, P. (1994). Managerial Representations of Competitive Advantage. *Journal of Marketing*, 58(2), 31-44.
- Day, G. S. and Wensley, R. (1988). Assessing Advantage a Framework for Diagnosing Competitive Superiority. *Journal of Marketing*, 52(2), 1-20.
- De Brentani, U. (1995). New Industrial Service Development: Scenarios for Success and Failure. *Journal of Business Research*, 32(2), 93-103.
- Deal T. E. and Kennedy, A. A. (1982). *Corporate Culture: The rites and Rituals of Corporate life*. Harmondsworth: Penguin Books.



- Denison, D. R. (1996). What is the Difference Between Organizational Culture and Organizational Climate?. *Academy of Management Review*, 21(3), 619-654.
- Derksen, A. K. (1998). *Relational Management Practices which Support or Impede Creativity and Innovativeness in Organizational Culture a Case in Missionary Management*. Ph.D. Theses, Illinois, Trinity Evangelical Divinity School.
- Desphande, R. J. and Webster, F. E. (1989). Organizational Culture and Marketing, Defining the Research Agenda. *Journal of Marketing*, 53(1), 3-15.
- Dess, G. G. Lumpkin G. T., and Eisner, A. B. (2007). *Strategic Management-Creating Competitive Advantage*. New York: McGraw-Hill Irwin.
- Dewett, T. and Gruys, M. L. (2007). Advancing the Case for Creativity Through Graduate Business Education. *Thinking Skills and Creativity*, 2(2), 85-95.
- Dibella, A.J., Nevis, E.C. and Gould, J.M. (1996). Understanding Organizational Learning Capability. *Journal of Management Studies*, 33(3), 361-379
- Dierickx, I. and Cool, K. (1989). Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science*, 35(12), 1504-1511.
- DiLiello, T. C. and Houghton, J. D. (2006). Maximizing Organizational Leadership Capacity for the Future: Toward a Model Of Self-Leadership Innovation and Creativity. *Journal of Managerial Psychology*, 21(4), 319-337.
- Drazin, R. and Van de Van, A. H. (1985). Alternative Forms of Fit in Contingency Theory. *Administration Science*, 30, 514-539.
- Duchon, D. J. (1983). *Creativity and Goal Setting*. Ph.D. Thesis, Texas, University of Houston.
- Eddleston, M., Buckley, N. A., Eyer, P. and Dawson, A. H. (2008). Management of Acute Organophosphorus Pesticide Poisoning. *The Lancet*, 371(9612), 597-607.
- Einstein, P. and Hwang, K. P. (2007). *An Appraisal for Determinants of Organizational Creativity And Impacts On Innovative Behavior*. In Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia. pp. 1041-1055.
- Ekvall, G. (1997). Organizational Conditions and Levels of Creativity. *Creativity and Innovation Management*, 6(4), 195-205.





- Eskildsen, J. K., Dahlgaard, J. J. and Norgaard, A. (1999). The Impact of Creativity and Learning on Business Excellence. *Total Quality Management*, 10(4-5), 523-530.
- Fanelli, A., Misangyi, V. F and Tosi, H. L. (2009). In Charisma we Trust the Effects of CEO Charismatic Visions on Securities Analysts. *Organization Science*, 20(6), 1011-1033.
- Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. New York: McGraw-Hill.
- Fisher, Robert, J., Maltz, E. and Jaworski, Bernard, J. (1997). Enhancing Communication between Marketing and Engineering, The Moderating Role of Relative Functional Identification. *Journal of Marketing*, 61(3), 54-70.
- Flatten, T. C. (2011). A Measure of Absorptive Capacity: Scale Development and Validation. *European Management Journal*, 29(2), 98-116.
- Floyd, S. W. and Lane, P. J. (2000). Strategizing Throughout the organization, Managing Role Conflict in Strategic Renewal. *Academy of Management Review*, 25(1), 54-177.
- Fong, C. T. (2006). The Effects of Emotional Ambivalence on Creativity. *Academy of Management Journal*, 49(5), 1016-1030.
- Fontenot, N. A. (1987). *The Effects of Training in Creativity and Creative Problem-Finding Upon Business People as Measure by Fluency Flexibility and Quality of the Problem Statement*. Ph.D. Theses, Oklahoma, The University of Oklahoma.
- Foo, M. D., Wong, P. K. and Ong, A. (2005). Do Others Think You Have a Viable Business Idea? Team Diversity and Judges' Evaluation of Ideas in a Business Plan Competition. *Journal of Business Venturing*, 20, 385-402.
- Ford, D. P. and Staples, D. S. (2006). Perceived Value of Knowledge: The Potential Informer's Perception. *Knowledge Management Research & Practice*. 4, 3-16.
- Gao, Y. (2010). Measuring Marketing Performance, A Review and a Framework, The Marketing Review, 10(1), 25-40.
- Garcia, R. and Calantone, R. (2002). A Critical Look at Technological Innovation Typology and Innovativeness Terminology: A Literature Review. *Journal of Product Innovation Management*, 19(2), 110-132.
- Gatignon, H. and Xuereb, J. M. (1997). Strategic Orientation in the Firm and New Product Performance. *Journal of Marketing Research*, 34, 77-90.



- Gerdin, J. and Greve, J. (2008). The Appropriateness of Statistical Methods for Testing Contingency Hypotheses in Management Accounting Research. *Accounting, Organizations and Society*, 33(7), 995-1009.
- Ghraiiri, A. M. (2011). Management Control and Performance: A Comparative Study of Tunisia Firms vs Developed Countries Firms. *International Journal of Global Business*, 4(1), 73-86.
- Gluck, F. W. (1981). Vision and Leadership in Corporate Strategy. *The McKinsey Quarterly*, 13-27.
- Goh, S. and Richards, G. (1997). Benchmarking the Learning Capability of Organizations. *European Management Journal*, 15(5), 575-583.
- Grandi, A. and Grimaldi, R. (2005). Academics' Organizational Characteristics and the Generation of Successful Business Ideas. *Journal of Business Venturing*, 20(6), 821-845.
- Grant, R. M. (1991). A Resource Based Theory of Competitive Advantage, Implications for Strategy Formulation. *California Management Review*, 33(3), 114-135.
- Grant, R. M. (1996). Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17(S2), 109-122.
- Green, G. I. and Keim, R. T. (1983). After Implementation Whats Next-EVALUATION. *Journal of Systems Management*, 34(9), 10-15.
- Gryskiewicz, S. S. and others. (1985). From Experience Demystify Creativity Enhance Innovation. *Journal of Product Innovation Management*, 2(2), 101-106.
- Gumusluoglu, L. and Ilsev, A. (2009). Transformational Leadership Creativity and Organizational Innovation. *Journal of Business Research*, 62(4), 461-473.
- Gupta, A. S., Ken, G. and Shalley, C. E. (2009). Use of Collaborative Technologies and Knowledge Sharing in Co-Located and Distributed Teams Towards the 24-h Knowledge Factory. *The Journal of Strategic Information Systems*, 18(3), 147-161.
- Gurteen, D. (1998). Knowledge, Creativity and Innovation. *Journal of knowledge Management*, 2(1), 5-13.
- Guth, W. D. and Ginsberg, A. (1990). Corporate Entrepreneurship. Special Issue. *Strategic Management Journal*, 11(1).



- Guth, W. D. and Ginsberg, A. (1990). Guest Editors' Introduction: Corporate Entrepreneurship. *Strategic Management Journal*, 11(Summer), 5-15.
- Hair, Jr. J. F., Babin, B. J. and Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. 7th ed. New Jersey: Pearson prentice hall.
- Hair, Jr. J.F., Black, B. B., Anderson, R. and Tatham, R. L. (2006). *Multivariate Data Analysis*. 6th ed. New Jersey: Pearson Education.
- Hanvanich, S., Sivakumar, K., Tomas, G. and Hult, M. (2006). The Relationship of Learning and Memory with Organizational Performance: The Moderating Role of Turbulence. *Journal of the Academy of Marketing Science*, 34(4), 600-612.
- Hardjono, T. W. and Marrewijk, M. V. (2001). The Social Dimensions of Business Excellence. *Corporate Environmental Strategy*, 8(3), 223-233.
- Hargadon AB. (2002). Brokering Knowledge, Linking Learning and Innovation. *Research Organizational Behavior*, 24, 41-85.
- Harmel, G. and Prahalad, C. K. (1994). Competing for the Future. *Harvard Business Review*, 72(4), 122-128.
- Heap, J. (1989). *The Management of Innovation and Design*. London: Cassell.
- Henri, J. F. (2006). Management Control Systems and Strategy, A Resource-Based Perspective. *Accounting, Organizations, and Society*, 31(6), 529-558.
- Herri, H. (2011). Firm's Performance and Top Management Characteristics in Indonesia. *International Business and Economics Research Journal*, 10(8), 15-22.
- Heunks, F. J. (1998). Innovation, Creativity and Success. *Small Business Economics*, 10(3), 263-272.
- Hickman, L. J. (1997). *The Impact of Executive Team Excellence and the Work Environment on Organizational Creativity*. Ph.D. Theses, Maryland, University of Maryland, Baltimore.
- Hickman, C. B. (1997). The Devil and the One Drop Rule: Racial Categories, African Americans, and the US Census. *Michigan Law Review*, 95(5), 1161-1265.
- Hong, J. C., Hwang, I. Y. and Lin, C. L. (2003). Chi and Organizational Creativity, A Case Study of Three Taiwanese Computer Firms. *Creativity and Innovation Management*, 12(4), 202-210.



- Hooley, Graham J. and Hitt. (2005). The Performance Impact of Marketing Resources, *Journal of Business Research*, 58(1), 18– 27.
- Hoskisson, R. E., Hitt, M. A., Wan, W. P. and Yiu, D. (1999). Theory and Research in Strategic Management. *Swings of a Pendulum. Journal of Management*, 25(3), 417-456.
- Howell, J. M. and Boies, M. (2004). Champions of Technological Innovation, The Influence of Contextual Knowledge Role Orientation Idea Generation, and Idea Promotion on Champion Emergence. *The Leadership Quarterly*, 15(1), 123-143.
- Hsu, M. L. A. and Fan, H. L. (2010). Organizational Innovation Climate and Creative Outcomes Exploring the Moderating Effect of Time Pressure. *Creativity Research Journal*, 22(4), 378-386.
- Huang, Y. T. and Chu, W. (2010). Enhancement of Product Development Capabilities of OEM Suppliers: Inter- and Intra-Organizational Learning. *Journal of Business and Industrial Marketing*, 25(2), 147–158.
- Huff, J. O., Huff, A. S. and Thomas, H. (1992). Strategic Renewal and the Interaction of Cumulative Stress and Inertia. *Strategic Management Journal*, 13(1), 55-75.
- Hult, G., Tomas M. (2011). Toward a Theory of the Boundary-Spanning Marketing Organization and Insights From 31 Organization Theories. *Journal of the Academy of Marketing Science*, 39(4), 509-536.
- Hultman, M., Katsikeas, C. S. and Robson, M. J. (2011). Export Promotion Strategy and Performance the Role of International Experience. *Journal of International Marketing*, 19(4), 17-39.
- Hunt, R. M. (2002). *An Exploratory Study of Entrepreneurial Arts and Sciences Faculty in the Context of their Work Environments*. Ph.D. Theses, Virginia, The College of William and Mary.
- Hunt, S. D. and Morgan, R. M. (1997). Resource-Advantage Theory, A Snake Swallowing its Tail or a General Theory of Competition. *Journal of Marketing*, 61(4), 74-82.
- Hunt, S. D. and Madhavaram, S. (2006). Teaching Marketing Strategy, Using Resource-Advantage Theory as an Integrative Theoretical Foundation. *Journal of Marketing Education*, 28(2), 93-105.



- Hunt, S. D. and Morgan, R. M. (1995). The Comparative Advantage Theory of Competition. *Journal of Marketing*, 59(2), 1-15.
- Hurley, R. F., Hult, G. T. M. and Knight, G. A. (2005). Innovativeness and Capacity to Innovate in a Complexity of Firm-Level Relationships: A Response to Woodside (2004). *Industrial Marketing Management*, 34(3), 281-283.
- Hurley, R. F. and Hult, G. T. M. (1998). Innovation, Market Orientation, and Organizational Learning, An Integration and Empirical Examination. *Journal of Marketing*, 62(3), 42-54
- Huselid, M. A., Jackson, S. E. and Schuler, R. S. (1997). Technical and Strategic Human Resource Management Effectiveness as Determinants of Firm Performance. *Academy of Management Journal*, 40(1), 171-188.
- Ichniowski, C., Kochan, T. A., Levine, D., Olson, C. and Strauss, G. (1996). What Works at Work. *Overview and Assessment Industrial Relations*, 35(3), 299-333.
- Isaksen, S. G. and Ekvall, G. (2010). Managing for Innovation, The Two Faces of Tension in Creative Climates. *Creativity and Innovation Management*, 19(2), 73-88.
- Jaakkola, M., Moller, K., Parvinen, Evanschitzky, P, H, and Muhlbacher, Hans. (2010). Strategic Marketing and Business Performance, A Study in Three European Engineering Countries. *Industrial Marketing Management*, 39(8), 1300-1310.
- Jeacle, I. and Carter, C. (2012). Fashioning the Popular Masses: Accounting as Mediator Between Creativity and Control. *Accounting, Auditing and Accountability Journal*, 25(4), 719-75.
- Johns, G. (2006). The Essential Impact of Context on Organizational Behavior. *Academy of Management Review*, 31(2), 386-408.
- Joshi, P. L. (2001). The International Diffusion of New Management Accounting Practices, The Case of India. *Journal of International Accounting, Auditing and Taxation*, 10(1), 85-109.
- Judge, W. Q. and Zeithaml, C. P. (1992). Institutional and Strategic Choice Perspectives on Board Involvement in the Strategic Decision Process. *Academy Management Journal*, 35(4), 76-94.



- Kallunki, J., Laitinen, E. K. and Silvola, H. (2011). Impact of Enterprise Resource Planning Systems on Management Control Systems and Firm Performance. *International Journal of Accounting Information Systems*, 12 (1),20-39.
- Kamm, J. B. and Nurick, A. J. (1993). The Stages of Team Venture Formation, A Decision Making Model. *Entrepreneurship Theory and Practice*, 17(2), 17-25.
- Kardoff, A. D. (1989). *Managing Creativity, Discovery and Enhancement*. Ed. D. Theses, Illinois, Northern Illinois University.
- Katila, R. and Ahuja, G. (2002). Something Old, Something New, A Longitudinal Study of Search Behavior and New Product Introduction. *Academy of Management Journal*, 45(6), 1183-1194.
- Kaynak, E. and Kara, A. (2004). Market Orientation and Organizational Performance, a Comparison of Industrial Versus Consumer Companies in Mainland China using market orientation scale (MARKOR). *Industrial Marketing Management*, 33(8), 743-753.
- Kittikunchotiwiut, P., Ussahawanitchakit, P. and Pratoom, K. (2013). Strategic Management Creativity and Firm Survival: An Empirical Investigation of the Exporting Fashion Accessories Business in Thailand. *Journal of Academy of Business and Economics*, 13(3), 87-114.
- Kogut, B. and Zander, Udo. (1992). Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. *Organization Science*, 3(3), 383-397.
- Kratzer, J., Gemunden, H. G. and Lettl, C. (2008). Balancing Creativity and Time Efficiency in Multi-Team, R&D Project. *The Alignment of Formal and Informal Networks, R&D Management*, 38(5), 538-549.
- Krejcie, R. V. and Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Kumar, S. and Gulati, R. (2010). Measuring Efficiency, Effectiveness and Performance of Indian Public Sector Banks. *International Journal of Productivity and Performance Management*, 59(1), 51-74.
- Kwantes, C. T. and Boglarsky, C. A. (2007). Perceptions of Organizational Culture, Leadership Effectiveness, and Personal Effectiveness Across Six Countries. *Journal of International Management*, 13(2), 204-213.



- Kwok, W. C. C. and Sharp, D. J. (1998). A Review of Construct Measurement Issues in Behavioral Accounting Research. *Journal of Accounting Literature*, 17(1), 137-174.
- Laforet, S. and Tann, J. (2012). Innovative Characteristics of Small Manufacturing Firms. *Journal of Small Business and Enterprise Development*, 13(3), 363–380.
- Lahiri, S., Kedia, B. L., Raghunath, S. and Agrawal, N. M. (2009). Anticipated Rivalry as a Moderator of the Relationship Between Firm Resources and Performance. *International Journal of Management*, 26(1), 146-158.
- Langfield-Smith, K. (1997). Management Control Systems and Strategy, a Critical Review. *Accounting, Organizations and Society*, 22(2), 207-232.
- Lapierre, J. and Giroux, V. P. (2003). Creativity and Work Environment in a High-Tech Context. *Creativity and Innovation Management*, 12(1), 11-23.
- Larwood, L., Falbe, C. M., Kriger, M. P. and Miesing, P. (1995). Structure and Meaning of Organizational Vision. *Academy of Management Journal*, 38(3), 740-769.
- Lau, C. M. (2008). Strategic Orientation of High-Technology Firms in a Transitional Economy. *Journal of Business Research*, 61(8), 765-777.
- Lawrence, P. R. and Lorsch, J. W. (1967). *Organization and Environment: Managing Differentiation and Integration*. Boston, Massachusetts: Harvard University
- Lee, H. and Choi, B. (2003). Knowledge Management Enablers, Processes, and Organizational Performance, An Integrative View and Empirical Examination. *Journal of Management Information Systems*, 20(1), 179-228.
- Lee, C. H. and Bruvold, N. T. (2003). Creating Value for Employees: Investment in Employee Development. *The International Journal of Human Resource Management*, 14(6), 981-1000.
- Lee, J.N., Huynh, M.Q., Chi-wai, K.R. and Pi, S.M. (2000). The Evolution of Outsourcing Research, What is The next Issue?. *Proceedings of the 33<sup>rd</sup> Hawaii International Conference on System Sciences*, 7(7), 1-10, January.
- Levinthal, D. A. and March, J. G. (1993). The Myopia of Learning. *Strategic Management Journal*, 14(Winter Special Issue), 95-112.





- Limpsurapong, C. and Ussahawanichakit, P. (2011). Dynamic Service Strategy and the Antecedents and Consequences: Evidence from Spa Businesses in Thailand. *Journal of International Business and Economics*, 11(4), 52-80.
- Lissack, M. R. and Gunz, H. P. (2005). *Managing Complexity in Organizations, A View in Many Directions*. London: Quorum Books Publication, Greenwood Publishing Group, Inc.
- Liu, S. S., Luo, X. and Shi, Yi-Zheng. (2002). Integrating Customer Orientation, Corporate Entrepreneurship, and Learning Orientation in Organizations in Transition, An Empirical Study. *International Journal of Research in Marketing*, 19(4), 367-383.
- Livingstone, L. P., Nelson, D. L. and Barr, S. H. (1997). Person-Environment Fit and Creativity, An Examination of Supply-Value and Demand-Ability Versions of Fit. *Journal of Management*, 23(2) , 119-146, 1997.
- Loo, R. (2002). Working Toward Best Practices in Project Management: A Canadian Case. *International Journal of Project Management*, 20(2), 93-98.
- Lumpkin, G. T. and Dess, G. G. (2001). Linking Two Dimensions of Entrepreneurial Orientation to Firm Performance, The Moderating Role of Environment and Industry Life Cycle. *Journal of Business Venturing*. 16(5), 429-451.
- Luo, Y. (2001). Equity Sharing in International Joint Ventures, An Empirical Analysis of Strategic and Environmental Determinants. *Journal of International Management*, 7(1), 31-58.
- MacDuffie, J. P. (1995). Human Resource Bundles and Manufacturing Performance, Organizational Logic and Flexible Production. *Industrial Labour Relation Review*. 48(2), 197-213.
- Madsen, P. M. and Desai, V. (2010). Failing to Learn? The Effects of Failure and Success on Organizational Learning in the Global Orbital Launch Vehicle Industry. *Academy of Management Journal*, 53(3), 451–476.
- Mahama, H. (2006). Management Control Systems, Cooperation and Performance in Strategic Supply Relationships; A Survey in the Mines. *Management Accounting Research*, 17, 315-339.





- Makadok, R. (2001). Toward a Synthesis of the Resource-Based and Dynamic-Capabilities Views of Rent Creation. *Strategic Management Journal*, 22(5), 387-401.
- Malmi, T. and Brown, D. A. (2008). Management Control Systems as a Package- Opportunities, Challenges and Research Directions. *Management Accounting Research*, 19(4), 287-300.
- March, J. G. (2006). Rationality, Foolishness and Adaptive Intelligence. *Strategic Management Journal*. 27(3), 201-214.
- March, J. G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*, 2(1), 71-87.
- Marimuthu, M., Arokiasamyl, A. and Ismail, M. (2009). Human Capital Development and its Impact on Firm Performance: Evidence from Developmental Economics. *The Journal of International Social Research*, 2(8), 265-272.
- Martins, E.C. and Terblanche, F. (2003). Building Organisational Culture that Stimulates Creativity and Innovation. *European Journal of Innovation Management*, 6(1), 64-74.
- Mathiyalakan, S. and Chung, C. (1996). A DEA Approach for Evaluating Quality Circles. *Benchmarking for Quality Management and Technology*, 3(3), 59-70.
- McAdam, R. and McClelland, J. (2002). Sources of New Product Ideas and Creativity Practices in the UK Textile Industry, *Technovation*, 22(2), 113-121.
- McLean, L. D. (2005). Organizational Culture's Influence on Creativity and Innovation, A Review of the Literature and Implications for Human Resource Development, *Advances in Developing Human Resources*, 7(2), 226-246.
- McLean, G.N. (2006). National Human Resource Development: A Focused Study in Transitioning Societies in the Developing World. *Advances in Developing Human Resources*, 8(1), 3-11.
- McNally, R.C., Durmusoglu, S.S., Calantone, R.J and Harmancioglu, N. (2009). Exploring New Product Portfolio Management Decisions, The Role of Managers' Dispositional Traits. *Industrial Marketing Management*, 38(1), 127-143.



- Menon, A., Bharadwaj, S. G., Adidam, P. T. and Edison, S. W. (1999). Antecedents and Consequences of Marketing Strategy Making: A Model and a Test. *Journal of Marketing*, 63(2), 18-40.
- Mentzer, J. T., Stank, T. P. and Esper, T. L. (2008). Supply Chain Management and its Relationship to Logistics, Marketing, Production, and Operations Management. *Journal of Business Logistics*, 29(1), 31-46.
- Mintzberg, H., Lampel, J. and Ahlstrand, B. (2005). *Strategy Safari, A Guided Tour Through the Wilds of Strategic Management*. London: Simon & schuster.
- Morgan, N. (2012). Marketing and Business Performance. *Journal of Academy, Marketing*, 40(1), 102-119.
- Morgan, R. E. (2004). Market-Based Organizational Learning—Theoretical Reflections and Conceptual Insights. *Journal of Marketing Management*, 20(2), 67-103.
- Mostafa, M. M. and El-Masry, A. (2009). Perceived Barriers to Organizational Creativity, A Cross-Cultural Study of British and Egyptian Future Marketing Managers, Cross Cultural Management. *An International Journal*, 15(1), 81-93.
- Mouzas, S. (2006). Efficiency Versus Effectiveness in Business Networks. *Journal of Business Research*, 59(10), 1124-1132.
- Mukherjee, A., Nath, P. and Pal, M. N. (2002). Performance Benchmarking and Strategic Homogeneity of Indian Banks. *International Journal of Bank Marketing*, 20(3), 122-139.
- Mumford, M. D. (2002). Leading Creative People, Orchestrating Expertise and Relationships. *Leadership Quarterly*, 13(6), 705-750.
- Murray, J. Y. and Chao, M. C. H. (2005). A Cross-Team Framework of International Knowledge Acquisition on New Product Development Capabilities and New Product Market Performance. *Journal of International Marketing*, 13(3), 54-78.
- Murthy, V. and Abeysekera, I. (2007). Human Capital Value Creation Practices of Software and Service Exporter Firms in India. *Journal of Human Resource Costing and Accounting*, 11(2), 84-103.
- Naidoo, V. (2010). Firm Survival Though a Crisis: The Influence of Market Orientation, Marketing Innovation and Business Strategy. *Industrial marketing management*, 39(2), 1311-1320.



- Naranjo-Gil, D., Maas, V. S. and Hartmann, F. G. H. (2009). How CFOs Determine Management Accounting Innovation, An Examination of Direct and Indirect Effects. *European Accounting Review*, 18(4), 667-695.
- Nasution, H. N., Mavondo, F.T., Matanda, M. J. and Ndubisi, N. O. (2011). Entrepreneurship, Its Relationship with Market Orientation and Learning Orientation and as Antecedents to Innovation and Customer Value. *Industrial Marketing Management*, 40(3), 336-345.
- Nath, P., Nachiappan, S. and Ramanathan, R. (2010). The Impact of Marketing Capability, Operations Capability and Diversification Strategy on Performance, a Resource-Based View. *Industrial Marketing Management*, 39(2), 317-329.
- Naveh, E. and Marcus, A. (2005). Achieving competitive Advantage Through Implementing a Replicable Management Standard, Installing and Using ISO 9000. *Journal of Operations Management*, 24(1), 1-26.
- Neuman, W. L. (2006). *Social Research Methods Qualitative and Quantitative Approaches*. USA: Pearson Education, Inc.
- Nicolau, J. L. (2005). Valuing the Business Environment on Daily Basis. *European Journal of Operational Research*, 164(1), 217-224.
- Nilniyom, P. and Ussahawanitchakit, P. (2009). Management Control System Effectiveness of Thai Manufacturing Firms, Impacts on Operational Advantage, Managerial Capability, and Business Success. *Review of Business Research*, 9(2), 45-66
- Noble, C. H., Sinha, R. K. and Kumar, A. (2002). Market Orientation and Alternative Strategic Orientations, A Longitudinal Assessment of Performance Implications. *Journal of Marketing*, 66(4), 25-39.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14-37.
- Nunnally, J. C. (1978). *Psychometric Theory*. 2nded. New York: McGraw-Hill.
- Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theory*. 3rded. New York: McGraw-Hill.
- Nyström, H. (1993). Creativity and Entrepreneurship. *Creativity and Innovation Management*, 2(4), 237-242.



- O'Hara, L. (2001). A Leadership Style and Group Creativity. PH.D. Theses, Connecticut, Yale University.
- O'Sullivan, D. and Abela, A. V. (2007). Marketing Performance Measurement Ability and Firm Performance. *Journal of Marketing*, 71(2), 79-93.
- Ostroff, C. and Schmitt, N. (1993). Configuration of Organizational Effectiveness and Efficiency. *Academy of Management Journal*, 36(6), 1345-1361.
- Oxendine, L. T. (1998). *Creative Coalitions, A Study of Collective Action in Organizational Creativity*. D. B. A. Dissertation, Massachusetts, Boston University United States.
- Palmatier, R. W., Dant, R. P. and Grewal, D. (2007). A Comparative Longitudinal Analysis of Theoretical Perspectives of Interorganizational Relationship Performance. *Journal of Marketing*, 71(4), 172-194.
- Paper, D. J. and Johnson, J. J. (1997). Atheoretical Framework Linking Creativity, Empowerment, and Organizational Memory. *Creativity and Innovation Management*, 6(1), 32-44.
- Perry-Smith, J. E. and Shalley, C. E. (2003). The Social Side of Creativity: A Static and Dynamic Social Network Perspective. *Academy of Management Review*, 28(1), 89-106.
- Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal*, 14(3), 179-191.
- Phokha, A. and Ussahawanitchakit, P. (2011). Marketing Leadership Strategy, Marketing Outcomes and Firm Sustainability: Evidence from Food Product Businesses in Thailand. *International Journal of Strategic Management*, 11(3), 1-25.
- Phong-Inwong, R. and Ussahawanitchakit, P. (2011). Creativity, Marketing Innovation and Marketing Success: Evidence from Home Decoration Export Businesses in Thailand. *International Journal of Business Research*, 11(4), 89-103.
- Phusavat, K. A., Anussornnitisarn, P. H. and Dwight, R. (2009). Performance Measurement, Roles and Challenges, *Industrial Management & Data Systems*, 109, 646-664.



- Piercy, Nigel F. and Morgan, Neil A. (1994). The Marketing Planning Process, Behavioral Problems Compared to Analytical Techniques in Explaining Marketing Plan Credibility. *Journal of Business Research*, 29(3), 167-178.
- Porter, M. E. (1979). The Structure Within Industries and Companies Performance. *The Review of Economics and Statistics*, 61(2), 214.
- Prachsrithum, S. and Ussahawanitchakit, P. (2009). Corporate Social Responsibility (CSR) Information Disclosure and Firm Sustainability: An Empirical Research of Thai-Listed Firms. *Journal of International Business & Economics*, 9(4), 40-59.
- Prahalad, C. K. and Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, 68(3), 79-91.
- Prempee, K., Ussahawanitchakit, P. and Boonlua, S. (2013). Management Accounting Governance and Firm Value of Textile Manufacturing Businesses in Thailand. *International Journal of Business Strategy*, 13(4), 41-72.
- Radas, S. and Bozic, L. (2009). The Antecedents of SME Innovativeness in an Emerging Transition Economy. *Technovation*, 29(6-7), 438-450.
- Rasulzada, F. and Dackert, I. (2009). Organizational Creativity and Innovation in Relation to Psychological Well-Being and Organizational Factors. *Creativity Research Journal*, 21(2-3), 191-198.
- Rasulzada, F. (2007). *Organizational Creativity and Psychological Well-Being, Contextual Aspects on Organizational Creativity and Psychological Well-Being from an Open Systems Perspective*. Ph.D. Theses, Sweden, Lunds Universitet (Sweden).
- Ritchie, L. and Dale, B. G. (2000). Self-Assessment Using the Business Excellence Model, A Study of Practice and Process. *International Journal of Production Economics*, 66(3), 241-254.
- Robert, E. (2012). Value in Business and Industrial Marketing, Past, Present, and Future. *Industrial Marketing Management*, 41(1), 207-214.
- Roos, J. (1998). Exploring the Concept of Intellectual Capital (IC). *Long Range Planning*, 31(1), 150-153.
- Rumelt, R. P. (1984). *Towards a Strategic Theory of the Firm*. In R. Lamb (ed.) *Competitive Strategic Management*. Prentice-Hall: Englewood Cliffs, NJ.



- Ryan, L. C. (2001). *The Relationship of Transformational Style of Leadership to the Creativity, Productivity, and Efficiency of Creative Work Teams within Organizations*. Ph.D. Theses, New York: New York University.
- Sandino, J. (2007). Selection Appropriate Wastewater Treatment Technologies For arge Urban Applications in Developing Countries. *Water*, 21(1), 42-44.
- Sauser, B. J., Reilly, R. R. and Shenhar, A. J. (2009). Why Projects Fail? How Contingency Theory Can Provide New Insights a Comparative Analysis of NASA's Mars Climate Orbiter Loss. *International Journal of Project Management*, 27(7), 665-679.
- Schepers, P. and P. T. van den Berg. (2007). Social Factors of Work-environment Creativity, *Journal of Business and Psychology*, 21(3), 407-428.
- Schiuma, G., Carlucci, D. and Lerro, A. (2012). Managing Knowledge Processes for Value Creation. VINE. *The Journal of Information and Knowledge Management Systems*, 42(1), 4-14.
- Schuler, R. S. and Jackson, S. E., (1995). Understanding Human Resource Management in the Context of Organizations and Their Environments. *Strategic Human Resource Management*, 46, 237-264.
- Senge, Peter M. (1990). *The Fifth Discipline, Mastering the Five Practices of the Learning Organization*. New York: Doubleday.
- Sharma, P. and Chrisman, J. J. (1999). Toward a Reconciliation of the Definitional Issues in the Field of Corporate Entrepreneurship. *Entrepreneurship Theory and Practice*, 23(3), 11-26.
- Siau, K. (2000). Knowledge Discovery as an Aid to Organizational Creativity. *Journal of Creative Behavior*, 34(4), 248-258.
- Singer, J. F. and Adkins, R. D. (1984). Managing for Creativity in Consulting Engineering. *Engineering Management International*, 2(4), 251-270.
- Sittimalakorn, W. and Hart, S. (2004). Market Orientation Versus Quality Orientation, Sources of Superior Business Performance. *Journal of Strategic Marketing*, 12(4), 243-253.
- Slater, S. F. and Narver, J. C. (1995). Market Orientation and the Learning Organization. *Journal of Marketing*, 59(3), 63-74.



- Slater, S, Hult, G. T. M. and Olson, E. M. (2010). Factors Influencing the Relative Importance of Marketing Strategy Creativity and Marketing Strategy Implementation Effectiveness. *Industrial Marketing Management*, 39(4), 551–559.
- Smith, W. K. and M. L. Tushman. (2005). Managing Strategic Contradictions: A Top Management Model for Managing Innovation Streams. *Organization Science*, 16(5), 522-536.
- Song, M, Di Benedetto, C. A. and Nason, R. W. (2007). Capabilities and Financial Performance, the Moderating Effect of Strategic Type. *Journal of the Academy of Marketing Science*, 35(1), 18-34.
- Song, M. (2005). Marketing and Technology Resource Complementarities, An Analysis of their Interaction Effect in Two Environmental Contexts. *Strategic Management Journal*, 26(3), 259-276.
- Spender, J. C. and Grant, R. M. (1996). Knowledge and the Firm: Overview. *Strategic Management Journal*, 17(Winter Special Issue), 5-9.
- Stevens, J. P. (2002). *Applied Multivariate Statistics for the Social Sciences*. 4Edition. New Jersey: Lawrence Erlbaum Associates Inc.
- Strickland and Towler. (2010). Correlates of Creative Behaviour: The Role of Leadership and Personal Factors. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, 28(1), 41–51.
- Swanson, R. A.(2001).Human Resource Development and Its Underlying Theory. *Human Resource Development International*, 4(3), 299-312.
- Syverson, C. (2010). *What Determines Productivity?*.Cambridge: National Bureau of Economic Research.
- Tabibi, S. J., Nasiripour, A. A. and Hessams, S. (2011). Factor Affecting Commitment to Human Resource Development of Iranian Hospitals. *African Journal of Business Management*, 5(9), 3706-3710.
- Tanriverdi, H. (2005). Information Technology Relatedness, Knowledge Management Capability, And Performance of Multibusiness Firms. *MIS Quarterly*, 29(2), 311-334.





- Teece, D. J., Pisano, G. and Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533.
- Theriou, G. N. and Chatzoglou, P. D. (2008 ). Enhancing Performance Through Best Hrm Practices. *Organizational Learning and Knowledge Management a Conceptual Framework, European Business Review*, 20(3), 185-20.
- Trice, H. M. and Beyer, J.M. (1993). *The Cultures of Work Organization*. Englewood Cliffs, NJ: Prentice Hall.
- Trochim, W. M. K. (1999). *The Research Methods Knowledge Base*. 2Edition. New York: Cornell University.
- Tseng, Y. F. and Lee, T. Z. (2009). Comparing Appropriate Decision Support of human Resource Practices on Organizational Performance with Dea/Ahp Model. *Expert Systems With Applications*. 36(3, Part 2),6548-6558.
- Tzokas, N., Michael, S. and Douglas, B. (1997). Generation Marketing Resources by Means of R&D Activities in High Technology Firms. *Industrial Marketing Management*, 26(2), 331-340.
- Ussahawanitchakit, P. and Pongpearchan, P. (2010). Human Capital Orientation, Effects on Organizational Effectiveness and Firm Success of Spa Businesses in Thailand. *Journal of International Business and Economics*, 10(3), 85-98.
- Vakola, M. and Rezgui, Y. (2000). Organisational Learning and Innovation in the Construction Industry. *Learning Organisation: An International Perspective*, 7(4), 174-184.
- Varadarajan, P. Rajan and Jayachandran, Satish. (1999). Marketing Strategy, An Assessment of the State of the Field and Outlook. *Journal of the Academy of Marketing Science*, 27(2), 120-143.
- Vazquez, R., Santos, M. L. and Alvarez, L. I. (2001). Market Orientation, Innovativeness and Competitive Strategies in Industrial Firms. *Journal of Strategic Marketing*, 9(1), 69-90.
- Venkatraman, N. and Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research, A Comparison of Approaches. *Academy Management Review*, 11(4), 801-14.
- Venkatraman, N. (1989). Strategic Orientation of Business Enterprises. *The Construct Dimensionality, And Measurement, Management Science*, 35(8), 942-962.





- Vroom, V. H. and Yetton, P. W. (1973). *Leadership and Decision-Making*. Pittsburgh: University of Pittsburgh Press.
- Wade, M. and Hulland, J. (2004). Review: The Resource-Based View and Information Systems Research. *Review, Extension, And Suggestions for Future Research. MIS Quarterly*, 28(1), 107-142.
- Wainer, Howard and Braun, Henry I. (1988). *Test Validity*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Way, S. A. and Thacker, J.W. (2001). The Successful Implementation of Strategic Human Resource Management: A Canadian Survey. *International Journal of Management*, 18(1), 25–32.
- Weber, B. and Weber, C. (2007). Corporate Venture Capital as a Means of Radical Innovation, Relational Fit, Social Capital, and Knowledge Transfer. *Journal of Engineering and Technology Management*, 24(1/2), 11-35.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), 171-180.
- Woodman, R. W., Sawyer, J. E. and Griffin, R. W. (1993). Toward a Theory of Organizational Creativity. *Academy of Management Review*, 18(2), 293–321.
- Woodward, J. (1965). *Industrial Organization, Theory and Practice*. Oxford: Oxford University Press, USA.
- Wright, P. and Snell, S. (1998). Toward a Unifying Framework for Exploring Fit and Flexibility in Strategic Human Resource Management. *Academy of Management Review*, 23(4), 756-772.
- Wright, P. and Snell, S. (2005). Partner or Guardian? HR's Challenge in Balancing Value and Values. *Human Resource Management*, 44(2), 177-182.
- Wu, F. (2006). The Impact of Information Technology on Supply Chain Capabilities and Firm Performance, A Resource-Based View. *Industrial Marketing Management*, 35(4), 493-504.
- Wyatt, A and Frick, H. (2010). Accounting for Investments in Human Capital: A Review. *Australian Accounting Review*, 20(3), 199-220.



- Xu, Y. and Bernard, A. (2011). Quantifying the Value of Knowledge Within the Context of Product Development. *Knowledge-Based Systems*, 24(1), 166-175.
- Yasamorn, N. (2011). *Strategic Collaborative Capability, Business Growth, and Organizational Sustainability, Evidence from Tourism Businesses in Thailand*. Ph.D. Dissertation, Mahasarakham Business School, Mahasarakham University, Thailand.
- Yui, D. W., Lau, C. and Bruton, G. D. (2007). Bruton. International Venturing By Emerging Economy Firms: The Effects of Firm Capabilities, Home Country Networks, and Corporate Entrepreneurship. *Journal of International Business Studies*, 38(4), 519-540.
- Zellmer-Bruhn, M. and Gibson, C. (2006). Multinational Organization Context: Implications for Team Learning and Performance. *Academy of Management Journal*, 49(3), 501-518.
- Zhang, Z. (2010). Analysis of Interactive Relationship Between Virtual Operation and Knowledge Distribution Based on the Knowledge Value Curve. *International Journal of Business and Management*, 5(11), 208-212.
- Zheng, C. (2009). Keeping Talents for Advancing Service Firms in Asia. *Journal of Service Management*, 20(5), 482-502.
- Zhou, K. Z., Yim, C. K. (Bennett). and Tse, D. K. (2005). The Effects of Strategic Orientations on Technology-Based and Market-Based Breakthrough Innovations. *Journal of Marketing*, 69(2), 42-60.
- Zikmund, W. G. (1997). *Business Research Methods*. 5th Ed. Orlando: The Dryden Press.
- Zott, C. and Amit, R. (2007). Business Model Design and the Performance of Entrepreneurial Firms. *Organization Science*, 18(2), 181-199.



## **APPENDICES**



**APPENDIX A**  
**Non-Response Bias Tests**



Table 1A Non-Response Bias Tests

Comparison	n	Mean	Std. Dev.	t-value	P-value
<b>Business owner types:</b>	104				
• First Group	52	1.1154	.32260	.316	.753
• Second Group	52	1.0962	.29768		
<b>Operational years:</b>	104				
• First Group	52	2.1923	.97092	.201	.841
• Second Group	52	2.1538	.97789		
<b>Operational Capital:</b>	104				
• First Group	52	2.1538	1.22690	.164	.870
• Second Group	52	2.1154	1.16575		
<b>Firm's Average revenue per year:</b>	104				
• First Group	52	2.5769	1.22628	.159	.874
• Second Group	52	2.5385	1.24399		
<b>Number of full-time employees:</b>	104				
• First Group	52	1.4615	.85087	-.332	.740
• Second Group	52	1.5192	.91802		



## **APPENDIX B**

### **Respondent Characteristics**



Table 1B Respondents Characteristics

Descriptions	Categories	Frequency	Percentage
Gender	Male	42	40.40
	Female	62	59.60
<b>Total</b>		<b>104</b>	<b>100.00</b>
Age	Less than 30 years old	15	14.40
	30 - 40 years old	49	47.10
	41 - 50 years old	38	36.50
	More than 50 years old	2	1.90
<b>Total</b>		<b>104</b>	<b>100.00</b>
Marital Status	Single	52	50.00
	Married	50	48.10
	Divorced	2	1.90
<b>Total</b>		<b>104</b>	<b>100.00</b>
Education Level	Bachelor's degree or lower	48	46.20
	Higher than Bachelor's degree	56	53.80
<b>Total</b>		<b>104</b>	<b>100.00</b>
Experience in Work	Less than 5 years	12	11.50
	5 - 10 years	34	32.70
	11 - 15 years	22	21.20
	More than 15 years	36	34.60
<b>Total</b>		<b>104</b>	<b>100.00</b>
Average Revenue per Month	Less than 50,000 Baht	38	36.50
	50,000 - 75,000 Baht	19	18.30
	75,001 - 100,000 Baht	16	15.40
	More than 100,000 Baht	31	29.80
<b>Total</b>		<b>104</b>	<b>100.00</b>
Current Position	Managing Director	52	50.00
	Shareholder	15	14.40
	Others	37	35.60
<b>Total</b>		<b>104</b>	<b>100.00</b>



## **APPENDIX C**

### **Characteristics of Software Businesses in Thailand**





Table 1C Characteristics of Software Businesses in Thailand

Descriptions	Categories	Frequency	Percentage
Business Owner Types	Company limited/Public company limited	93	89.40
	Partnership	11	10.60
	<b>Total</b>	<b>104</b>	<b>100.00</b>
Operational Years	Less than 5 years	29	27.90
	5 - 10 years	40	38.50
	11 - 15 years	23	22.10
	More than 15 years	12	11.50
<b>Total</b>		<b>104</b>	<b>100.00</b>
Operational Capital	Less than 25,000,000 Baht	43	41.30
	25,000,000 – 50,000,000 Baht	28	26.90
	50,000,001 – 75,000,000 Baht	9	8.70
	More than 75,000,000 Baht	24	23.10
<b>Total</b>		<b>104</b>	<b>100.00</b>
Firm's Average Revenue per Year	Less than 10,000,000 Baht	27	26.00
	10,000,000 – 30,000,000 Baht	30	28.80
	30,000,001 – 50,000,000 Baht	9	8.70
	More than 50,000,000 Baht	38	36.50
<b>Total</b>		<b>104</b>	<b>100.00</b>
Number of Full-time Employees	Less than 50 employees	73	70.2
	50 – 100 employees	18	17.3
	101 – 150 employees	6	5.8
	More than 150 employees	7	6.7
<b>Total</b>		<b>104</b>	<b>100.00</b>



## **APPENDIX D**

### **Item Factor Loadings and Cronbach's Alpha Analyses**



Table 1D Item Factor Loadings and Cronbach's Alpha Analyses

Constructs	Items	n = 30	
		Factor Loadings (.727 – .904)	Cronbach's Alpha (.755 – .919)
<b>New Management Method (NMM)</b>	NMM1	.859	.882
	NMM2	.859	
	NMM3	.810	
	NMM4	.815	
	NMM5	.784	
<b>Valuable Human Resource Development (VHR)</b>	VHR1	.837	.855
	VHR2	.836	
	VHR3	.829	
	VHR4	.843	
<b>Novel Organizational Culture Formation (NOC)</b>	NOC1	.882	.826
	NOC2	.895	
	NOC3	.815	
<b>Useful Operational Control Establishment (UOC)</b>	UOC1	.807	.831
	UOC2	.875	
	UOC3	.867	
	UOC4	.727	
<b>Original Performance Evaluation System (OPE)</b>	OPE1	.857	.852
	OPE2	.814	
	OPE3	.844	
	OPE4	.832	
<b>Business Practice Effectiveness (BPE)</b>	BPE1	.842	.868
	BPE2	.877	
	BPE3	.859	
	BPE4	.831	
<b>Organizational Innovation Success (OIS)</b>	OIS1	.873	.755
	OIS2	.765	
	OIS3	.822	



Table 1D (Continued)

Constructs	Items	n = 30	
		Factor Loadings (.727 – .904)	Cronbach's Alpha (.755 – .919)
<b>Organizational Excellence Efficiency (OEE)</b>	OEE1	.753	.788
	OEE2	.784	
	OEE3	.861	
	OEE4	.736	
<b>Firm Performance (FPF)</b>	FPF1	.760	.900
	FPF2	.863	
	FPF3	.838	
	FPF4	.893	
	FPF5	.876	
<b>Executive Proactive Vision (EPV)</b>	EPV1	.788	.900
	EPV2	.872	
	EPV3	.861	
	EPV4	.878	
	EPV5	.838	
		<b>Factor Loadings</b>	<b>Cronbach's Alpha</b>
<b>Strategic Renewal Mindset (SRM)</b>	SRM1	.835	.886
	SRM2	.789	
	SRM3	.846	
	SRM4	.833	
	SRM5	.847	
<b>Corporate Resource Readiness (CRR)</b>	CRR1	.794	.755
	CRR2	.851	
	CRR3	.817	
<b>Business Environment Complexity (BEC)</b>	BEC1	.829	.879
	BEC2	.868	
	BEC3	.871	
	BEC4	.874	



Table 1D (Continued)

Constructs	Items	n = 30	
		Factor Loadings (.727 – .904)	Cronbach's Alpha (.755 – .919)
<b>Transformational Orientation (TFO)</b>	TFO1	.850	.840
	TFO2	.894	
	TFO3	.871	
<b>Organizational Well-roundedness (OWR)</b>	OWR1	.859	.919
	OWR2	.904	
	OWR3	.873	
	OWR4	.878	
	OWR5	.865	
<b>Organizational Learning Capability (OLC)</b>	OLC1	.823	.833
	OLC2	.888	
	OLC3	.892	



## **APPENDIX E**

### **Cover Letter and Questionnaire: English Version**



**Questionnaire to the Ph. D. Dissertation Research**  
**“Organizational Creativity Capability And Firm Performance : Empirical**  
**Evidence From Software Businesses In Thailand”**

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**Dear Sir,**

This research is a part of doctoral dissertation of Miss Wadsana Charunsrichotikomjorn at the Mahasarakham Business School, Mahasarakham University, Thailand. The objective of this research is to examine the operation of software businesses in Thailand. The questionnaire is divided into 7 parts

- Part 1:** Personal information about executive of software businesses in Thailand,
- Part 2:** General information about food businesses in Thailand,
- Part 3:** Opinion on organizational creativity capability of software businesses in Thailand,
- Part 4:** Opinion on business outcomes of software businesses in Thailand,
- Part 5:** Opinion on internal environmental factors of software businesses in Thailand,
- Part 6:** Opinion on external environmental factors of software businesses in Thailand, and
- Part 7:** Recommendations and suggestions in the operation of software businesses in Thailand.

Your answer will be kept as confidentiality and your information will not be shared with any outsider party without your permission.

Do you want a summary of the results?

(    ) Yes, e-mail ..... (    ) No

If you want a summary of this research, please indicate your E-mail address or attach your business card with this questionnaire. The summary will be mailed to you as soon as the analysis is completed.

Thank you for your time answering all questions. I have no doubt that your answer will provide valuable information for academic advancement. If you have any questions with respect to this research, please contact me directly.

Sincerely yours,

(Miss Wadsana Charunsrichotikomjorn)

Ph. D. Student

Maharakham Business School

Maharakham University, Thailand

**Contact Info:**

Cell phone: 087 – 8650101, 087 – 2020303

E-mail: [wadsanafon55555fon@gmail.com](mailto:wadsanafon55555fon@gmail.com)





**Part 1 Personal information of executive of software businesses in Thailand****1. Gender**☐ Male☐ Female**2. Age**☐ Less than 30 years old☐ 30 – 40 years old☐ 41 – 50 years old☐ More than 50 years old**3. Marital status**☐ Single☐ Married☐ Divorced**4. Education level**☐ Bachelor's degree or lower☐ Higher than Bachelor's degree**5. Experience in work**☐ Less than 5 years☐ 5 – 10 years☐ 11 – 15 years☐ More than 15 years**6. Average revenue per month**☐ Less than 50,000 Baht☐ 50,000 – 75,000 Baht☐ 75,001 – 100,000 Baht☐ More than 100,000 Baht**7. Current Position**☐ Managing Director☐ Shareholder☐ Others

**Part 2 General information of software businesses in Thailand**

## 1. Type of business

- ☐ Company limited/Public company limited      ☐ Partnership

## 2. Operational years

- ☐ Less than 5 years      ☐ 5 – 10 years  
☐ 11 – 15 years      ☐ More than 15 years

## 3. Operational capital

- ☐ Less than 25,000,000 Baht      ☐ 25,000,000 – 50,000,000 Baht  
☐ 50,000,001 – 75,000,000 Baht      ☐ More than 75,000,000 Baht

## 4. Firm's average revenue per year

- ☐ Less than 10,000,000 Baht      ☐ 10,000,000 – 30,000,000 Baht  
☐ 30,000,001 – 50,000,000 Baht      ☐ More than 50,000,000 Baht

## 5. Number of full-time employees

- ☐ Less than 50 employees      ☐ 50 – 100 employees  
☐ 101 – 150 employees      ☐ More than 150 employees



**Part 3 Opinion on organizational creativity capability of software businesses in Thailand**

Organizational Creativity Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
<b>New Management Method</b>					
1. The firm believes that having of the new concept and new methods of the operation will help to encourage the management of the organization more efficiently and effectiveness.	5	4	3	2	1
2. The firm encourages employees to develop new product of the ability continuously.	5	4	3	2	1
3. The firm encourages continuously employee creativity in all aspects. This will help push forward and cause the approach and methods, including new products. To contest the competitor.	5	4	3	2	1
4. The firm encourages employees to bring any new information. Used as a guide in the development process. In operation even more successful.	5	4	3	2	1
5. The firm focuses on budget allocation to improve and develop work method for increase performance continuously	5	4	3	2	1
<b>Valuable Human Resource Development</b>					
6. Firm fully realizes that participation and cooperation of staff will help the organization's operations more efficient.	5	4	3	2	1



Organizational Creativity Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
7. Firm supports to employees with ability and outstanding ability an opportunity to advance in a career current and in the future.	5	4	3	2	1
8. Employees are encouraged to act and present ideas which are considered valuable to the business.	5	4	3	2	1
9. The firm supports staff with outstanding potential and ability by opportunities for career advancement for now and on.	5	4	3	2	1
<b>Novel Organizational Culture Formation</b>					
10. The firm is determined to focus on perceiving and learning new issues while working so as to improve its work.	5	4	3	2	1
11. The firm promotes sharing in order to work more effectively.	5	4	3	2	1
12. The firm promotes learning continuously to develop their work to be more effective both in short term and long term.	5	4	3	2	1
<b>Useful Operational Control Establishment</b>					
13. Company believes that good management control can help to ensure the operation is planned and efficiently.	5	4	3	2	1
14. Company focus on ways to control and manage black makes the work more effectively and efficiently.	5	4	3	2	1



Organizational Creativity Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
15. Company focused on the development of administrative systems, reflecting the creation of revenue and control costs incurred in a systematic and concrete.	5	4	3	2	1
16. Company recognizes that the management control system and incentives to help drive the business to work more effectively and efficiently.	5	4	3	2	1
<b>Original Performance Evaluation System</b>					
17. Firm commits the new creativity for evaluation, which congruent with the firm target for efficiency and effectiveness of firm.	5	4	3	2	1
18. Firm emphasizes on determine guideline and approach for new evaluation of performance to achieve firm success.	5	4	3	2	1
19. Firm aware of the right evaluation will provide the success of the firm in both current and future.	5	4	3	2	1
20. Firm aware of the important of developing and improving evaluation system as timely.	5	4	3	2	1



#### Part 4 Opinion on business outcomes of software businesses in Thailand

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
<b>Business practice effectiveness</b>					
1. Firm has the method and working process consistent with goal, missions, and vision of firm.	5	4	3	2	1
2. Firm can operate in consistence with excellence.	5	4	3	2	1
3. Firm has the overall performance in good criteria that is better than other business in the same industry consistent with organization target.	5	4	3	2	1
4. Firm has continuous better performance consistent with goal setting	5	4	3	2	1
<b>Organizational Innovation Success</b>					
5. Firm applies new way and new management technique to continuously and supports their operating of business in order to achieve.	5	4	3	2	1
6. Firm can build on new product innovation and new services will be tangible and acceptance.	5	4	3	2	1
7. Firm can build on new innovation to continuously and support their products in order to quality.	5	4	3	2	1
<b>Organizational Excellence Efficiency</b>					
8. Firm aims to achieve performance with high standard operations than other firms of the same industry.	5	4	3	2	1



**Part 4** (Continued)

<b>Business Outcomes</b>	<b>Levels of Agreement</b>				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	5	4	3	2	1
9. Firm can develops a different format, procedure, and product that customers require and respond to customer immediately.	5	4	3	2	1
10. Firm supports staff to analyze and monitor the efficiency of operation continuously to be accurately forecast the future before the competitors.	5	4	3	2	1
11. Firm can uses firm's resources properly and reduce the missing consistent with firm's target efficiency and effectiveness.	5	4	3	2	1
<b>Firm performance</b>					
12. Firm has the number of new customers increased when compared with a year ago.	5	4	3	2	1
13. Firm can increase sales continuously when compared with a year ago.	5	4	3	2	1
14. Firm has the operating revenues increased when compared with a year ago.	5	4	3	2	1
15. Firm has a net profit increased when compared with a year ago.	5	4	3	2	1
16. Firm has a market share increased when compared with a year ago.	5	4	3	2	1



**Part 5 Opinion on internal environmental factors of software businesses in Thailand**

Internal Environmental Factors	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
<b>Executive Proactive Vision</b>					
1. Firm believes that the implementation of the goals in the future and enhance the business goals more efficiently and effectively.	5	4	3	2	1
2. Firm focus on business analysis and forecasting changes in the future.	5	4	3	2	1
3. Firm support the staff to study of trends and changes of environment in the future. Firm to be used in the development of guidelines for the administration of benefits.	5	4	3	2	1
4. Firm promote education and understanding of the role and impact of technological changes in the future. Firm plan and budget to be allocated in the most effective	5	4	3	2	1
5. Firm pushed the integration of information and factors that are relevant and affect the operations related to the operation of the business both now and in the future to be used as a guide in developing strategies to maximize performance.	5	4	3	2	1
<b>Strategic renewal mindset</b>					
6. Firm believes continuous developing and improving the quality contributes to high performance capability.	5	4	3	2	1





**Part 5 (Continued)**

<b>Internal Environmental Factors</b>	<b>Levels of Agreement</b>				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
7. Firm believes the operations that focus on continuous analyze and estimate business environment can promote the high capability of operation.	5	4	3	2	1
8. Firm believes focusing on the strategy fit with situation will provide the creation and strategic development differ from the others.	5	4	3	2	1
9. Firm believes applying new technology will provide high performance efficiency and will success over rivals.	5	4	3	2	1
10. Firm promotes budget allocation to seek new knowledge to adopt into action plan efficiency.	5	4	3	2	1
<b>Corporate Resource Readiness</b>					
11. Firm believes that the very rich and full of the company's resource which helps to plan their operations more efficiency.	5	4	3	2	1
12. Firm focuses on the application of resources for maximize the distinctive point and difference. Thus, the organization has competitive advantage	5	4	3	2	1
13. Firm focuses on the application of resources for maximize.	5	4	3	2	1



**Part 5 (Continued)**

<b>Internal Environmental Factors</b>	<b>Levels of Agreement</b>				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
<b>Organizational Well-roundedness</b>					
14. Firm can combine of knowledge to understanding, strength, highlights and potential management of the organization for maximum efficiency.	5	4	3	2	1
15. Firm can uses experiences to evaluation and resolving properly.	5	4	3	2	1
16. Firm accumulates knowledge and experience in the past to practice, which generates guideline and approach to management efficiency	5	4	3	2	1
17. Firm accumulates knowledge and experience in the past to evaluation and resolving the problems properly.	5	4	3	2	1
18 Firm believes using the knowledge and experience in the past is the approach to adapt strategy quickly when market situation changes.	5	4	3	2	1
<b>Organizational Learning Capability</b>					
19. The firm believes that support on learning can help the firm run more effectively and achieve its goals.	5	4	3	2	1
20. The firm emphasizes that all sections in the firm links to each other and work collaboratively and systematically in order to run its business more effectively.	5	4	3	2	1



**Part 5 (Continued)**

<b>Internal Environmental Factors</b>	<b>Levels of Agreement</b>				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	5	4	3	2	1
21. The firm promotes doing experiments in order to improve its operational process more effectively.	5	4	3	2	1

<b>Transformational Orientation</b>					
22. The firm believes that flexible administration in order to response to changes will help the firm run business effectively.	5	4	3	2	1
23. The firm is determined to adjust its administration regularly because of the changes happening all the time, and this can improve its working potential.	5	4	3	2	1
24. The firm is always aware that adjusting its work promptly can help the firm successful and stable now and in the future.	5	4	3	2	1



**Part 6 Opinion on external environmental factors of software businesses in Thailand**

External Environmental Factors	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
<b>Business Environment Complexity</b>					
1. In a fierce competition sector enables firms to seek new strategic focus is always to achieve operations.	5	4	3	2	1
2. Currently, there are so many competitors in the business so the firm is interested in developing system to handle both proactive and reactive in order to comply with the competition.	5	4	3	2	1
3. Customers are with diverse needs. So firms must find a way to modify new services continue to meet their needs in a timely manner.	5	4	3	2	1
4. Today's technology has advanced so much so that companies can offer a new service model from a combination of personnel in the organization and new technologies. Thus, the organization has a competitive advantage.	5	4	3	2	1

**Part 7 Recommendations and suggestions in the operation of software businesses in Thailand.**

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Thank you for your time and attention to this matter. Please fold and return in provided envelope and return to me. If you desire a summary report of this study, please supply with this questionnaire. The summary will be mailed to you upon the completion of data analysis.



## **APPENDIX F**

### **Cover Letters and Questionnaire: Thai Version**



## แบบสอบถามเพื่อการวิจัย

เรื่อง ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรและผลการดำเนินงาน

: หลักฐานเชิงประจักษ์จากธุรกิจซอฟต์แวร์ในประเทศไทย

### คำชี้แจง

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาวิจัยเรื่อง “ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรและผลการดำเนินงาน: หลักฐานเชิงประจักษ์จากธุรกิจซอฟต์แวร์ในประเทศไทย : การตรวจสอบเชิงประจักษ์ของปัจจัยที่ส่งผลและผลลัพธ์ที่ตามมา” เพื่อเป็นข้อมูลในการจัดทำวิทยานิพนธ์ในระดับปริญญาเอกของผู้วิจัยในหลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จังหวัดมหาสารคาม หมายเลขโทรศัพท์ 043-754333

ข้าพเจ้าใคร่ขอความอนุเคราะห์จากท่านผู้ตอบแบบสอบถาม ได้โปรดตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนคำถาม 7 ตอน ดังนี้

- ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารของธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 3 ความคิดเห็นเกี่ยวกับศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรของธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อการดำเนินงานของธุรกิจซอฟต์แวร์ในประเทศไทย
- ตอนที่ 7 ข้อคิดเห็น ปัญหา และข้อเสนอแนะเกี่ยวกับการบริหารการตลาดของธุรกิจซอฟต์แวร์ในประเทศไทย

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใดๆ ที่เปิดเผยเกี่ยวกับตัวท่านในการรายงานข้อมูล รวมทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าวกับบุคคลภายนอกอื่นใดโดยไม่ได้รับอนุญาตจากท่าน



ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

(    ) ต้องการ E-mail .....

(    ) ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่าน หรือแนบนามบัตรของท่าน  
มา กับแบบสอบถามชุดนี้

ผู้วิจัยขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้ อย่างถูกต้องครบถ้วน และ  
หวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา  
 ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อผู้วิจัยนางสาววาสนา จรุงศรีโชติกำจร  
โทรศัพท์เคลื่อนที่ 087-8650101 หรือ E – mail : [wadsanafon55555fon@gmail.com](mailto:wadsanafon55555fon@gmail.com)

(นางสาววาสนา จรุงศรีโชติกำจร)

นิสิตปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการจัดการ

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม





**ตอนที่ 1** ข้อมูลทั่วไปเกี่ยวกับผู้บริหารธุรกิจซอฟต์แวร์ในประเทศไทย

1. เพศ

☐ ชาย

☐ หญิง

2. อายุ

☐ น้อยกว่า 30 ปี

☐ 30 – 40 ปี

☐ 41 – 50 ปี

☐ มากกว่า 50 ปี

3. สถานภาพ

☐ โสด

☐ สมรส

☐ หย่าร้าง/หม้าย

4. ระดับการศึกษา

☐ ปริญญาตรีหรือต่ำกว่า

☐ สูงกว่าปริญญาตรี

5. ประสบการณ์ในการทำงาน

☐ น้อยกว่า 5 ปี

☐ 5 – 10 ปี

☐ 11 – 15 ปี

☐ มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือนที่ได้รับในปัจจุบัน

☐ ต่ำกว่า 50,000 บาท

☐ 50,000 – 75,000 บาท

☐ 75,001 – 150,000 บาท

☐ มากกว่า 100,000 บาท



## 7. ตำแหน่งงานในปัจจุบัน

☐ กรรมการผู้จัดการ☐ หัวหน้าผู้จัดการ☐ อื่นๆ (โปรดระบุ).....**ตอนที่ 2** ข้อมูลทั่วไปเกี่ยวกับธุรกิจซอฟต์แวร์ในประเทศไทย

## 1. รูปแบบของธุรกิจ

☐ บริษัทจำกัด/บริษัทมหาชนจำกัด☐ ห้างหุ้นส่วน

## 2. ระยะเวลาในการดำเนินธุรกิจ

☐ น้อยกว่า 5 ปี☐ 5 – 10 ปี☐ 11 – 15 ปี☐ มากกว่า 15 ปี

## 3. จำนวนทุนในการดำเนินงาน

☐ ต่ำกว่า 25,000,000 บาท☐ 25,000,000 – 50,000,000 บาท☐ 50,000,001 – 75,000,000 บาท☐ มากกว่า 75,000,000 บาท

## 4. รายได้ของกิจการต่อปี

☐ น้อยกว่า 10,000,000 บาท☐ 10,000,000 – 30,000,000 บาท☐ 30,000,001 – 50,000,000 บาท☐ มากกว่า 50,000,000 บาท

## 5. จำนวนพนักงานประจำ

☐ น้อยกว่า 50 คน☐ 50 – 100 คน☐ 101 – 150 คน☐ มากกว่า 150 คน

**ตอนที่ 3** ความคิดเห็นเกี่ยวกับศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรของธุรกิจซอฟต์แวร์ใน  
ประเทศไทย

ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>วิธีการจัดการใหม่ๆ (New Management Method)</b>					
1. กิจการเชื่อมั่นว่าการแสวงหาและพัฒนาเทคนิคและวิธีการใหม่ๆ ในการทำงานจะช่วยทำให้กิจการสามารถดำเนินงานได้เป็นอย่างดีและมี ประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
2. กิจการส่งเสริมให้มีการพัฒนาความสามารถของบุคลากร ในการ สร้างผลิตภัณฑ์ใหม่ๆ ซึ่งจะช่วยให้กิจการสามารถเพิ่มขีด ความสามารถในการดำเนินการได้อย่างต่อเนื่อง	5	4	3	2	1
3. กิจการส่งเสริมให้บุคลากรมีความคิดริเริ่มสร้างสรรค์ในการทำงาน ทุกด้านอย่างต่อเนื่อง ซึ่งจะช่วยผลักดันและก่อให้เกิด กระบวนการ แนวทางและวิธีการรวมถึงผลิตภัณฑ์ใหม่ๆ เพื่อต่อสู้กับคู่แข่ง	5	4	3	2	1
4. กิจการส่งเสริมให้บุคลากรสามารถนำความรู้ข้อมูล ข่าวสารใหม่ๆ มาใช้เป็นแนวทางในการพัฒนา กระบวนการในการทำงาน เพื่อให้ การดำเนินงานประสบความสำเร็จมากยิ่งขึ้น	5	4	3	2	1
5. กิจการให้ความสำคัญกับการจัดสรรงบประมาณในการปรับปรุง และพัฒนาวิธีการทำงาน เพื่อให้ผลการดำเนินงานเจริญเติบโตและดี ขึ้นอย่างต่อเนื่อง	5	4	3	2	1



ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>การพัฒนาทรัพยากรมนุษย์ที่มีคุณค่า</b> <b>(Valuable Human Resource Development)</b> 6. กิจการมุ่งเน้นให้มีการพัฒนาความสามารถ ศักยภาพ และความเชี่ยวชาญในการทำงาน เพื่อก่อให้เกิดประโยชน์สูงสุดทั้งในปัจจุบันและอนาคต	5	4	3	2	1
7. กิจการสนับสนุนให้บุคลากรที่มีศักยภาพและความสามารถโดดเด่น ได้มีโอกาสก้าวหน้าในสายอาชีพทั้งในปัจจุบันและอนาคต 8. กิจการส่งเสริมให้บุคลากรมีการแสดงออกและนำเสนอความคิดใหม่ ๆ ซึ่งถือว่าการกระทำดังกล่าวก่อให้เกิดคุณค่าในการดำเนินงานขององค์กร	5  5	4  4	3  3	2  2	1  1
9. กิจการตระหนักเสมอว่าการมีส่วนร่วมและความร่วมมือของบุคลากร จะช่วยให้การดำเนินงานขององค์กรมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
<b>รูปแบบวัฒนธรรมองค์กรใหม่ ๆ</b> <b>(Novel Organizational Culture Formation)</b>					
10. กิจการมุ่งเน้นให้ความสำคัญกับการรับรู้และเรียนรู้ ประเด็นหรือหัวข้อใหม่ที่เกิดขึ้นในการดำเนินงานเพื่อนำมาใช้ในการปรับปรุงพัฒนาการดำเนินงานให้ดียิ่งขึ้น	5	4	3	2	1
11. กิจการส่งเสริมการปลูกฝังให้มีการแลกเปลี่ยนความรู้ เพื่อพัฒนาการดำเนินงานให้มีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1



ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
12. กิจกรรมสนับสนุนให้มีให้มีการเรียนรู้สิ่งใหม่ๆอย่างต่อเนื่อง เพื่อพัฒนาการดำเนินงานอย่างมีประสิทธิภาพทั้งในระยะสั้นและระยะยาว	5	4	3	2	1
<b>การสร้างการควบคุมการดำเนินงานที่ใช้ประโยชน์ได้</b>  <b>(Useful operational control establishment)</b>					
13. กิจกรรมเชื่อมั่นว่าการควบคุมการบริหารและการดำเนินการที่ดี สามารถช่วยให้การดำเนินงานเป็นไปตามแผนงานที่วางไว้ได้อย่างมีประสิทธิภาพ	5	4	3	2	1
14. กิจกรรมให้ความสำคัญกับการแสวงหาหรือเลือกสรรแนวทางและระบบในการควบคุมการบริหาร ทำให้การดำเนินงานเกิดประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
15. กิจกรรมมุ่งเน้นให้มีการพัฒนาระบบควบคุมการบริหารเพื่อทำให้เกิดประสิทธิภาพและประสิทธิผลในการดำเนินงานยิ่งขึ้น	5	4	3	2	1
16. กิจกรรมตระหนักเสมอว่าระบบการควบคุมการบริหารที่ดีจะช่วยผลักดันผลการดำเนินงานให้เกิดประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1



**ตอนที่ 3 (ต่อ)**

ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>ระบบการประเมินผลการดำเนินงานที่แปลกใหม่</b>  <b>(Original performance evaluation system)</b>					
17. กิจกรรมมีความมุ่งมั่นในการสร้างสรรค์วิธีการหรือรูปแบบใหม่ๆ ในการประเมินผลการปฏิบัติงานที่สอดคล้องกับเป้าหมายขององค์กร เพื่อให้เกิดประสิทธิภาพและประสิทธิผลสูงสุดต่อองค์กร	5	4	3	2	1
18. กิจกรรมให้ความสำคัญกับการกำหนดแนวทางและวิธีการในการประเมิน ผลการดำเนินงานใหม่ๆ เพื่อให้บรรลุผลสำเร็จขององค์กร	5	4	3	2	1
19. กิจกรรมตระหนักเสมอว่าการประเมินผลการปฏิบัติงานที่ถูกต้องและ เหมาะสมจะส่งผลให้กิจกรรมประสบผลสำเร็จทั้งในปัจจุบันและอนาคต	5	4	3	2	1
20. กิจกรรมตระหนักถึงความสำคัญในการปรับปรุงและพัฒนา ระบบการประเมินผลการดำเนินงานที่ทันสมัย	5	4	3	2	1



**ตอนที่ 4** ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจซอฟต์แวร์ในประเทศไทย

ผลการดำเนินงาน (Business Outcomes)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>ประสิทธิผลของการปฏิบัติงานของธุรกิจ</b>  <b>(Business practice effectiveness)</b>					
1. กิจกรรมวิธีการและกระบวนการทำงานที่เป็นไปตาม จุดมุ่งหมาย พันธกิจ และวิสัยทัศน์ของกิจการ	5	4	3	2	1
2. กิจการสามารถดำเนินงานเป็นไปตามเป้าหมายของ กิจการได้เป็นอย่างดี	5	4	3	2	1
3. กิจการมีผลการดำเนินงานในภาพรวมอยู่ในเกณฑ์ที่ดี เหนือกว่าธุรกิจอื่นในอุตสาหกรรมเดียวกันสอดคล้องกับ เป้าหมายที่ได้กำหนดไว้ขององค์กร	5	4	3	2	1
4. กิจการมีผลการดำเนินงานที่ดีขึ้นอย่างต่อเนื่องเป็นไปตาม เป้าหมายที่วางไว้	5	4	3	2	1



ผลการดำเนินงาน (Business Outcomes)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>ความสำเร็จของนวัตกรรมองค์กร</b> <b>(Organization Innovation Success)</b>					
5. กิจกรรมมีการประยุกต์ใช้แนวทางและวิธีการบริหารงาน ใหม่ๆ อยู่เสมอและทำให้ผลการดำเนินงานประสบ ความสำเร็จ	5	4	3	2	1
6. กิจกรรมมีนวัตกรรมสินค้าและบริการใหม่ๆ ที่เป็นรูปธรรม และได้รับการยอมรับ	5	4	3	2	1
7. กิจกรรมสามารถนำเสนอนวัตกรรมใหม่ๆ ได้อย่างต่อเนื่อง ทำให้ผลิตภัณฑ์มีคุณภาพมากยิ่งขึ้น	5	4	3	2	1
<b>ประสิทธิภาพความเป็นเลิศขององค์กร</b> <b>(Organizational excellence efficiency)</b>					
8. กิจกรรมมุ่งเน้นให้มีการกำหนดแนวทางการปฏิบัติงานให้ บรรลุเป้าหมายได้อย่างมีประสิทธิภาพและเหนือกว่า มาตรฐานในอุตสาหกรรมเดียวกัน	5	4	3	2	1





ผลการดำเนินงาน (Business Outcomes)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
9. กิจกรรมสามารถพัฒนารูปแบบกระบวนการ, ผลิตภัณฑ์ที่มีความแตกต่างและเป็นที่ต้องการของลูกค้าได้เหนือกว่าคู่แข่ง และสามารถตอบสนองความต้องการของลูกค้าได้อย่างรวดเร็วและทันทั่วทั้งที่	5	4	3	2	1
10. กิจกรรมสนับสนุนให้มีการวิเคราะห์และตรวจสอบการดำเนินงานอย่างต่อเนื่อง ซึ่งทำให้สามารถคาดการณ์อนาคตได้อย่างแม่นยำ ก่อนคู่แข่งขึ้น	5	4	3	2	1
11. กิจกรรมสามารถใช้ทรัพยากรในการดำเนินงานต่างๆ ของกิจการอย่างถูกต้อง และมีความเสียหายของทรัพยากรลดลงอย่างเห็นได้ชัด สอดคล้องกับเป้าหมายการดำเนินงานได้อย่างมีประสิทธิภาพและประสิทธิผล	5	4	3	2	1
<b>ผลการดำเนินงานของบริษัท (Firm performance)</b>					
12. กิจกรรมมีลูกค้าใหม่จำนวนเพิ่มขึ้นเมื่อเทียบกับปีที่ผ่านมา	5	4	3	2	1
13. กิจกรรมสามารถเพิ่มยอดขายอย่างต่อเนื่องเมื่อเทียบกับปีที่ผ่านมา	5	4	3	2	1
14. กิจกรรมมีรายได้จากการดำเนินงานเพิ่มสูงขึ้นเมื่อเทียบกับปีที่ผ่านมา	5	4	3	2	1



ผลการดำเนินงาน (Business Outcomes)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
15. กิจการมีกำไรสุทธิเพิ่มสูงขึ้นเมื่อเทียบกับปีที่ผ่านมา	5	4	3	2	1
16. กิจการมีส่วนแบ่งทางการตลาดเพิ่มสูงขึ้นเมื่อเทียบกับปีที่ผ่านมา	5	4	3	2	1

**ตอนที่ 5** ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการสร้างความคิดสร้างสรรค์ขององค์กรและ

การดำเนินงานของธุรกิจซอฟต์แวร์ในประเทศไทย

ปัจจัยภายในที่ส่งผลต่อศักยภาพในการสร้างความคิด สร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>วิสัยทัศน์เชิงรุกของผู้บริหาร (Executive proactive vision)</b>					
1. ผู้บริหารของกิจการเชื่อมั่นว่าการดำเนินงานที่มุ่งเน้นเป้าหมายในอนาคต ช่วยให้งานมีประสิทธิภาพมากขึ้น	5	4	3	2	1
2. ผู้บริหารของกิจการให้ความสำคัญกับการวิเคราะห์และคาดการณ์สถานการณ์เปลี่ยนแปลงในอนาคต	5	4	3	2	1



ปัจจัยภายในที่ส่งผลต่อศักยภาพในการสร้างความคิด สร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
3. ผู้บริหารของกิจการสนับสนุนให้บุคลากร ได้มีการศึกษา ถึงแนวโน้มและการเปลี่ยนแปลงสภาพแวดล้อมในการ ดำเนินงานในอนาคต เพื่อนำมาใช้ในการปรับปรุงพัฒนา แนวทางในการบริหารงานให้เกิดประโยชน์สูงสุด	5	4	3	2	1
4. ผู้บริหารของกิจการส่งเสริมให้มีการศึกษาและทำความเข้าใจถึงบทบาทและผลกระทบของการเปลี่ยนแปลง เทคโนโลยีในอนาคต เพื่อให้กิจการสามารถจัดสรร งบประมาณและวางแผนในการดำเนินงานให้เกิด ประสิทธิภาพสูงสุด	5	4	3	2	1
5. ผู้บริหารของกิจการผลักดันให้มีการบูรณาการข้อมูล ปัจจัยต่างๆที่มีความเกี่ยวข้องและส่งผลกระทบต่อการ ดำเนินงานที่เกี่ยวข้องกับการดำเนินงานของกิจการทั้งใน ปัจจุบัน และในอนาคต เพื่อนำมาใช้เป็นแนวทางในการ ดำเนินงานในอนาคตให้เกิดประโยชน์สูงสุด	5	4	3	2	1



**ตอนที่ 5 (ต่อ)**

ปัจจัยภายในที่ส่งผลต่อ การสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>การตระหนักถึงการปรับเปลี่ยนในเชิงกลยุทธ์</b> <b>(Strategic renewal mindset)</b> 6. กิจกรรมเชื่อมั่นว่าการพัฒนาและปรับปรุงคุณภาพการปฏิบัติงานอย่างต่อเนื่องสามารถทำให้เกิดความสามารถในการดำเนินงานที่สูงขึ้น	5	4	3	2	1
7. กิจกรรมเชื่อมั่นว่าการดำเนินงานที่มุ่งเน้นไปที่การวิเคราะห์และคาดการณ์สภาพแวดล้อมในการดำเนินธุรกิจเพื่อนำมาพัฒนากลยุทธ์ของกิจการอย่างต่อเนื่องทำให้เกิดความสามารถในการดำเนินงานที่สูงขึ้น	5	4	3	2	1
8. กิจกรรมเชื่อมั่นว่าการให้ความสำคัญกับการวางแผนกลยุทธ์ให้สอดคล้องกับสถานการณ์เพื่อให้สามารถสร้างสรรค์และพัฒนากลยุทธ์ที่สร้างความแตกต่างจากกิจการอื่นหรือคู่แข่งรายอื่นได้อย่างต่อเนื่อง	5	4	3	2	1



ปัจจัยภายในที่ส่งผลต่อ  การสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
9. กิจกรรมเชื่อมั่นว่าการประยุกต์ใช้เทคโนโลยีที่ทันสมัยและรวดเร็วตลอดเวลานำมาซึ่งการดำเนินงานที่มีประสิทธิภาพสูงสุดและประสบความสำเร็จเหนือคู่แข่ง	5	4	3	2	1
10. กิจกรรมสนับสนุนให้มีการจัดสรรงบประมาณในการแสวงหาความรู้ใหม่ๆ อยู่เสมอ เพื่อนำมาใช้ในการวางแผนปฏิบัติงานอย่างมีประสิทธิภาพ	5	4	3	2	1
<b>ความพร้อมทางทรัพยากรขององค์กร</b>  <b>(Corporate resource readiness)</b>					
11. กิจกรรมเชื่อมั่นว่ากิจกรรมมีทรัพยากรต่างๆอย่างเพียงพอและสมบูรณ์ซึ่งจะช่วยให้สามารถวางแผนการดำเนินงานได้อย่างมีประสิทธิภาพและมีประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
12. กิจกรรมมุ่งเน้นให้มีการประยุกต์ใช้ทรัพยากรที่มีอยู่อย่างเต็มที่ โดยนำมาใช้ก่อให้เกิดจุดเด่นและข้อแตกต่างในการแข่งขันดำเนินงานของกิจการมากกว่ากิจการอื่น	5	4	3	2	1
13. กิจกรรมให้ความสำคัญในการประยุกต์ใช้ทรัพยากรที่มีอยู่อย่างเต็มที่เพื่อให้เกิดประโยชน์สูงสุดแก่องค์กรอย่างเต็มที่	5	4	3	2	1



ปัจจัยภายในที่ส่งผลต่อ  การสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>ความรอบรู้ขององค์กร</b>  <b>(Organizational well-roundedness)</b>					
14. กิจกรรมการผสมผสานความรู้ ความเข้าใจ จุดแข็ง จุดเด่น และศักยภาพการบริหารงานขององค์กรได้อย่างมีประสิทธิภาพสูงสุด	5	4	3	2	1
15. กิจกรรมการใช้ประสบการณ์ในการประเมินและแก้ไขปัญหาได้อย่างเหมาะสม	5	4	3	2	1
16. กิจกรรมมีการรวบรวมความรู้และประสบการณ์ในอดีตมาใช้ในการปฏิบัติงาน ทำให้เกิดแนวทางและวิธีการให้บริการที่มีประสิทธิภาพมากขึ้น	5	4	3	2	1
17. กิจกรรมมีการรวบรวมความรู้และประสบการณ์ในอดีตมาใช้ในการประเมินและแก้ไขปัญหาได้อย่างเหมาะสม	5	4	3	2	1
18. กิจกรรมเชื่อมั่นว่าการนำความรู้และประสบการณ์ในอดีตมาใช้เป็นแนวทางในการปรับกลยุทธ์ให้เกิดขึ้นได้อย่างรวดเร็วเมื่อสถานการณ์ในตลาดหรือการแข่งขันมีการเปลี่ยนแปลง	5	4	3	2	1



## ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่ส่งผลต่อ  การสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
<b>ความสามารถในการเรียนรู้ขององค์กร</b> <b>(Organizational learning capability)</b> 19. กิจกรรมเชื่อมั่นว่าการสนับสนุนการเรียนรู้ จะช่วยให้ กิจกรรมสามารถดำเนินงานได้อย่างมีประสิทธิภาพ และบรรลุ เป้าหมายได้เป็นอย่างดี	5	4	3	2	1
20. กิจกรรมมุ่งเน้นให้ทุกส่วนขององค์กรมีการเชื่อมโยงและ ทำงาน ประสานกันอย่างเป็นระบบ เพื่อการดำเนินงานที่มี ประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
21. กิจกรรมส่งเสริมให้มีการทดลองกระบวนการทำงาน เพื่อ เป็นการปรับปรุงกระบวนการทำงานขององค์กรให้มี ประสิทธิภาพมากยิ่งขึ้นอย่างต่อเนื่อง	5	4	3	2	1



ปัจจัยภายในที่ส่งผลต่อ การสร้างความคิดสร้างสรรค์ขององค์กร	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
การมุ่งเน้นในการปรับเปลี่ยน (Transformational orientation)					
22. กิจการเชื่อมั่นว่านโยบายการบริหารงานที่มีความ ยืดหยุ่นจะสามารถตอบสนองต่อสถานการณ์ที่เปลี่ยนแปลง ที่เกิดขึ้นจะ ทำให้กิจการสามารถดำเนินงานอย่างมี ประสิทธิภาพ	5	4	3	2	1
23. กิจการมุ่งมั่นในการปรับเปลี่ยนนโยบายและรูปแบบการ บริหารงานอย่างต่อเนื่อง ภายใต้สถานการณ์การ เปลี่ยนแปลงที่เกิดขึ้นตลอดเวลาจะทำให้กิจการสามารถ เสริมสร้างศักยภาพการดำเนินงานได้อย่างต่อเนื่อง	5	4	3	2	1
24. กิจการตระหนักเสมอว่าการปรับเปลี่ยนการดำเนินงาน ได้อย่างทันท่วงทีและทันเวลาจะช่วยให้กิจการประสบ ความสำเร็จ อยู่รอด และมั่นคงได้ทั้งในปัจจุบันและอนาคต	5	4	3	2	1





**ตอนที่ 6** ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อความคิดสร้างสรรค์ขององค์กร

ของธุรกิจซอฟต์แวร์ในประเทศไทย

ปัจจัยภายนอกที่ส่งผลต่อความคิดสร้างสรรค์ขององค์กร (External Environmental Factors)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
ความซับซ้อนของสภาพแวดล้อมทางธุรกิจ (Business environment complexity)					
1. ในปัจจุบันธุรกิจมีการแข่งขันอย่างรุนแรง ทำให้กิจการต่างๆ มุ่งเน้นในการแสวงหารูปแบบกลยุทธ์ใหม่ๆ อยู่เสมอ เพื่อสร้างความโดดเด่นให้กับการดำเนินงาน	5	4	3	2	1
2. ในปัจจุบันธุรกิจมีคู่แข่งเกิดขึ้นจำนวนมาก ทำให้กิจการต่างๆ มีการพัฒนาระบบการบริหารงานทั้งเชิงรุกและเชิงรับ เพื่อให้สอดคล้องกับการแข่งขันอยู่เสมอ	5	4	3	2	1
3. ลูกค้ามีความต้องการที่หลากหลายทำให้ กิจการต่างๆ มีการปรับเปลี่ยนค้นหาวิธีการดำเนินงานใหม่ๆ อย่างต่อเนื่อง ต้องสามารถตอบสนองความต้องการได้อย่างทันทั่วทั้งที่	5	4	3	2	1



ปัจจัยภายนอกที่ส่งผลต่อความคิดสร้างสรรค์ขององค์กร (External Environmental Factors)	ระดับความคิดเห็น				
	5 มากที่สุด	4 มาก	3 ปานกลาง	2 น้อย	1 น้อยที่สุด
4. ปัจจุบันเทคโนโลยีมีความทันสมัยมากขึ้น ทำให้กิจการต่างๆ สามารถนำเสนอรูปแบบการดำเนินงานใหม่ๆ ได้จากการผสมผสานระหว่างบุคลากรในองค์กรและเทคโนโลยีใหม่ๆ ซึ่งทำให้องค์กรมีศักยภาพในการแข่งขันที่เหนือกว่าคู่แข่งตลอดเวลา	5	4	3	2	1

#### ตอนที่ 7 ข้อเสนอแนะ

หากท่านมีข้อเสนอแนะเพิ่มเติมเกี่ยวกับการบริหารงานของธุรกิจซอฟต์แวร์ในประเทศไทย เพื่อให้สามารถตอบสนองต่อการเปลี่ยนแปลงของสภาพแวดล้อมทั้งภายในและภายนอกกิจการ หรือ มีข้อเสนอแนะเกี่ยวกับแบบสอบถาม ได้โปรดเสนอแนะในช่องว่างด้านล่างนี้

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ขอขอบพระคุณท่านที่ได้สละเวลาตอบแบบสอบถามทุกข้อ โปรดพับแบบสอบถามใส่ซองที่แนบมา  
พร้อมนี้ และส่งคืนตามที่อยู่ที่จะระบุไว้



**APPENDIX G**  
**Letters To Experts**





ที่ ศธ 0530.10/ 548

คณะกรรมการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม

อำเภอกันทรวิชัย จังหวัดมหาสารคาม

44150

20 มีนาคม 2557

เรื่อง ขออนุมัติโครงการรื้อถอนแบบสอบถาม

เรียน กรรมการผู้จัดการ/หุ้นส่วนผู้จัดการ

ด้วย นางสาววาสนา จรุงศรีโชติกำจร นิสิตระดับปริญญาเอก คณะการบริหารและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรและผลการดำเนินงาน :หลักฐานเชิงประจักษ์จากธุรกิจซอฟต์แวร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการทำวิทยานิพนธ์ หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการจัดการ และการศึกษาในครั้งนี้ได้เน้นให้นักศึกษาข้อมูลด้วยตนเอง ดังนั้น เพื่อให้การจัดทำวิทยานิพนธ์ เป็นไปด้วยความเรียบร้อยและบรรลุวัตถุประสงค์ คณะการบริหารและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขออนุญาตให้ นางสาววาสนา จรุงศรีโชติกำจร ศึกษาและเก็บรวบรวมในรายละเอียดตามแบบสอบถามที่แนบมาพร้อมนี้

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม หวังเป็นอย่างยิ่งว่าคงได้รับความอนุเคราะห์จากท่านในการให้ข้อมูลในครั้งนี้เป็นอย่างยิ่ง และขอขอบคุณมา ณ โอกาสนี้

ขอแสดงความนับถือ

(รองศาสตราจารย์ ดร.ปภักษ์บาร์มี อุตสาหะวานิชกิจ)

คณบดีคณะกรรมการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม

สำนักบริหารหลักสูตรระดับบัณฑิตศึกษาและวิจัย

คณะกรรมการบัญชีและการจัดการ โทรศัพท์ (043) 754333 ต่อ 3410





## บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/

วันที่ 20 มีนาคม 2557

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.เกสินี หมั่นไธสง

ด้วย นางสาววาสนา จรุงสุทธิโชติกำจร นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรและผลการดำเนินงาน: หลักฐานเชิงประจักษ์จากธุรกิจซอฟต์แวร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.ปภักษ์บาร์มี อุตสาหะวานิชกิจ)

คณบดีคณะการบัญชีและการจัดการ





## บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422

ที่ ศธ.0530.10/

วันที่ 20 มีนาคม 2557

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.สุธนา บุญเหลือ

ด้วย นางสาววาสนา จรุงศรีโชติกำจร นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ศักยภาพในการสร้างความคิดสร้างสรรค์ขององค์กรและผลการดำเนินงาน: หลักฐานเชิงประจักษ์จากธุรกิจซอฟต์แวร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.ปณกรณ์บาร์มี อุตสาหะวานิชกิจ)

คณบดีคณะการบัญชีและการจัดการ



## **CURRICULUM VITAE**





## CURRICULUM VITAE

**NAME** Miss Wadsana Charunsrichotikomjorn  
**DATE OF BIRTH** March 13, 1984  
**PLACE OF BIRTH** Udonthani, Thailand  
**ADDRESS** 238/2/1 Thahan Road, Amphur Mueang,  
Udonthani Province, Thailand 41000  
**POSITION** Instructor and Researcher  
**OFFICE** Kamphaeng Phet Rajabhat University, 69, Amphur Mueang,  
Kamphaeng Phet Province 62000, Thailand

### EDUCATION BACKGROUND

2005 Bachelor of Business Administration (Management),  
Udonthani Rajabhat University, Udonthani, Thailand  
2007 Master of Business Administration (Strategic Management),  
Maharakham University, Maharakham, Thailand  
2015 Doctor of Philosophy (Management),  
Maharakham University, Maharakham, Thailand

### RESEARCH

Charunsrichotikomjorn, Wadsana and Ussahawanitchakit, Phapruke. (2013).

Organizational Change Management Capability and Firm Survival: An  
Empirical Investigation of Software Businesses in Thailand. *European Journal  
of Management*, 13(4), 5-25.

Charunsrichotikomjorn, Wadsana, Ussahawanichakit, Phaprukbaramee, and  
Jhundra-indra, Prathanporn. (2014). Organizational Creativity Capability and  
Firm Performance: A Conceptual Paper. *International Journal of Business  
Research*, 14(3), 37-60.



enhance the effectiveness of organizational creativity capability. This empirical research helps devise solutions to business problems which provide the basis for the survival and success of firms. Thus, CEO's should experiment with other resources to encourage effectiveness and create new opportunities in the competitive to maximize the benefits of organizational strategy.

### **Limitations and Future Research Directions**

#### **Limitations**

The operation of business in the context of the software industry in Thailand, the firms operated under the changes of the business situations and the conditions fluctuation in various business factors. The business situations have changed such as the fluctuation of currency exchange rates, the increasing of production, raw materials, technological change and labor cost, the condition of labor shortage, the lack of political stability and the global economy, and the government policy which related to the software industry. These factors affect the implementation of organizational creativity capability and the success of Thailand's software business operation. This research did not conduct to investigate the effect of these factors on organizational creativity capability and firm performance.

#### **Future Research Directions**

According to the results, confirmations and limitations, the need for future research is apparent. Firstly, future research needs to collect data from different groups of the sample and/or a comparative population in order to verify the generalizability of the study and increase the level of reliability. Secondly, one should re-conceptualize and re-measure these constructs that do not have an effect on the hypothesized relationships. Third, some dimensions of organizational creativity capability (i.e. useful operational control establishment) have no significant impact on the consequence. Thus, future research should consider conducting an in-depth interview for understanding other aspects of these constructs and for use as a guideline to prepare the questionnaire. Also, the in-depth interview may broaden the perspective for more precise analytical results.

