



**EMPLOYEE CREATIVITY MANAGEMENT CAPABILITY
AND CORPORATE SUSTAINABILITY: EMPIRICAL
EVIDENCE FROM FURNITURE EXPORTING
BUSINESSES IN THAILAND**

PATTARIKA CHINCHANG

**A dissertation submitted in partial fulfillment of the requirements for
the degree of Doctor of Philosophy in Management
at Mahasarakham University**

May 2017

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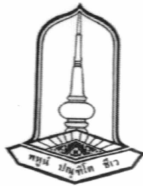
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The examining committee has unanimously approved this dissertation, submitted by Miss Pattarika Chinchang, as a partial fulfillment of the requirements for the degree of Doctor of Philosophy in Management at Mahasarakham University.

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TITLE Employee Creativity Management Capability and Corporate Sustainability: Empirical Evidence from Furniture Exporting Businesses in Thailand

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ABSTRACT

Employee creativity management capability is regarded as an important driving force to enhance business competitiveness and to generate sustainable business. The research aims to investigate the influence of five dimensions of employee creativity management capability (new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency) on corporate sustainability through the mediating effects of organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success. The five antecedents including vision for proactive operations, top management support, organizational learning culture, and continuous environmental change are also investigated. Additionally, technology growth is the moderator of the aforementioned relationships. The resource-advantage theory and the contingency theory are applied to explain the relationships among these variables. The samples are 139 managing directors of furniture exporting businesses in Thailand. Multiple regression analysis is used to verify hypotheses tested.

The results indicate that new ideas generation orientation has a more positive influence on organizational innovation, than working practice originality implementation, and creative solution usefulness competency respectively. The working practice originality implementation in the most important dimension that influence on organizational productivity and organizational excellence, which in turn positive affect business competitiveness and firm success. Job improvement value focus has the



strongest effect on business competitiveness. While, creative solution usefulness competency has the strongest impact on firm success. The results also demonstrate the relationships among business competitiveness, firm success, and corporate sustainability. Moreover, the antecedents, such as top management support, organizational learning culture, and vision for proactive operations have an influence on employee creativity management capability. However, technology growth does not play a moderating role on the relationships between the antecedents and each dimension of employee creativity management capability. The contributions to theoretical and managerial implications, conclusions, and suggestions for future research are also discussed.



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CHAPTER I

INTRODUCTION

Overview

The rapidly changing of extremely competitive markets has created opportunities and challenges for firms. Therefore, the firm typically attempts to create and maintain the firm success and business competitiveness. The firm needs to continue generates and develop creativity, which can upgrade distinctive competencies of the firm by devising new products and service to respond to consumer demand (Vicenzi, 2000). The changing of firm is a challenge that must adapt and compete with creativity, which is an important driving force behind gaining organizational success. It requires the creative development of an employee and expands their ideas for the operation of the organization (Yang, Lee, and Cheng, 2016). Encouraging creativity can be essential for business excellence and sustainability, which many firms have tried to use various creative ideas to improve and develop firms to achieve effectiveness and efficiency, such as the ability to create new products (Huang, Krasikova, and Liu, 2016). Creativity to generate new approaches in business is an important requirement for existing resources implementation due to creativity is the core driver of the organization effectiveness (Amabile and Khaire 2008; Basadur and Hausdorf 1996). Creativity is invaluable and the indispensable resource and has become the core resource for achieving organizational success, which can be gained by managing and supporting employee creativity. It is also at the heart of increasing and generating competitive advantage that an organization can achieve advantage over its competitors (Amabile et al., 1996; Quinn and Rohrbaugh, 1981). Increasing creativity has generated opportunities for organizational success and responds to the emerging challenges of fast-changing business environment, which is enhancing the ability to gain a long-term competitive advantage (Oldham and Cummings, 1996; Woodman, Sawyer, and Griffin, 1993).

Creativity refers to the process of developing that is both novel and has useful ideas, involved with products, services, and procedure or processes of the organization (Amabile et al., 1996; Zhou and Shalley, 2003).The creativity dimension of the



organization is the process of novelty, benefit, and appropriate ideas, for use in problem-solving and increasing its effectiveness. The creativity dimension of an individual is a personal characteristic by which one can think of a variety of perspectives, has flown, has flexibility, can link and have originality that are key factors in generating innovation for organizational success (Amabile et al., 1996). Creativity are key factors of organizational development that are consistent with McGregor (2007) who suggested that many successful organizations focus on the creative use of personnel to create organizational innovation and creativity involved in all activities of the operation. Guilford (1980) explained that people can think endlessly, which a positive thinking is creating innovation. These ideas are advanced skills and a systematic process consists of originality, fluency, flexibility, and elaborate thinking. Those persons have the creativity to find new ideas from existing data and links to information.

Increasing creativity is one of the crucial issue and challenges that make organizations adapt to compete with other firms and can makes a difference in the delivery of goods or services, which create the greatest consumer satisfaction (Veselá and Klimová, 2014; Yang, Lee, and Cheng, 2016). The organization will survive in the future under the conditions of rapid change depends on the creativity and potential draw of an organization and will not adhere to traditional rules that have limited the imagination of the employees in organizations. Many organizations have an idea to convert knowledge or creativity within an organization which, as property, is like intangible assets to benefit economically or establish a commercial advantage (Joo, Yang, and McLean, 2014). Developing creativity in the workplace does not depend on the perspective of traditional jobs is an essential aspect of creativity. It is due to the creative work begun by employees that have generated powerful new ideas for any job in any organization (Madjar, Oldham, and Pratt, 2002). Also, creativity is a complex ongoing process involving the generation of new ideas, which are both the production of original and valued outcomes (Amabile, 1988; Drazin, Glynn, and Kazanjian, 1999). Most organizations realize that creativity is necessary for the organization, which leads to a creative organization (March, 1991). Organizations are using the right strategy in the present and in the future that do not have to face the end of competitive advantage from another business (McGrath, 2013). Organizations can promote creativity in employees by the stimulation of creativity within organizations to gain and maintain a



competitive advantage (Amabile et al., 1996; Woodman, Sawyer, and Griffin, 1993). Employee creativity can bring the greatest benefit to the organization by building competitive advantages through increased market share and innovation (Amabile, 1997; Kim, Hon, and Lee, 2010).

Enhancing employee creativity is widely recognized as a crucial component for the organization's survival or to achieve competitive advantage (Amabile, 1988; Burnside, 1990). Most organizations attempt to find various ways to support and promote employee creativity, which are supporting funds, materials, facilities, times, and spaces for the employee to find creativity (Hirst, Dick, and Knippenberg, 2009; Zhou and George, 2001). The pace of technological, cultural, demographic, and economic changes are an increasingly important element of the knowledge-based economy. Employee creativity has become major factor of organizations that is a great advantage to enrich an organization's core competences (Prahalad and Hamel 1990), support survivability of the organization, and maintain the sustainability of competitive advantage in the global marketplace (Amabile, 1996; McGrath, 2013; Porter, 1998; Xia and Tang, 2011). Employee creativity provides an understanding about the production of novel and useful ideas that are giving priority to develop products, services, and work processes, that are critical factors of continuous improvement to achieve long-term organizational success (Amabile, 1988; Oldham, 2003; Oldham and Cummings, 1996; Shalley, 1991). Research on employee creativity was acknowledged as creativity that is the outcome which emerged from the relationship between contextual factors and individual factors (Woodman, Sawyer, and Griffin, 1993).

Although the work on employee creativity has been studied in diverse disciplines for the past decade, a substantial amount, studying employee creativity, has focused on the individual level (Guilford, 1967; Zuckerman and Cole, 1994). At the level of organization, creativity is a necessary factor in building an effective high performance (Weinzimmer, Michel, and Franczak, 2011). Nevertheless, there is little empirical evidence on employee creativity at the organization level and it rarely considers the perspective of management capability. The key consideration of this research explores the extent to which the different perspectives study a firm's management capability to enhance employee creativity.



The main purpose of this research is to investigate the impact of employee creativity management capability on corporate sustainability. This research proposes that when firms fully utilize employee creativity management capability, it can help organizations improve efficiency and opportunity responsiveness. It can also help organizational adaptation to environmental changes, long-term sustainable growth, and intensify competition (Unsworth, 2001). These demonstrate the important role of employee creativity management capability that can be used as a competitive weapon to build and maintain a sustainable competitive advantage.

Within the context of this research, employee creativity management capability is defined as an organization's ability that encourages employees to produce ideation, utilize behavioral patterns in routine activity, improve a task or activity performance, perform the basic functional activities of the firm, and effectively solve problems, which are creating a fresh perspective that can bring the foremost benefit to an organization. This research endeavors to build more understanding of employee creativity management capability that is developed in five dimensions: new idea generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. Additionally, employee creativity management capability is expected to directly affect corporate sustainability through the relationship of organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. The antecedents of employee creativity management capability are vision for proactive operations, top management support, organizational learning culture, and continuous environmental change. Furthermore, technology growth is proposed to moderate the relationships of the conceptualization model.

The furniture exporting businesses is largely depending on creative skills which originate from creativity, skill, and talents of employees that are the driving force for a process of high-volume production in countries such as Thailand, Malaysia, and Vietnam (Rampal and Nizam, 2006). Over the years, the furniture manufacturing industry in Thailand, Malaysia, Indonesia, and Vietnam have been growing rapidly and are extremely important to rapid economic growth, which has seen evidence from a large increase in employment and income (Ratnasingam, Ioras, and Abrudan, 2012). Creativity and design are important competitive tools for the furniture manufacturing



industry, and has become one of the major economic resources to grow and contribute to economic growth (Scott, 1999; 2001). The furniture exporting businesses is one of Thailand's potential industries and development opportunities in many respects. Thailand has the creative abilities of employees, in which there is an increase in the overseas market demand. The government has a policy to develop Thailand's furniture industry in expanding production and international markets. Moreover, Thailand has the advantage of infrastructure facilities, has cultural diversity, and a gorgeous, and valuable culture, which are a significant cost to applying creativity in work. Moreover, the opportunity of economic integration of the ASEAN Economic Community or AEC in market liberalization increases the positive impact of the furniture exporting business in Thailand. Because Thailand's furniture exports is large businesses and an area with growth potential, Thailand's Ministry of Commerce and the Department of Export Promotion are operating to establish Thailand as an Asian furniture export hub for furniture product exports (Decharat, 2014).

Thailand's furniture exports in January through December 2015 was valued at U.S. \$1050.94 million and Thai exports are likely to expand by 3 percent, which Thailand's furniture exports and related products are big business and potential growth opportunities (Department of International Trade Promotion, Ministry of Commerce, 2016). Building a strengthened furniture exporting businesses in Thailand wrests market share, this increases continuously. Thailand's furniture industry should focus on enhancing the development of standards for products in both production and management. For development of production systems that are more standardized, the development of production technology improves product and service quality as well as the development of a highly-skilled workforce which is composed of creativity, design and technology. Thus, the importance of industrial development by providing support to raise production from mass production develops into the consumer market with high purchasing power in a niche market. In giving priority to the development of the design, the trend is for the needs of the consumer market, and for improving the product to conform to the lifestyle of the customer. This includes opening new markets through more sales channels that receive increasing incomes and foreign currency in intensified competition that encourages the export furniture industry to enhance competitiveness to achieve more sustainability.



This research attempts to investigate the relationships among employee creativity management capability, antecedents, consequences, and moderators in the context of the Thai furniture exporting business by utilizing two theories, including the resource-advantage theory and contingency theory to explain the conceptual model. Firstly, the resource-advantage theory, as focusing on survival and a wealth of business in the future, realizes market activity orientation. The theory is focused on creating a competitive advantage by using administrative resources that are worth the cost and are for efficiency (Hunt and Morgan, 1995). Manufacturing importance is different from the competitor and concept of originality which are different ways. This is to serve as a starting point for product development. Customer demand response differs from competitors (Kirca, Jayachandran, and Bearden, 2005). This theory is applied to explain the relationships among each of five dimensions of employee creativity and its consequences. Finally, the contingency theory is a concept that depends on the situation or a concept to determine the structure of the management and organization control systems. The contingency theory is largely dependent on the circumstances and the nature of the external environment that affect organizational operation, or different ways of organizations, which face a different situation and require different management methods (Fiedler, 1967). This theory is applied to explain the relationships among the antecedents of employee creativity management capability, each of five dimensions of employee creativity management capability, and the moderating effect.

Purposes of the Research

The main purpose of this research is to investigate the relationship between employee creativity management capability and corporate sustainability. The specific research purposes are also as follows:

1. To investigate the influence of each of five dimensions of employee creativity management capability (new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency) on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success,



2. To examine the influence of organizational innovation on organizational productivity, organizational excellence, business competitiveness, and firm success,
3. To explore the influence of organizational productivity on business competitiveness, and firm success,
4. To inspect the influence of organizational excellence on business competitiveness, and firm success,
5. To examine the influence of business competitiveness on firm success and corporate sustainability,
6. To explore the influence of firm success on corporate sustainability,
7. To investigate the impacts of vision for proactive operation, top management support, organizational learning culture, and continuous environment change on each of the five dimensions of employee creativity management capability, and,
8. To test the moderating effect of technology growth on the influence of vision for proactive operations, top management support, organizational learning culture, and continuous environmental change on each of the five dimensions of employee creativity management capability.

Research Questions

The key research question is, “How does employee creativity management capability relate to corporate sustainability?” Moreover, specific research questions are as follows:

1. How does each of five dimensions of employee creativity management capability (new ideageneration orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, creative solution usefulness competency) have an effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success?
2. How does organizational innovation influence organizational productivity, organizational excellence, business competitiveness, and firm success?
3. How does organizational productivity influence business competitiveness and firm success?



4. How does organizational excellence influence business competitiveness and firm success?
5. How does business competitiveness influence firm success and corporate sustainability?
6. How does firm success influence corporate sustainability?
7. How do vision for proactive operations, top management support, organizational learning culture, and continuous environmental change influence each of the five dimensions of employee creativity management capability?
8. How does technology growth moderate the influence of vision for proactive operations, top management support, organizational learning culture, and continuous environment change which influence each of the five dimensions of employee creativity management capability?

Scope of the Research

There are two theories explaining the phenomena in the research, including the resource-advantage theory and the contingency theory. All theories demonstrate the relationships among five dimensions of employee creativity management capability, its antecedents, its consequential and its moderator constructs. First, the resource advantage theory describes the relationships among each of five dimensions of employee creativity and its consequences (organizational productivity, organizational innovation, organizational excellence, business competitiveness, firm success, and corporate sustainability). Second, the contingency theory is applied to explain the relationships among the antecedents of employee creativity management capability (vision for proactive operation, top management support, organizational learning culture, and continuous environmental change) and each of the five dimensions of employee creativity management capability. It is also applied to explain the relationship of the moderator variable of technology growth in the relationships among the antecedents of employee creativity management capability and each of five dimensions of employee creativity management capability. This research proposes the theory interaction to describe the relationship of each variable to examine and to answer the research questions and objective. Additionally, the questions and objective



are answered by analysis which is based on the data collection from samples of furniture exporting businesses in Thailand.

The conceptual framework of this research illustrates the relationships among employee creativity management capability, its antecedents, consequences, and moderators. Employee creativity management capability is defined as an organization's ability that encourages employees to produce ideation, utilize behavioral patterns in routine activity, improve a task or activity performance, perform the basic functional activities of the firm, and effectively solve problems, which are creating a fresh perspective that can bring the foremost benefit to an organization (Zhou and George, 2001). It includes five dimensions, namely, new idea generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency.

This research proposes that when firms fully utilize employee creativity management capability, it can help increase organizational productivity, organizational innovation, organizational excellence, business competitiveness and firm success that lead to corporate sustainability. Moreover, there are both internal and external factors of organizations that are associated with employee creativity management capability. Likewise, the antecedent constructs of employee creativity management capability are composed of internal factors and external factors: vision for proactive operation, top management support, organizational learning culture, and continuous environmental change. In addition, this research examines the moderating roles of technology growth on the relationships among vision for proactive operation, top management support, organizational learning culture, continuous environment change, and five dimensions of employee creativity management capability.

This research focuses on the effects of employee creativity management capability on corporate sustainability in the context of the furniture exporting business in Thailand. The data for the research are collected from a mail questionnaire survey. The managing directors or managing partners of furniture exporting business in Thailand are key informants. Regression analysis is employed to test and examine the hypothesized relationships.

In conclusion, the scope of this research consists of four main parts. The first is to investigate the effect of employee creativity management capability on organizational

productivity, organizational innovation, and organizational excellence. The second is to investigate the effect of organizational productivity, organizational innovation, and organizational excellence on business competitiveness and firm success. The third is to investigate the effect of business competitiveness and firm success on corporate sustainability. Finally, the fourth is to examine the relationship among four antecedents and each dimension of employee creativity management capability, including the moderating effect of technology growth.

Organization of the Dissertation

This research is organized into five chapters. Chapter one provides an overview and motivation of the research, the role of employee creativity management capability, the purposes of the research, the research questions, the scope of the research, and the organization of the dissertation. Then, chapter two reviews the relevant literature on employee creativity management capability, explains the theoretical framework to describe the conceptual model and the relationships among the different variables, and develops the related hypotheses for testing. Chapter three discusses the research method, including the sample selection and data collection procedure, the variable measurements of each construct, the development and verification of the survey instrument by testing reliability and validity, the statistics and equations testing the hypotheses, and the table summarizing the definitions and operational variables of the constructs. Chapter four demonstrates the empirical results and discussion in full detail. Finally, chapter five presents the details of the conclusion, the theoretical and managerial contributions, limitations, and direction for further research.



CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The previous chapter provides a situation overview of employee creativity management capability that is comprised of research objectives, research questions, and the scope of the research. Moreover, this chapter attempts to provide details of employee creativity management capability that includes a theoretical foundation, literature review, the conceptual framework, and the hypotheses development. The hypotheses are proposed to be investigated to answer the research objectives and the research questions. This chapter is divided into three sections. The first section represents an introduction to the theoretical perspectives in this research. The second section provides the previous literature that is directly relevant to all the constructs of the conceptual framework, the definitions, and the previous research on the area of employee creativity management capability in the context of furniture exporting businesses in Thailand. The final section presents the conceptual model of hypotheses relationships among employee creativity management capability and its antecedents and consequences. Moreover, the final section also provides an understanding of the hypotheses development.

Theoretical Foundation

Base on the relevant literature on employee creativity management capability, little empirical research has investigated the relationship among employee creativity management capability and its antecedents and consequences. This research attempts to integrate theory to explain the complete phenomena by utilizing two theories to back up these relationships. The perspective of employee creativity management capability is dominated by the resource-advantage theory and the contingency theory, which stress the importance to describe the aforementioned relationships. This research unites the two theories by utilizing explanation, prediction, and description, and making connections through all variables. Each theoretical framework is detailed as follows to generate the greatest possible benefit and provides suggestions for employee creativity management capability.



Resource-Advantage Theory

The resource-advantage theory (R-A theory) is the main theory explaining employee creativity management capability. The resource-advantage theory develops a general theory of competition that explains the concepts of the competition process. The resource-advantage theory has evolved in a substantial number of disciplines, consisting of general business (O’Keeffe, Mavondo, and Schroder, 1998), marketing (Hunt, Lambe, and Wittmann, 2002), economics (Hunt, 1997), ethics (Arnett and Hunt 2002), and management (Hunt and Lambe, 2000). The resource-advantage theory was first developed in 1995 by Hunt and Morgan (1995) who suggested considering and creating a competitive advantage that would not be a domination, an imitation, a replacement, or a core innovation. It forms the perspective of comparative advantage that leads to the resource-advantage theory of Hunt and Morgan (1997). The resource-advantage theory has recognized the importance of the source of sustainable competitive advantage. Organizations need to have market segments, firm resource heterogeneity, comparative advantage of firm resources, and advantageous positions in the marketplace (Hunt, 1997).

The resource-advantage theory that originated from the combination of two theories comprises the heterogeneous demand theory (Alderson, 1957) combined with the resource-based theory to be assembled into a new theory of competition. Hunt (2002) demonstrates the perspective of the resource-advantage theory that contains both heterogeneous and imperfectly mobile resources as a combination of concepts fundamental to the resource-based view. The resource-advantage theory refused to search for equilibrium that is the framework based on the resource-based theory.

The resource-advantage theory is continuous competition with other firms to gain comparative advantages of resources such as superior financial performance and market segment. Using the resource-advantage theory as a theory distinguishes that which is gained from the comparative advantages of the resources that can bring the greatest benefit to a firm by the exploitation of resources that are key factors essential to a firm's superior performance. Moreover, the resource-advantage theory is the decisions which separate the effectiveness and efficiency of positional advantage (Hunt and Morgan, 1995). The resource-advantage theory comprises seven types of resources: financial, human, organizational, informational, physical, legal, and relational.



The resources of employee creativity management capability comprise both tangible and intangible resources that encourage a firm to build effective and efficient performance for businesses (Colbert, 2004). Indeed, employee creativity management capability is a relational resource perspective on employee creativity when it can stimulate employees' imaginations. For the resource-advantage theory, employee creativity management capability is resources that involve engagement with socially complex, interconnecting, combinations of intangible (e.g., specific practice, specific cultural activities and the knowledge, skills, abilities and creativity of employees) and tangible resources (e.g., specific products, specific machinery and equipment). Because these resources are particularly important for an organization to operate efficiently, an employee creativity management capability plays a crucial role in business success which can build sustainability in the future (Hunt and Arnett, 2003). Therefore, the resource-advantage theory is able to provide a suitable framework for integrating a resource, competence, and relational factors, which have explained employee creativity management capability.

The resource-advantage theory is aware of the importance of employee creativity management capability as a core resource of an organization which encourages superior performance that is caused by each individual's creativity as a starting point for organizational innovation. Employee creativity, as a major resource, creates a competitive advantage for the organization. In previous studies related to the resource-based view, Das and Teng (2000) also believed that resources integration (i.e., developing idiosyncratic resources), can help organizations find the foremost resources that enable generating more value of the resources with individual firms, and it can be used to support or improve organizational performance (Lambe, Spekman, and Hunt, 2002). An organization which wants to gain a competitive advantage requires the fast-learning abilities that enable organizations to create knowledge, for which there is a source of competitive advantage (Slater and Narver, 1995). Learning is positively associated with creativity due to continual employee learning that will lead to creative ability, is a resource that creates a competitive advantage for the organization.

In this research, the resource-advantage theory is applied to explain employee creativity management capability, which is a resource to help development more effectively than competitors and gain a better position in the marketplace. With respect



to elements of competitive advantage, there are six variables comprised of organizational productivity, organizational innovation, organizational excellence, business competitiveness, firm success, and corporate sustainability.

The Contingency Theory

The contingency theory, evolved from the late 1950s, developed into a classic organization theory in organizational research. The contingency theory demonstrates the organizational effectiveness that is the organization's ability to be able to adapt or adjust to the foremost challenge that an organization confronts with a changing environment. Also, there is congruence of the association between the environmental context and the diversity structure (Drazin and Van de Ven, 1985; Lawrence and Lorsch, 1967). The perspective of the contingency theory evolved from a study of Woodard (1958) which indicated that the application of the technology that is used to directly determine organizational attributes containing the formalization of operating procedures and the centralization of authority and controls. According to scholars, Burns and Stalker (1961) demonstrated an understanding of the association between mechanisms and organic organizations, and provide evidence to support organic organizations, which are responding appropriately to more turbulent dynamic environments.

Based on the contingency theory, this research has proposed the employee creativity management capability in the success of organizations that is required to use a substantial amount of methods for a given situation (March, 1991). There are few studies about employee creativity management capability within various organizational contexts. Not surprisingly, much of studies have focused on only the environmental factors which influence creative outcomes in an organization (Woodman, Sawyer, and Griffin, 1993). The failure of study regarding external and internal contingencies arises during findings and inappropriate practical applications that hindered the suitable developing of organizations for situations diversity (Miller, 1992).

This research can overwhelm the limitation and it suggests that the contingency model development must consider both the environmental and internal fits of employee creativity management capability, which are based on the contingency framework (Tornatzky and Fleischer, 1990), and which indicate that multiple factors are concerned with organizational innovations. According to Yang, Lee, and Cheng (2016), this



research showed great concern for the multiple contingencies of environmental creativity intensity and organizational contexts as crucial external and internal factors (Nonaka and Takeuchi, 1995). In this research, the contingency theory posits that environmental creativity intensity is a crucial external factor due to organizational creativity that is the ultimate resource, and that can be used as a weapon to create competitive advantages (Nonaka and Takeuchi, 1995). A knowledge-oriented economy is a feature in the organizational environment that has a tendency to increase creative possibilities for the organization (Liao, Fei, and Chen, 2007).

The contingency theory is applied to explain the conceptual framework in this research. The contingency theory has developed since the 1950s and has expanded into a variety of fields such as strategic management, marketing, accounting, information technology and organizations (Augusto and Coelho, 2009). According to scholars, Fiedler (1967) introduced the contingency theory to give priority to the process of choosing a suitable solution from available alternatives, which are not the best way to the organizational solution. Four elements of the contingency theory include that there are no best practices for achieving its mission and goals, the design of organizations must fit into the environment, building effective organizations must fit with environment and systems, and the appropriateness of work group management and the tasks undertaken (Fiedler, 1964). The concept is based on the fit between the organization and the environment that is a concept, and it has the important role of the contingency theory, which point represents the view of three ways that are composed of selection, interaction, and systems (Drazin and Van de Ven, 1985). In addition, the assumption of the contingency theory is that there is no best practice for all situations, and in which organizations must carefully choose the best method that is appropriate for the situation in determining their practices (Vroom and Yetton, 1973). For organizations that adapt to both the internal and external environments and appropriate fits, they are regarded as highly effective organizations (Wei and Atuahene-Gima, 2009). The contingency theory explains the importance of an organization by trying to apply these principles to increase success; and, the organization must take into account the appropriate operation to be consistent with the situation (Cadez and Guilding, 2008).

The contingency theory is applied to a vision for proactive operations, top management support, organizational learning culture, and continuous environment change by utilizing improvement of the ability of an organization that is able to



effectively respond to changes in more turbulent dynamic environments and that can encourage employee creativity management capability. Additionally, the contingency theory is applied to explain the moderating effects of technology growth in the relationships among the antecedent variables, and each dimension of employee creativity management capability. Therefore, the contingency theory is employed to investigate the effect of the antecedent variables and moderator variables on employee creativity management capability and antecedent variables.

Relevant Literature Review and Research Hypotheses

The related literature is developed for the conceptual framework as shown in Figure 1 on the basis of extant research. This research attempts to conceptually link the relationships among the antecedents and the consequences of employee creativity management capability through two theories that are the resource-advantage theory and the contingency theory. Employee creativity management capability and corporate sustainability are the independent variables and the dependent variable of the research, respectively. Organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are the mediating effects of the research. Vision for proactive operations, top management support, organizational learning culture, and continuous environmental change are also the antecedents of employee creativity management capability. Lastly, technology growth is the moderating effect of the research.

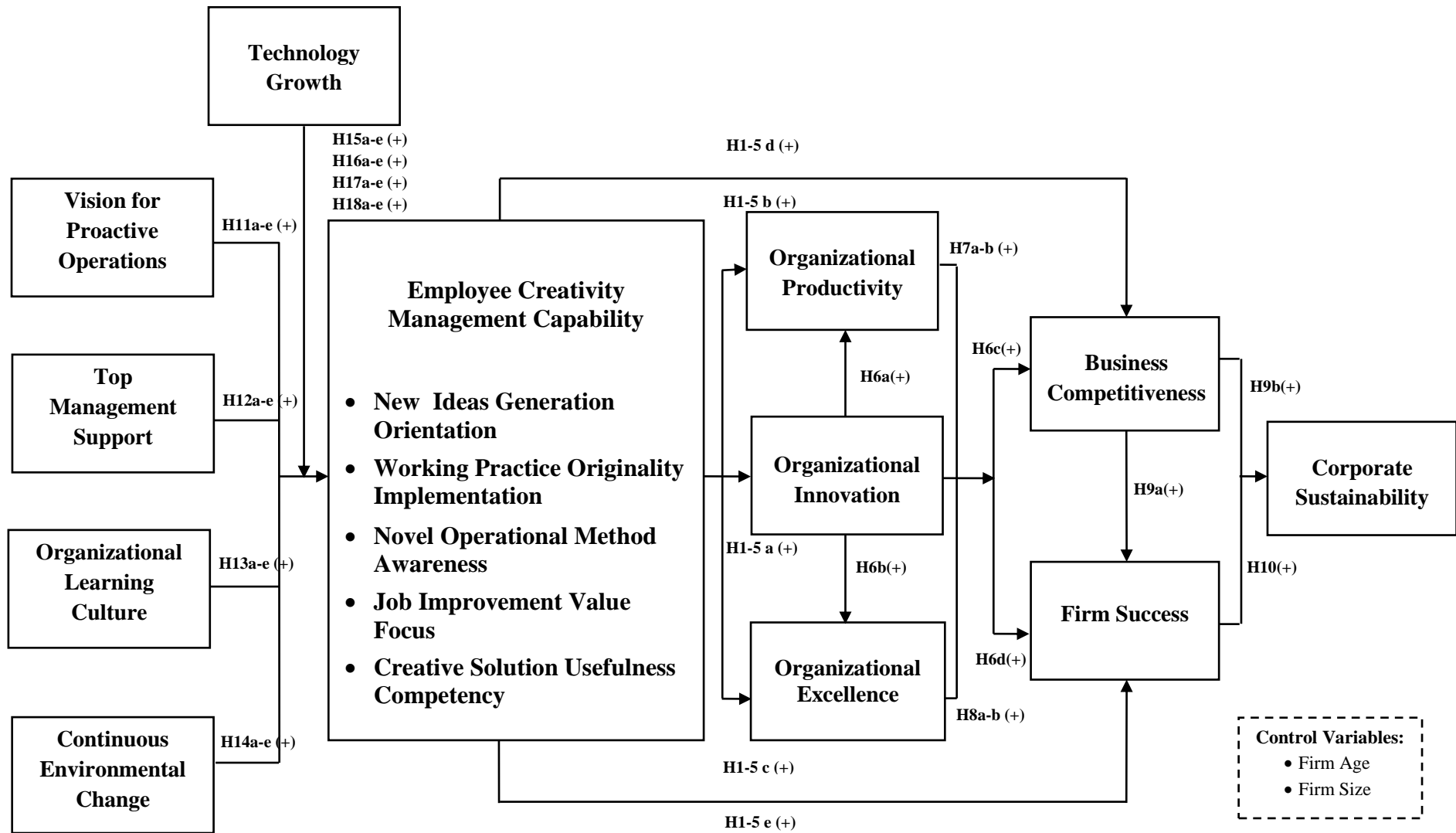
As discussed earlier, this research proposes that employee creativity management capability is positively related to corporate sustainability. Additionally, the mediating effects of organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are tested. Organizational innovation, organizational productivity, and organizational excellence are supposed to have a positive relationship with business competitiveness and firm success. The effects of vision for proactive operation, top management support, organizational learning culture, and continuous environmental change are expected to positively relate with employee creativity management capability. Lastly, the effects of vision for proactive operations, top management support, organizational learning



culture, and continuous environmental change on employee creativity management capability, by using technology growth as the moderator, are examined. The next section details the literature review and the hypotheses of employee creativity management capability to be discussed and proposed.



Figure 1 Conceptual Model of Employee Creativity Management Capability and Firm Sustainability



Employee Creativity Management Capability

Many organizations are faced with growing complexity and dynamics of the business environment, such as a large number of competitors or technology that is changing all the time. These affect the changing of consumer preferences. Therefore, organizations must be prepared with personnel to accommodate the growing global economies (Coviello and Joseph, 2012). The development of knowledge, skills and expertise of employees are important to solve problems in the workplace. Moreover, increasing knowledge, skills, abilities, expertise and creativity of employees can build a sustainable competitive advantage that is hard for competitors to imitate (Rasulzada, and Dackert, 2009). The state of competition in an industry is likely to intensify, and corporate executives need to modify the strategy and tactics of the administration, which differ from the past. This is done by starting promotion of the creativity of employees (Jaskyte and Kisieliene, 2006). The rivalry tends to increase in intensity, and corporate executives need to modify the strategy and tactics of the administration, differ from the past, by promoting employee creativity in the workplace is the key for success (Amabile et al., 2004; Pan, Sun, and Chow, 2012).

The componential model of creativity (Amabile, 1996) demonstrated three core components of creativity that are composed of domain-relevant skills, creativity-relevant processes, and intrinsic task motivation. Lau and Chu (2004) summarized a previous study of creativity that is divided into three areas which compose culture and its influence in creativity, education and development about creativity, and creativity in practice. Collins and Amabile (1999) argued that three core components of creativity should be interactive with each other instead of considering each one alone. In addition, according to Amabile (1996) a congruence of four factors to manage creativity in organizations that include: 1) goal-setting processes that are associated with both the tightly and loosely-controlled approach for overall business goals.; 2) evaluation is the frequency of assessments and feedback that are linked work performance; 3) reward is creativity promotion that has been motivated by an incentive or reward; and 4) pressure is needed for congruency between suitable competition and creativity that can help increase creativity. Sternberg (1999) have demonstrated the association between a high level of creativity and personal involvement of individuals, and discovered both



intrinsic motivation and skills of the hiring personnel decisions. Previous studies related to creativity indicated that intrinsic motivation can bring the foremost benefit for the advancement of organizational development (Amabile, 1983; Csikszentmihalyi, 1991; Maslow, 1943; Oldham and Cummings, 1996). The crucial role of intrinsic motivation that is dedicated to enhancing creativity in performing activity is due to that it is particularly important to encourage creativity in an organization (Greer and Levine, 1991).

Employee creativity is the development of individual ideas that are novel, potential, and appropriate for use in practices, procedures, products, and services (Shalley, Zhou, and Oldham 2004). The concept of novelty is associated with the integration or development of available resources to provide a product, service, process, or practice, is something completely new (Oldham and Cummings 1996). A useful concept demonstrates great benefit that is both directly and indirectly related, and happens in both the short and long-term (Shalley, Zhou, and Oldham 2004). Whereas employee creativity is a role at the individual-level for their ability to develop idea it is the first step in creating ideas for organizational innovation (Woodman, Sawyer, and Griffin 1993; West and Farr 1990). Not surprisingly, a considerable amount of research is the development of the antecedents is related to employee creativity. A large number of studies are about the importance of personal focus is a basic mechanism to drives employee creativity for the role of personality and a cognitive style. The other prime areas of research are awareness of the role in contextual factors, the other prime areas of research are awareness of the role in contextual factors, which is the working environment directly affecting an employee's creativity (Shalley, Zhou, and Oldham 2004). Employee creativity is a highly important element of organizational success for survival in a highly competitive business environment. It can be either promoted or inhibited by focusing on building organizational values, culture, and norms, take action by an organization to guide the working for the employee (George, 2007; Shalley, Zhou, and Oldham 2004).

Organizational creativity is the nature of each situation which shows the ability of employees to generate new ideas, procedures and products for an individual or group that brings big benefit to the organization (Taggar, 2002, Williams and Yang, 1999). Evidence from the perspective of creativity also believes that organizational creativity is



based on the sum of creativity of employees that is gained from the combination of enhancing individual creativity in workplace (Woodman, Sawyer, and Griffin, 1993). Organizational creativity is described in terms of encompassing factors that are related to overcoming barriers by producing organizational innovation, idea evaluation process, internal and external communication procedures, developing or researching sources of idea generation, an individual's motivational stimuli, and creative planning (Majaro, 1991). Organizational creativity is critical to building both valuable and useful new products, services, ideas, and procedures, which is working together for organizational members under consideration of complex social systems (Woodman, Sawyer, and Griffin, 1993). Organizational creativity is increasingly essential for the organizations to respond to a rapidly changing environment. Increasing creativity in organizations can bring the greatest benefit for organization by supporting congruence in both quantity and quality of service, decreasing costs, reducing waste, trying to avoid bureaucracy and boosting efficiency at work.

The role of an organization's management capabilities are a foremost engine of business growth, and these are necessary elements for congruency between competences and the context of changing environmental conditions that can lead to increased organizational performance and success (Kor and Mesko, 2013). An organization's management capabilities that are a combination of technical, person, and ideation ability can be used to help generate, leverage, integrate, and reconfigure their competencies and organization's resources to achieve success (Adner and Helfat, 2003; Lun et al., 2016). In this way, an organization's management capabilities can bring the highest possible profit and business competitiveness in achieving corporate sustainability performance (Gelhard and Delft, 2016). Similarly, Kor and Mesko (2013) also demonstrate is that an organization's management capabilities increase a dominant logic that is linked with routines, procedures, practices, operation and capabilities; which can be used as a prime tool to establish, search, and implement new options for organizational growth and creating organizational innovation. An organization's management capabilities reflect an organization's ability to produce, integrates, and determine organization's resources, capabilities, and core competencies (Barbero, Casillas, and Feldman, 2011). The prior research on management provided evidence to support an understanding of the association between an organization's management



capabilities, strategy, and performance (Kearney, Harrington, and Kelliher, 2014; Sirmon and Hitt, 2009). Management capability is viewed as an important part of an organization that demonstrates the firm managerial behavior and organizational skills that consists of decision-making process, managerial skills, internal communication strategy and conflict management, which there is a confirmation that employees' efforts and skill that can lead to achieving organization objectives and strategies (Chung et al., 2016; Park and Luo, 2001). Therefore, an organization's management capabilities are a foremost stage that can bring the business success or failure to the organization.

According to the discussions above, employee creativity management capability is the combination of an employee's creativity and an organization's management capabilities. Employee creativity management capability plays a foremost role in encouraging and supporting skills, attitudes, and behaviors of employees in the workplace. It helps promote an organization's management capabilities which dedicated to inspiring and motivating employee about creative thinking skills (Pan, Sun, and Chow, 2012). These roles not only support employee creativity to build a better performance, but also can lead to achieve success and competitive advantage for organizations (Amabile et al., 2004). The prior literature has not given a direct meaning for employee creativity management capability. Therefore, it will be defined from the review of related literature. Employee creativity management capability is defined as an organization's ability that encourages employees to produce ideation, utilize behavioral patterns in routine activity, improve a task or activity performance, perform the basic functional activities of the firm, and effectively solve problems, which are creating fresh perspective that can bring the foremost benefit to an organization. These are the capabilities of organizations for building long-term competitive advantage and a sustainable business. It implies that employee creativity management capability has focused on the approach to the management of an organization to promote an employee's creativity. It can be used as a competitive weapon to build and maintain a sustainable competitive advantage in the future. Despite a substantial amount of research attempting to understand creativity at the individual level, little research has focused on employee creativity at the organizational level. Moreover, there is less research endeavoring to understand the relationship among employee creativity management capability and its antecedents and consequences on furniture exporting businesses. Therefore, this research proposes the research framework and research agenda to fill these gaps.



This research has applied concepts from the prior research, Amabile (1996) who proposed four factors to manage creativity in organizations. This is the described sequence as follows: Firstly, goal setting process refers to the tightly and loosely-controlled approach for overall business goals. Secondly, evaluation refers to the frequency of assessments and feedback that linked work performance. Thirdly, reward refers to creativity promoting has been motivated by the incentive or reward. Lastly, pressure refers to the need for congruency between suitable competitive and creativity that can help increase creativity. All of the above mentioned are forms of creativity management that allow firms to encourage and increase the creative capacities of employees within organizations respond to constantly changing in a business environment. Therefore, this research has developed five dimensions of employee creativity management capability which include new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. Each dimension plays a different but complementary role to reflect the nature and influences of employee creativity management capability on corporate sustainability. Therefore, the key literature review demonstrates that employee creativity management capability tends to be verified in the form of increased corporate sustainability. This stream is identified by a substantial number of contextual factors that affect employee creativity, such as vision for proactive operations, top management support, organizational learning culture, continuous environmental change, and technology growth. This research has followed the latter approach, and has focused on the link among contextual factors, outcome factors, and employee creativity management capability. This research context is determined to a great extent by managerial behaviors, thus constituting a key area for managerial interference aimed at employee creativity management capability.

Many studies examine creativity by different theories, which are similar to the concept of employee creativity management capability such as the system theory, process theory, and cognitive theory. In addition to contributing to employee creativity at the organizational level in management research, this research proposes employee creativity management capability. Developing the definitions of employee creativity management capability is various, as evidenced in Table 1. The acceptance of this concept has been reflected by review of related literature. Therefore, a summary of key literature reviews on employee creativity management capability are presented in Table 2.



Table 1 Summary of Definitions of Employee Creativity Management Capability

Author(s)	Definitions of Employee Creativity Management Capability
Woodman, Sawyer, and Griffin (1993)	The competence of an organization to summon all the ideation of employee by stimulate, encourage and support people working together to creating and utilizing products, services, ideas, procedures, or processes.
Baughman and Mumbord (1995)	An organizational capability to connect with a person's ability in workplace to generate novel, valuable, and useful thoughts for the production of product, process, procedure, method and approach to problem solving in organization.
Amabile et al.(1996)	The potential of organization that have influence on individuals and teams of individuals by advocate the production of creative ideas within the organization.
Robinson and Stern (1997)	An organization's ability to generating new, valuable and useful ideas of product, process, method and resolving problems through promoting potential of personal in workplace along the line of organizational goals.
Ekvall (1997)	The competence of an organization to perform supporting activities for the ideation of organization members to create a new view in product, and process or procedures.
Sternberg and Lubart (1999)	The ability of an organization to generate ideas of product, process, and method that is both novel and appropriate through joint efforts to support and encourage members of an organization along the line of business's goals and objectives under a variety of a rapidly changing environment.
George and Zhou (2001)	The competence and potential of an organization to encourage and support an organization's employee which is the production of new and valuable ideas which can be the starting points of product, services, procedure, and tools or techniques of problem solving.



Table 1 Summary of Definitions of Employee Creativity Management Capability (continued)

Author(s)	Definitions of Employee Creativity Management Capability
George and Zhou (2001)	The competence and potential of an organization to encourage and support an organization's employee which is the production of new and valuable ideas which can be the starting points of product, services, procedure, and tools or techniques of problem solving.
Taggar (2002)	The scenarios come out of the ability of individual employees to generate new ideas, procedure and products that bring a great benefit to organization.
Shalley and Gilson (2004)	An organization's ability to encourage and motivate an firm's personnel to create valuable and novel ideas for developing and producing product, services, procedure, method, and new way of solving problems.
Styhre and Sundgren (2005)	The ability of the organization to promote a collaborative of organizational members encourage through a variety of activities for creating new ideas, new product, new process, and new ways of solving problems.
Shalley and Zhou (2008)	The firm's ability to foster the member in an organization to generate both novel and useful ideation by making product, services, process and new way to resolve problems in line with the available resources in workplace.
Fisher and Amabile (2009)	The competence of an organization to reshape ideas for novel and appropriate products, services, and processes through promoting and motivating potential employees in an organization.



Table 1 Summary of Definitions of Employee Creativity Management
Capability (continued)

Author(s)	Definitions of Employee Creativity Management Capability
Bratnicka, Gabrys, and Bratnicki (2013)	The ability of firm to encourage the production of new and valuable ideas to respond the rapidly changing opportunities by stimulating and promoting employee of an organization to generate novel and new way of solving problems, products, services, and process under the a rapidly changing environment.
Hashemi, Tabatabaei, Rafiei, and Chegani (2015)	The competence and potential of a firm through promoting the personnel in an organization to create novel, valuable and useful ideas for product, services, procedure in an organization.
Mach-Król (2015)	The potential of an organization that create dynamic activity of employees for creating novel and appropriate products, services, and processes in response to changing business environment.



Table 2 Summary of the key literature reviews on employee creativity management capability

Authors	Titles	Key Issues Examine	Main Findings
Jaskyte and Kisieliene (2006)	Determinants of Employee Creativity: A Survey of Lithuanian Nonprofit Organizations.	The study investigates the relationship between individual cognitive style, intrinsic motivation, leadership behaviors, job design, cultural norms of diversity, and work group relations and employee creativity.	The finding revealed that the relationship between an organization's ability to support determinants of employee creativity (e.g. individual cognitive style, intrinsic motivation, leadership behaviors, job design, and cultural norms) is positive influence higher employee creativity in a sample of Lithuanian nonprofit organizations.
Muñoz-Doyague, González-Álvarez, and Nieto (2008)	An Examination of Individual Factors and Employees' Creativity: The Case of Spain.	The study examined the relationship between individual attributes and creativity. The data obtained from employees of a Spanish firm.	The finding demonstrates the competence of an organization to reshape the individual attributes have a positive relationship with employee creativity. By intrinsic motivation, expertise, cognitive style, individual creativity and creative process engagement is positive associated with creativity and the connection between individual factors and creativity performance of employee characteristics in Spain.

Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Yilmaz (2010)	The analysis of organizational creativity in schools regarding principals' ethical leadership characteristics	The study examined the relationship between organizational creativity and the ethical leadership behaviors, which was conducted between 2008 and 2009 in Konya region of Turkey.	The investigation of study found that the competence of a firm to support creativity of employee in organization have a significant relationship with the ethical leadership behaviors (e.g. the dimensions of environmental ethic, ethical decision making and behavioral ethic)
Kim, Hon, and Lee (2010)	Proactive Personality and Employee Creativity: The Effects of Job Creativity Requirement and Supervisor Support for Creativity	The study examined the relationship between proactive personality and employee creativity from a sample of 157 employee-supervisor pairs in South Korea.	The finding revealed that the relationship between proactive personality and employee creativity is moderated by job creativity requirement and supervisor support for creativity. The results demonstrates the ability of the organization to promote a proactive personality have positively associated with employee creativity.



Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Ollo-López, Bayo-Moriones, and Larraza-Kintana, (2011)	The impact of country-level factors on the use of new work practices.	This study investigates the impact of country-level factors on the use of new work practices that collected from 16 European countries.	The investigation of study found that the use of new work practices with the degree of cross-cultural difference such as power distance, individualism, and masculinity that can explain why work practices differ across countries.
Sukati et al. (2012)	The effect of organizational practices on supply chain agility: an empirical investigation on Malaysia manufacturing industry.	The study examined the relationship between organizational practices and supply chain agility of 150 staff from 40 manufacturing firms in Malaysia.	The research finds that the positive effects of supply organizational practices on supply chain agility. Moreover, supporting technology shows influencing effect on the relationship between organizational practices and supply chain agility.

Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Yeh-Yun Lin, and Liu (2012)	A cross-level analysis of organizational creativity climate and perceived innovation The mediating effect of work motivation.	The study investigates the effects of organizational creativity climate on perceived innovation of 398 employees from different companies of Taiwan, and investigates the mediating or moderating roles of work motivation.	The study provide direct evidence to support positive relationship between the ability of firm to organizational creativity climate (e.g. organizational encouragement, supervisory encouragement, work group support, sufficient resource and challenging work) and perceived innovation, that are positive relationship and significant.
Carmeli, Gelbard, and Reiter-Palmon (2013)	Leadership, creative problem-solving capacity, and creative performance: the importance of knowledge sharing.	The study examined the relationship among leader supportive behaviors, knowledge sharing, employee creative problem solving capacity, and creative performance.	The findings showed the positive effects of leader supportive behaviors, knowledge sharing, and creative problem solving on employee creative performance, and also found the positive effects of perceived supervisor support on the curvilinear relationship between creative ideas generation and idea implementation.



Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Gong, Zhou, and Chang (2013)	Core knowledge employee creativity and firm performance: the moderating role of riskiness orientation, firm size, and realized absorptive capacity	This study investigates the impact of employee creativity on firm performance in from 148 high-technology firms that collected from 761 core knowledge employees.	The findings showed the positive effects of employee creativity on firm performance when realized absorptive capacity at high level and the negative effects of employee creativity on firm performance when riskiness orientation at high level. The findings demonstrates an organization's ability to encourage employee creativity by managing potential absorptive capacity and riskiness orientation that can improve firm performance.
Davoudi (2013)	Impact: job enrichment in organizational citizenship behavior.	The study examined the effects of job enrichment on organizational citizenship behavior in Mazandaran.	The investigation of study found that the positive connection between job enrichment and employees' organizational citizenship behaviour.



Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Škerlavaj, Černe, and Dysvik (2014).	I get by with a little help from my supervisor: creative-idea generation, idea implementation, and perceived supervisor support.	The study examined the relationship among creative-idea generation, idea implementation, and perceived supervisor support of 24 direct supervisors from a manufacturing firm.	The investigation of study found that a curvilinear inverse U-shaped relationship between creative-idea generation and idea implementation. And the positive effects of perceived supervisor support on the curvilinear relationship between creative ideas generation and idea implementation.
Shrivastava (2014)	Special volume on organizational creativity and sustainability theme “paths for integrating creativity and sustainability”	The study investigated the connection between organizational creativity and sustainability.	The investigation of study found that the competence of an organization to encourage individuals is a prime value promoting more creativity in the workplace.



Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

Authors	Titles	Key Issues Examine	Main Findings
Lee (2015)	The effect of operational innovation and QM practices on organizational performance in the healthcare sector	The study examined the relationship among operational innovation, quality management (QM) practices and organizational performance from 239 hospitals.	The research found that the positive effects of operational innovation and quality management (QM) practices on organizational performance.
Ghosh (2015)	Developing organizational creativity and innovation toward a model of self-leadership, employee creativity, creativity climate and workplace innovative orientation.	The study examined the relationship among self-leadership, employee creativity, and creativity climate and workplace innovative orientation.	The research found that the positive connection among self-leadership, employee creativity, creativity climate and workplace innovative orientation. And the result showed the moderating roles of creativity climate in activating employee creativity associated with workplace innovative orientation.



Table 2 Summary of the key literature reviews on employee creativity management capability (continued)

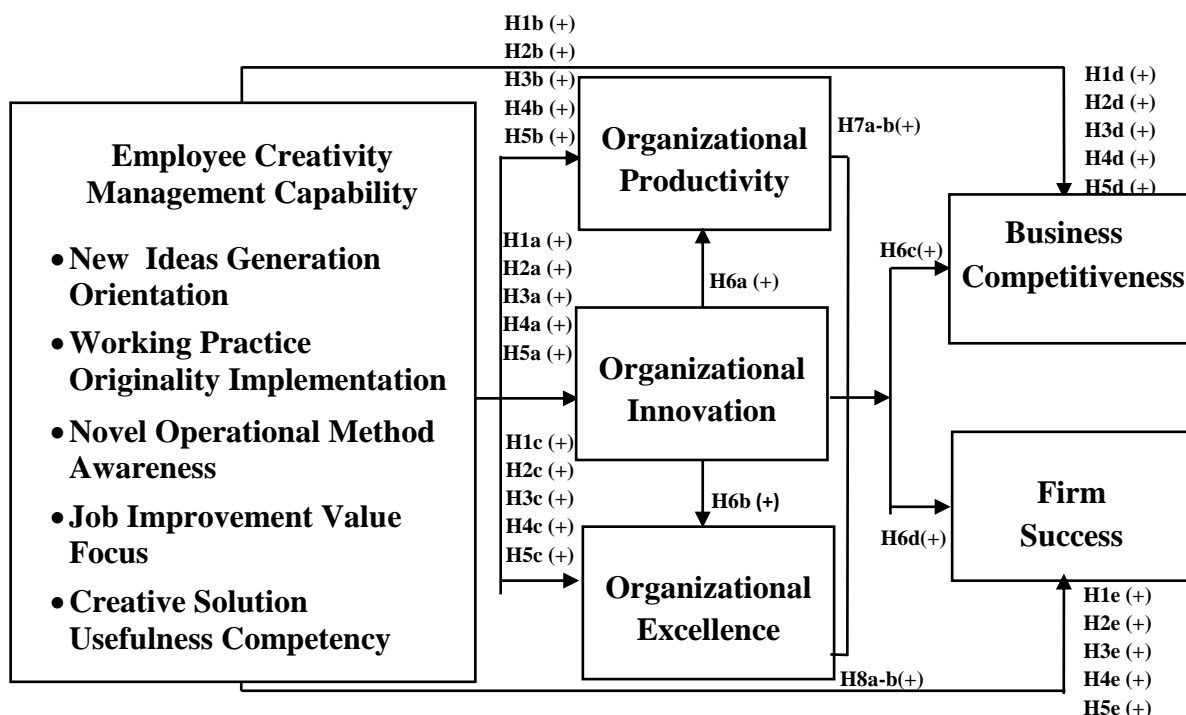
Authors	Titles	Key Issues Examine	Main Findings
Ruppel, Lawrence, and Tworoger (2016)	Exploring the relationship between organizational creativity at the individual and group levels and the organizational context.	The study examine the relationship between creativity and the interaction between specific characteristics of the person, group, and contextual factors.	The result show an organization's ability connect between the creativity and the importance of individual and team personality which can stimulates creativity and support the development of new ideas.
Yang, Lee, and Cheng (2016)	Continuous improvement competence, employee creativity, and new service development performance: A frontline employee perspective	The study investigrated the effects of employee creativity on new service development performance in the banking sector of China.	The research find that the role of frontline employees' creativity have significant positive impacts on NSD performance . The study show the positive relationship between the frontline employees' operational improvement competence (OIC) and employee creativity.

The following section shows the investigation of the relationships among employee creativity management capability which includes five dimensions: new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. They also contribute greatly to corporate sustainability. A more detailed discussion of these dimensions is provided below.

The Effects of Employee Creativity Management Capability on Its Consequences

This section investigates the effects of five dimensions of employee creativity management capability that consist of new idea generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency on five consequences, comprising organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success as shown in Figure 2 below.

Figure 2 the Effects of Employee Creativity Management Capability on Its Consequences



Employee Creativity Management Capability

This research defines employee creativity management capability as organization's ability that encourages employees to produce ideation, utilize behavioral patterns in routine activity, improve a task or activity performance, perform the basic functional activities of the firm, and solve effectively problems, which are creating a fresh perspective that can bring the foremost benefit to an organization. These are the abilities of organizations for building a long-term competitive advantage and a sustainable business. This research attempts to identify the core contents of employee creativity management capability with new dimensions. The essential features of employee creativity management capability are composed of five dimensions including new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency, as discussed hereafter. Most of the research on the outcomes of employee creativity has focused on organizationally relevant consequences, such as organizational innovation (Woodman, Sawyer, and Griffin 1993; West and Farr 1990), and productivity (Halos and Triremes, 2007).

New Ideas Generation Orientation

New ideas generation orientation is the first dimension of employee creativity management capability. New ideas can bring the greatest benefit to the firm by generating and developing, which are the prime drivers of organizational growth by the creativeness of employees (Nikolowa, 2014). New ideas generation orientation is a prime source of the firm's ability to develop a process or procedures, and products or service, which responds to continuing market demand and builds customer satisfaction that leads to market performance (Thipsri and Ussahawanitchakit, 2009). Some of the studies demonstrate that idea generation is the ability of a firm to generate and develop, which fosters new operational processes and the ideas generation role is positively affected by the promoting of ideas via both informal and formal channels (Howell and Boies, 2004). Jonson (2005) defines idea generation as the idea stemmed from the process of critical thinking, which can be demonstrated in terms of the visual, concrete, or abstract.



In creating a good idea, it is difficult to establish that which requires a thought process occurred in a process of the cognitive, metacognitive, chemical and biological (Hamid, 2001). The ability to generate new ideas in organizations is important for survival skills in a rapidly changing business environment, which results in different organizations need to adapt the existing strategies or create the new strategies (DeHaan, 2011). Therefore, new ideas generation orientation in this research is defined as the organization's ability that promotes and encourages employees by focusing on creating, developing, and communicating ideas effectively and can transforms from abstract ideation into something more concrete which brings important benefit to the organization (Grandi and Grimaldi, 2005; Guilford, 1967; Gallupe et al., 1992; Garfield et al., 2001).

New ideas generation are regarded as prerequisites for effectiveness and continued ability, which can be considered part of the important driving force of the firm success, due to it being a prime factor in improving organizational innovation and new ideas generation. It is also the main driver of creation, and sustains business competitiveness for firms (Geum and Park, 2016). According to Calantone, Cavusgil, and Zhao (2002), new ideas improve a customer's shipping that can generate greater customer satisfaction for the achievement of organizational goals, and is the foremost requirement for organizational excellence. Moreover, a method to produce a good quality product is used to determine that the engineering design that was developed leads to organizational productivity in responding to customer satisfaction (Zhang, Vonderembse, and Cao, 2009). Heong et al. (2012) demonstrate the role of the generating ideas concept is the critical factor to achieving success, which requires thinking carefully to create ideas. It was found that the major obstacles to ideas generation are a deadlock of ideas. According to the relevant literature, new idea generation orientation is more likely to enhance organizational productivity, organizational innovation, and organizational excellence. Therefore, the hypotheses are proposed as follows:

Hypothesis 1a: New idea generation orientation has a positive influence on organizational innovation.

Hypothesis 1b: New ideas generation orientation has a positive influence on organizational productivity.



Hypothesis 1c: New ideas generation orientation has a positive influence on organizational excellence.

Hypothesis 1d: New ideas generation orientation has a positive influence on business competitiveness.

Hypothesis 1e: New ideas generation orientation has a positive influence on firm success.

Working practice originality implementation

Working practice originality implementation is the second dimension of employee creativity management capability. The work practice of employees is important to create a common understanding among activities and processes in the work that takes place within an organization (Zacarias et. al, 2008). Work practice is defined as action patterns that vary according to the nature of the locale, which occur in the context of various operations that are performed in the organization (Zacarias and Martins, 2012). A variety of related fields such as management science, business anthropology, work systems design, and socio-technical systems are vital to work practice (Warren, 2003). Working practice is the behavioral patterns of individuals in the organization, which are doing the inner work of the organization that can have an important impact on employee connections, interactions and achievement due to these working practices are a close link in organizational culture (Koveshnikov et. al., 2012). Working practice is described in terms of a behavior scheme that is the sequence of action. There is uniqueness of local manner. Work practices are transformed according to the context of performing. Furthermore, work practices can bring the foremost usefulness to the organization that originate from observing how the daily actions, analyzing work actions, and related actions; and finding the contextual pattern of recurrent action (Zacarias and Martins, 2012).

Creating work practices is critical to encourage users to achieve efficient and effective operation in organizations (Warren, 2003 ; Brézillon, 2003). The organization is currently more complex and has changes in the business environment. More competition or technology is changing all the time that affect the work practices field such as in flexible work, teamwork, and non-hierarchical organizational structures (Marr, 2011). Working practice is a notion that started from characteristics of socio-



technical systems, management science, business and organizational anthropology, and designing a work system (Warren, 2003). Work practices are the action of showed behavior patterns that are provided by unique individuals, executing particular activities, which depend on a specific situation. Work practices that relate to people's activities over time are also engaged in utilizing an engine, documents, equipment, and invention. Therefore, working practice originality implementation in this research is defined as an organization's ability to understand and utilize patterns of work activity by supporting and developing the skills, knowledge, abilities and behavior necessary to perform the work, which are an essential aspect to building a successful business (Gatewood and Riordan, 1997; Johnson, 1995; Zacarias and Martins, 2012).

A working practice within an organization is consistent with the arrangement of a workplace, which is one of the foremost parts that support organizational success (Rosholm, Røed, and Schøne, 2013). Working practice is generated by recognizing congruence among organizational design and structure, job titles and descriptions, work system methods, recruitment and selection processes, organizational development processes, performance management systems, internal communications plans, and technology, by using more efficient working practice to build organizational excellence and business competitiveness in the future (Zacarias et al., 2008; Adnan et al., 2015). Previous studies related to working practice originality implementation demonstrated that working practice can lead to supported and enhanced employee productivity that originate from the adoption of best practices for improving more organizational productivity (Brézillon, 2003; Warren, 2003). Work practice is also foremost to creating a deeper understanding of conducting individual activities. It is composed of a process of doing business and evaluating the actual operational alignment and process alignment (Zacarias et al., 2008). The ability to develop and increase organizational innovation outcomes depends on the potential of a firm to generate work practices which, in turn, enhance business competitiveness (Mazzei, Flynn, and Haynie, 2016). Based on the relevant literature, working practice originality implementation is more likely to enhance organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. Therefore, the hypotheses are proposed as follows:



Hypothesis 2a: Working practice originality implementation has a positive influence on organizational innovation.

Hypothesis 2b: Working practice originality implementation has a positive influence on organizational productivity.

Hypothesis 2c: Working practice originality implementation has a positive influence on organizational excellence.

Hypothesis 2d: Working practice originality implementation has a positive influence on business competitiveness.

Hypothesis 2e: Working practice originality implementation has a positive influence on firm success.

Novel operational method awareness

The third dimension of employee creativity management capability is novel operational method awareness. Operational innovation is described in terms of both the generation and implementation of crucial transformation or new methods in operations and processes for the production plan of products that takes place within a manufacturing firm (Hammer, 2004). Operational innovation is linked to be the ability of a firm, which is transformed into processes and methods of performance that can be used as a competitive engine that rivals find difficult to imitate. This is done employing operational innovations containing process improvements that relate to more system components and are long-sighted, rather than trying to reform the simple system or increase changes. Operation capability is broadly perceived as a key factor in combinations of complex activities that operate in firms to develop or improve the efficiency and productivity, which relate to production capabilities, the flow process of materials into a firm, and the advancement of technology (Yu, Ramanathan, and Nath, 2014). Operational capability is one of the essential features of a firm in order to increase the competence and potential of the firm to accomplish the ultimate goal of production, such as in offering a high-quality product, product and volume flexibility, on time delivery, product cost reduction, and efficient production (Peng, Schroeder, and Shah, 2008).

Wu, Melnyk, and Flynn (2010) are observing that the firms that have new methods of operating can help to increasing systemic opportunities and challenges of



the common process to encourage business operations that are important for improving new processes in organizational innovation development. Previous studies related to the operations field examined the role that the operations capability plays in successful organizational performance which includes cost, speed, dependability, quality and flexibility (Tan, Kannan, and Narasimhan, 2007). Nath, Nachiappan, and Ramanathan (2010) have also pointed out the link between operations capability and financial performance that can be considered as part of a prerequisite for successful firms. The literature on operations strategy can enable efficient and effective delivery of products to respond to customers' demands in the market, and are the important driving force which provides direction for organizational excellence (Baines, et al., 2009). Swink and Hegarty (1998) found that the new method of operating can create differentiated skills, processes, and routines that are a radical improvement of existing operations processes, or can developing and implement new and uniqueness that has highly efficient operations processes. Therefore, novel operational method awareness in this research is defined as the organization's ability to realize the potential of new thinking, new methods and new techniques to increase operational efficiency and effectiveness are critical for organizations to achieve goals and gain competitive advantage over competitors (Hammer, 2004; Wu, Melnyk, and Flynn, 2010; Oke and Kach, 2012).

Krasnikov and Jayachandran (2008) provide relevant evidence that supports the connection between operations capabilities and increasing competitive advantage that are the crucial, important requirements for business competitiveness. Operational innovation bring about a great advance in operating an organization, and has positively affected the entire business and organizational strategic goals, which are focused on business processes, organizational innovation and strategy of organization (Hammer, 2005). Hamel and Breen (2007) demonstrate the connection between novel operational method and procurement, research and development, logistics, and customer service support for achieving operational efficiency, which are regarded as the foremost driving force of organizational excellence. Azadegan (2011) is convinced that the novel operational method and linking, using common processes are particularly important to generate and maintain business competitiveness. Focusing on building the new methods of operating is a major engine can be used to achieve goals and strategies that drive a firm's success (Hammer, 2004). It is frameworks that focus on the high level



business processes together with both of operating method and that organization's strategy. Hamel and Breen (2007) provide evidence to support an understanding of the new method of operating, such as procurement, logistics, production, purchasing, finance, marketing, customer service support, and research and development. These play an important role in achieving organizational productivity. Based on the relevant literature, novel operational method awareness is more likely to increase organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. Therefore, the hypotheses are proposed as follows:

Hypothesis 3a: Novel operational method awareness has a positive influence on organizational innovation.

Hypothesis 3b: Novel operational method awareness has a positive influence on organizational productivity.

Hypothesis 3c: Novel operational method awareness has a positive influence on organizational excellence.

Hypothesis 3d: Novel operational method awareness has a positive influence on business competitiveness.

Hypothesis 3e: Novel operational method awareness has a positive influence on firm success.

Job improvement value focus

The fourth dimension of employee creativity management capability is job improvement value focus. Job improvement value can be consider part of job enrichment that provide the connection between reduce their absenteeism, turnover, and stress which as negative work outcomes, and improve their performance, satisfaction, and motivation which as positive work outcomes, which are the crucial requirement for organizational innovation and are the important driving force of organizational excellence (Cook and Salvendy, 1999). Similarly, Hackman and Oldham (1980) also believed that job enrichment is described in term of job improvement value. They contains crucial manner of job, such as skill diversity, task identity, task meaning, freedom, and feedback, by jobs filled with these characteristics that foster the need of all employees and work outcomes that can lead to organizational productivity and firm



success. According to Aswathappa (2005), job improvement value denotes important concepts of motivational enhancement that added more challenge or rewards to the job. Focusing on job improvement value is to soothe the chronically bored employees that stream from excessive specialization and tend to be mass production that can build a source of job satisfaction. Job improvement value has also left employees' participation in management due to business that is necessary to support autonomy and scope for using rationales in decisions (Aswathappa, 2005).

The perspective of job improvement value is relate to job design that has a high-level overview in meaning, driving direction, and perceiving results of a factor in learning and performance. Moreover, job improvement value has also realized how enhanced work functions in both a horizontal slice and a vertical slice of the organization (Nicholas, 1982). Job improvement value focus as a root of enhancing motivation for the employee can bring the greatest goal to the organization by focusing on behavior (Likert, 1967; Orpen, 2011). A substantial amount of research indicated that job improvement value focus can boost freedom and responsibility of employees towards an organization to perform better. One of the more challenging and interest in work is the job manner that has a variety of skills, a significance of task, and an identifiable piece of task to make work more meaningful. Also, job satisfaction of employees can lead to increased business competitiveness and organizational productivity. Job improvement value focus performs more tasks and is also a way to augment towards self-actualization, self-respect, and self-control that lead to the success of organizational excellence (Vroom and Yetton, 1973; Swinth, 1971).

The key role of job improvement value attempts to integrate vertical and horizontal slices in a work unit. Job improvement is key factor for motivating employees in creating good job opportunities can be achieved by adding more responsibilities and increasing varieties in their jobs (Aina and Omoniyi, 2014). The prior research on the job improvement value is greatly related to skill variety, task identity, task significance, autonomy, and feedback. It is and found that the role of a perceived job shows positive effects on employee attitudes and behavior (Hackman et al., 1975; Hackman and Oldham, 1980). Therefore, job improvement value focus in this research is defined as the organization's ability to inspire employees by concentrating worth adding to daily tasks and giving more responsibility to create meaningful, challenging, and interesting



tasks which are important in helping organizations become successful (Cook and Salvendy, 1999; Rey-Martí, Ribeiro-Soriano, and Sánchez-García, 2016). Pan and Werblow (2012) suggested considering job improving and self-managing work teams that can use help to build employee performance and organizational success in the construction industry. Similarly, Ruthankoon and Ogunlana (2003) provide evidence to support the important driving force of job satisfaction, and also consider factors such as job improvement which is regarded as an element to create and maintain job satisfaction is still a key tool to achieve firm success. In addition, according to Orpen (2011) job improvement value can build employee satisfaction and performance in the workplace, which implies that job improvement value leads to increasing employee performance which can be considered a part of achieving business competitiveness. Yang and Lee (2009) was convinced that enhancing employee satisfaction is the driving force that provides increasing employee performance and enables the employee to achieve success in work through the mechanism of job enrichment, which is derive from the value in focusing on job improvement that can help to improve organizational productivity. Saleem, Shaheen, and Saleem (2012) provided an understanding of organizational innovation can be enhanced by enriching job improvement in the organization. Based on the relevant literature, job improvement value focus will have a positive influence on organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. Therefore, the hypotheses are proposed as follows:

Hypothesis 4a: Job improvement value focus has a positive influence on organizational innovation.

Hypothesis 4b: Job improvement value focus has a positive influence on organizational productivity.

Hypothesis 4c: Job improvement value focus has a positive influence on organizational excellence.

Hypothesis 4d: Job improvement value focus has a positive influence on business competitiveness.

Hypothesis 4e: Job improvement value focus has a positive influence on firm success.



Creative solution usefulness competency

Creative solution usefulness competency is the last dimension of employee creativity management capability. The role of an ability to solve problems creatively is the most crucial thing in organizational performance due to new problems that can have a serious incident to react on every day (Trilling and Fadel, 2009). Creative problem-solving originates from the development by Osborn (1957) who demonstrates more efficient building processes to fix the problem for organizations. A considerable number of researchers have implemented developing creative thinking or other abilities and skills (Buisine, et. al., 2012; Chant, Moes, and Ross, 2009; Kuo, Chen, and Hwang, 2014). Lumsdaine and Lumsdaine (1995) suggested that the creative solution comprises five key steps, namely, defining the problem, generating an idea, evaluating ideas, making judgments, and applying solutions. The process of creating solutions is associated with analytical, creative, and critical thinking, which can be used as a competitive engine to enhance productivity and quality of work (Lumsdaine and Lumsdaine, 1995). Problem-solving is a foremost skill that contains both convergent and divergent thinking for generating possible solutions to a problem (Newman, 1995). The skills in problem-solving are perspectives that relate to identifying causality, structure, and deploying a system of knowledge to fix the complex problem (Jonassen, 2004).

The usefulness of creative solution is necessary with regard to improvement and adaptation to several other contexts and several different entities. Creative problem solving reflects the processes of crucial creativity that link with the building which is composed of the action of identifying and construction, the acquisition of information and concepts, as well as the implementation that contains assessment, selection, and planning (Reiter-Palmon and Illies, 2004). Creative solution has an important role and implications in enhancing organizational productivity and performance, which ability solves problems creatively and is also a key skill of organizations in the face of constantly changing problem conditions (Trilling and Fadel, 2009). Therefore, creative solution usefulness competency in this research is defined as the organization's ability that provides support to an employee to find a way to be more diverse, pursue new possibilities, create new alternatives, and think outside the box for the problem-solving of an organization in order to help achieve organizational business goals and objectives



(Caughron and Mumford, 2008; Althuizen and Wierenga, 2014; Puccio, 1999; Ray and Romano, 2013).

Creative problem solving is also linked the possible solution processes and creative thinking to use effective problem-solving, are a crucial requirement for organizational innovation (Kirton, 2003). Creative solution is important in the organization that is demonstrated by the creativity of employees in order to find a solution to the problems in the organization, and the creative solution of organizations that can be used as the competitive engine to gain and maintain business competitiveness (Ray and Romano, 2013). Previous studies have related to creative solution, and demonstrate a process that involves creative solution, which consists of five stages that are: a fact-finding, identifying, idea generation, evaluation and selection of solutions. Acceptation in response to finding creative solutions to firm problems can build firm success and are essential to producing organizational excellence in the future (Basadur, Graen, and Green, 1982; Mumford et al., 1991). Generally studies have found that creativity in an organization is associated with a creative solution, which investigation found that individual creativity to solving problems for achieving firm success when is also in the same situation (Carmeli, Gelbard, and Reiter-Palmon, 2013). Based on the relevant literature, creative solution usefulness competency is more likely to increase organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. Therefore, the hypotheses are proposed as follows:

Hypothesis 5a: Creative solution usefulness competency has a positive influence on organizational innovation.

Hypothesis 5b: Creative solution usefulness competency has a positive influence on organizational productivity.

Hypothesis 5c: Creative solution usefulness competency has a positive influence on organizational excellence.

Hypothesis 5d: Creative solution usefulness competency has a positive influence on business competitiveness.

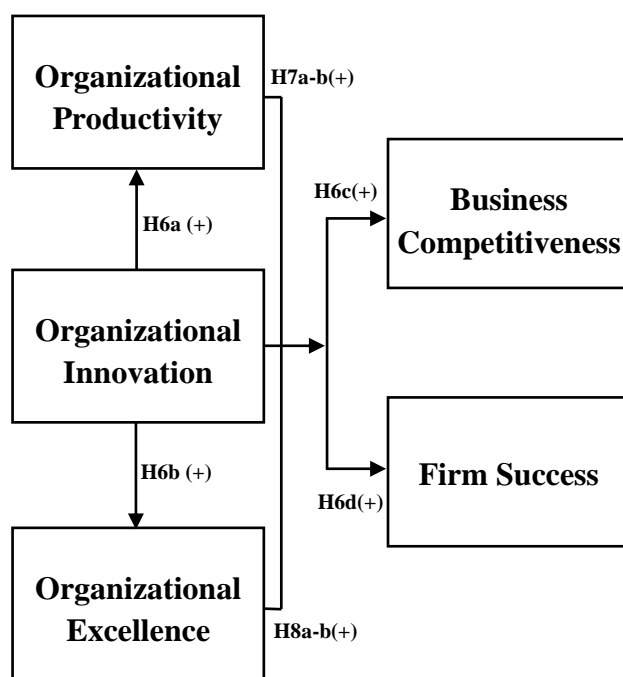
Hypothesis 5e: Creative solution usefulness competency has a positive influence on firm success.



The Effects of the Consequences of Employee Creativity Management Capability on Business Competitiveness and Firm Success

This section investigates the effects of consequences of employee creativity management capability that consist of organizational productivity, organizational innovation, organizational excellence on business competitiveness and firm success shown in Figure 3.

Figure 3 The Effects of Consequences of Employee Creativity Management Capability on Business Competitiveness and Firm Success



Organizational innovation

Competitiveness pertains to the effectiveness of an organization have shown that organizational innovation as the main driving force in the creating of significant potential for organizations (Madrid-Guijarro, Garcia, and Auker, 2009). A competitive situation in the market as the crucial driving force which provide developing and implementing an organizational innovation to protect competition and can respond to the challenges of markets (Matzler et al., 2013). The importance of firm



competitiveness are driven by and depends upon organizational innovation, which is a core factor for organizations to build a competitive advantage that results from inimitable skills and unique abilities of the organization (Noruzy et al., 2013). Creating products is a result of the organization's capacity to transform resources into organizational innovation for responding to market demands which is regarded as an important requirement to build and maintain business competitiveness (Camisón and Villar-López, 2014). Many of the organizations effort to build or develop technological capabilities and organizational innovation to respond to changes in market needs, which are factors involved in individual productivity that can lead to increased organizational productivity (Gera and Gu, 2004). The perspective on novelty, improvements, and responsiveness to customer needs are essential components and has emphasized the importance of the organizational innovation which can be considered a core part for achieving the success of the firm (Santos-Vijande and Álvarez-González, 2007). The development, improvements, and modifications of original products in an organization are considered as the core elements of organizational innovations that originate from the ability of the organization to achieve its objectives, which is are important in driving organizational excellence (Chen and Lin, 2009). Fast adaptability, flexibility, and agility are regarded as crucial capability of creating an organizational innovation to respond effectively to rapidly changing business scenarios due to the performance of the organization depends upon the creation of greater organizational innovation, which is prerequisite for business competitiveness (Liao and Wu, 2010). Organizational innovation is novelty in how value creates the difference in several approaches to practices, processes, and services development within the organization in order to create and maintain organizational productivity in the long-term (Mazzanti, Pini, and Tortia, 2006). Therefore, organizational innovation in this research is defined as the new work process, new method, new products, new services, or new technologies which implemented by organizations for responding to changing customer demands and rapidly changing business scenarios (Damanpour, 1996 ; Montes, Moreno, and Morales, 2005).

The importance role of organizational innovation to enhance business competitiveness, which is a factor for organizations to build a competitive advantage that results from inimitable skills and unique abilities of the organization (Noruzy et al.,



2013). Organizational innovation is reflected in business growth and performance increases, is closely related to the organizational effectiveness (Garcia-Morales, Llorens-Montes, and Verdú-Jover, 2006). Achieving marketing success and building and maintaining business competitiveness are created by the development of new products and services are regarded as important part of organizational innovation to meet customer needs and achieve satisfaction (Ho, 2011). In building sustainability for organization, organizational innovation is the key factor for creating a competitive advantage, the future growth of organizations, and increasing the effectiveness of its operations in the economic system (Alshammari et al., 2014). Organizational innovation has a direct relationship to an organization's capability and its performance. Organizations want to be successful, and it is needed to create innovation responding to changes in a business environment (Carmen and José, 2008). Based on the relevant literature, organizational innovation will have a positive influence on organizational productivity, organizational excellence, business competitiveness, and firm success. Therefore, the hypotheses are posited as follows:

Hypothesis 6a: Organizational innovation has a positive influence on organizational productivity.

Hypothesis 6b: Organizational innovation has a positive influence on organizational excellence.

Hypothesis 6c: Organizational innovation has a positive influence on business competitiveness.

Hypothesis 6d: Organizational innovation has a positive influence on firm success.

Organizational productivity

Productivity is great importance to the employees, the organization, and the national economy, which can use to create sustainable competitive advantage (Yesufu, 2000, Akinyele, 2010). Efficiency and effectiveness are the critical factors of productivity, which these factors create a balance of performance. Also, the profitability can be found from value creation, time effectiveness and quality products (Oeij et al., 2012). Organizational productivity are driven by depends upon employee effectiveness and



managerial efficiency and are greatly relate to efficient use of resources, machines and environment, due to it is the foremost driving force which provide organization's growth and profitability lead to profit maximization and business competitiveness (Masi and Cooke, 2000).

The competitiveness of the manufacturing industry focuses on productivity by stimulating the development of productivity in profitability, work quality, sales, and processes (Culnan and Bair, 1983; Pritchard, 1990). Improving operational efficiencies of the organization to reduce the amount of waste, energy, labor, and time are the difference between inputs that is less than output, by which comes productivity improvement in the organization (Oeij et al., 2012). Therefore, organizational productivity in this research is defined as the working systems, which are outstanding and modern to help improve process efficiency, and using resources efficiently in response to customer need and superior value (Ritchie and Dale, 2000).

Productivity improvement of an organization will affect its ability to achieve long-term profit and growth (Neely, 2002). Increasing the productivity of an organization is formed by talent, skills and knowledge, which are the important assets of the organization to improve performance (Halkos and Tzeremes, 2007). The most common measure of an organization's ability can be measured by productivity, which is the output from the production activities of an organization (Chinda, 2012). Base on the relevant literature, organizational productivity will have a positive influence on business competitiveness and firm success. Therefore, the hypotheses are posited as follows:

Hypothesis 7a: Organizational productivity_success has a positive influence on business competitiveness.

Hypothesis 7b: Organizational productivity_success has a positive influence on firm success.

Organizational excellence

A myriad of organizations want to bring excellence into the workplace because it can increase competitiveness over other rivals. Organizational excellence originates from the best practice of an organization that enables successful organizations to remain competitive, which is the greatest challenge that an organization faces in response to



changing needs (Marrewijk et al., 2004). Organizational excellence reflects responding to customer satisfaction and creating better value for customers through better operational efficiency, operations that are outstanding, and the ability to coordinate within the organization (Darling and Nurmi, 1995). The challenge for organizational excellence is to find a way of achieving a sustainable competitive advantage over the other competition, by the prime goal of organizational excellence in operating efficiently over rivals (Reijers and Manser, 2005).

Organizational excellence is regarded as one of effective ways for firms to sustain organization capability in responding to change in a rapidly-changing business environment (Kaynack, 2003). Organizational excellence can bring a great advance to organization by focusing on managing the business strategy, business practices, and firm's stakeholders to work together cohesively on a shared goal that lead to achieving the business competitiveness and success (Adebanjo and Mann, 2008). Organizational excellence is integrated into each prime process, activity, and resource to support the ability to achieve the objectives of the organization, which is a great basis for establishing a business sustainability concept (Gordon, Loeb and Tseng, 2009). In this research, organizational excellence is defined as the working systems that are outstanding and modern to help improve process efficiency, and using resources efficiently in response to customer need and superior value. (Ritchie and Dale, 2000; Hardjono and Marrewijk, 2001).

Many researchers study the importance of organizational excellence that relates to the performance of an organization. Tari, Molina, and Casterjon (2007) demonstrate the adoption of Total Quality Management (TQM), and an improved firm leads to excellence and sustainability. Organizational excellence is positively related to business performance. Kalyani and Sahoo (2011) argue that organizational excellence can bring the greatest benefit to the organization by performing better than the other firm. Many organizations want to achieve within a particular period of time, creating a business excellence is an effective alternative for the organization. This is often described as outstanding practices for delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders (Ritchie and Dale, 2000). A sustainable competitive advantage originates from concentration on improving operational efficiency and effectiveness to seek a way of achieving the



greatest benefit to the business, such as in responding to customer need by exceeding their expectations (Kaynak and Hartley 2005). Rapid response to planning and managing the production process is the prime factor in making the changes that lead to organizational excellence. Many organizations attempt to increase the efficiency and effectiveness of operations to enable them to maintain competitive advantage (Reijersa and Mansar, 2005). Based on the relevant literature, organizational excellence will have a positive influence on business competitiveness and firm success. Therefore, the hypotheses are posited as follows:

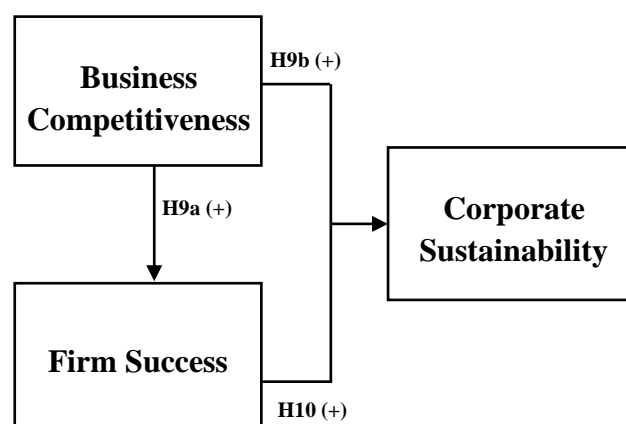
Hypothesis 8a: Organizational excellence has a positive influence on business competitiveness.

Hypothesis 8b: Organizational excellence has a positive influence on firm success.

The Effects of Business Competitiveness on Firm Success and Corporate Sustainability

This section investigates the effects of business competitiveness on firm success and corporate sustainability shown in Figure 4.

Figure 4 The Effects of the Effects of Business Competitiveness on Firm Success and Corporate Sustainability



Business competitiveness

The concept of competitiveness is used in a wide variety of fields, which is associated with many theories. Competitiveness is linked to the strategy and operations of an organization (Barney, 2001). The development of prices and costs as a key concept of firm competitiveness, indicate the potential of the organization's performance, namely market shares and sales growth (Testa, Iraldo, and Frey, 2011). Pungboonpanich and Ussahawanitchakit (2010) define competitive advantage as the ability of a firm in building and sustaining superiority, and gaining or maintaining market position. Competitiveness is a factor that explains the fundamental strength of the economy, because it relates to competitors in competitive markets for goods, services, skills, and concepts (Ambasta and Momaya, 2004).

Most of the definitions of competitiveness are related to the capabilities and offerings of the organization for competition with rivals in the market (Feurer and Chaharbaghi, 1994). Business competitiveness is a superior competitive ability over others in design, manufacturing, service and product which can be considered superior performance from both monetary and non-monetary value (D'Cruz, 1992). Business competitiveness is important, which relates directly to the customers, shareholders, and business, to create better value through the organization's ability to both proactively and reactively respond to a rapidly-changing market (Feurer and Chaharbaghi, 1994). In this research, business competitiveness is defined as the potential of organizations to manage and operate business better than a competitor, which is the ability to provide good customer service, generate innovation, and maintain quality (Testa, Iraldo, and Frey, 2011).

Intarapanich and Ussahawanitchakit (2011) indicated that the ability of organization to an achieve superiority over its rivals is a critical factor for the concept of competitive success in business that comprises organizational creativity, new operation strategy, and new product and service development. Prasertsang and Ussahawanitchakit (2012) provide the relationship between firm competitiveness and corporate sustainability, which demonstrates that the business competitiveness and firm success are regarded as significant mechanism that is essential to create corporate sustainability in a rapidly changing business environment. Singh (2012) suggested that the business competitiveness



demonstrated by strong competitive position in an industry, and increasing market share which originates from operational efficiency and effectiveness, is the greatest challenge that organizations face. In building a business competitiveness of organizations, there are a variety of approaches to achieve a business competitiveness, including strategies implementation that enhance the ability of an organization, such as a cost leadership strategy and a differentiation strategy to gain a firm success (Tan et al., 2015). Based on the relevant literature, business competitiveness will have a positive influence on firm success and corporate sustainability. Therefore, the hypotheses are posited as follows:

Hypothesis 9a: Business competitiveness has a positive influence on firm success.

Hypothesis 9b: Business competitiveness has a positive influence on corporate sustainability.

Firm success

The organization operates to achieve organizational goals and objectives, both in terms of finance and marketing, consisting of customer relationship management, customer satisfaction, sales growth, market share, and profitability, that can build corporate sustainability in future (Cadez and Guilding, 2008; Maltz, Shenhar, and Reilly, 2003). Waranantakul, Ussawanitchakit, and Jhundra-indra (2013) provided an understanding of firm success as the operation to achieve the prime goals, which introduces the four major perspectives of the performance consisting of finance, customer, internal business process, and growth. Chalatharawat, Jirapa, and Ussahawanitchakit (2009) is described in term of firm success as achieving the highest possible profit for the firm, which is derived from a potential of performance by four prime perspectives comprised of finance, customers, internal business processes, learning and growth.

Cadez and Guilding (2008) provide that many organizations are measuring the key success of organizations, which is measured in a variety of dimension, such as profitability, customer satisfaction, and employee satisfaction, contribution to society, sales volume, market share, and return on investment (ROI). Some of the organizational achievements originate from the influence of capabilities, both personal and



organizational (Turner and Crawford, 1998). Therefore, firm success in this research is defined as the achievement of the business to have income and profits according to the goals, the growth rate of market share, the financial position and the performance that are higher (Maltz, Shenhar, and Reilly, 2003).

There are important for organizational survival and growth. Chatman and Barsade (1995) suggest firm success, related to strategic capabilities, is a key factor to the success of the organization, because the organization can be used as a competitive weapon for it to gain success in a challenging and rapidly-changing market. Based on the relevant literature, firm success will have a positive influence on corporate sustainability. Therefore, the hypothesis is posited as follows:

Hypothesis 10: Firm success has a positive influence on corporate sustainability.

Corporate sustainability

Many businesses make the effort to keep the key objective to achieve the long-term highest profit, superior performance, cost reduction, and long-term competition. Sustaining superior performance originate from using a proper strategy of organization. (Venkatraman and Ramanujam, 1986). Hart and Milstein (2003) define corporate sustainability as corporate capabilities to generate "sustainable development delivering simultaneously economic, social, and environmental benefits, the so-called triple bottom line" (p. 56). Corporate sustainability that originates from the developing and supporting corporate capabilities is a significant tool to gain or maintain a long-term competition (Johannessena and Olsen, 2003). Enhancing an organization's ability to responds customers, shareholders, and employees, demands of the organization significant methods to create a sustainable organization (Dyllick and Hockerts, 2002).

The prime factor that helps to create a sustainable business originates from enhancing corporate reputation and market presence, and adopting good business practices, which manage sustainability to improve processes, pursue growth, and add value to an organization (Wong and Avery, 2009). Most organizations hope to become sustainable. Measuring the strategic success of the organization is one which may be considered by making business more sustainable (Slater, Hult, and Olson, 2010). In this



research, corporate sustainability is defined as the long-term performance of firms that are increasing continuously and maintain profitability in both profit and non-profit success (Dyllick and Hockerts, 2002; Szekely and Knirsch, 2005).

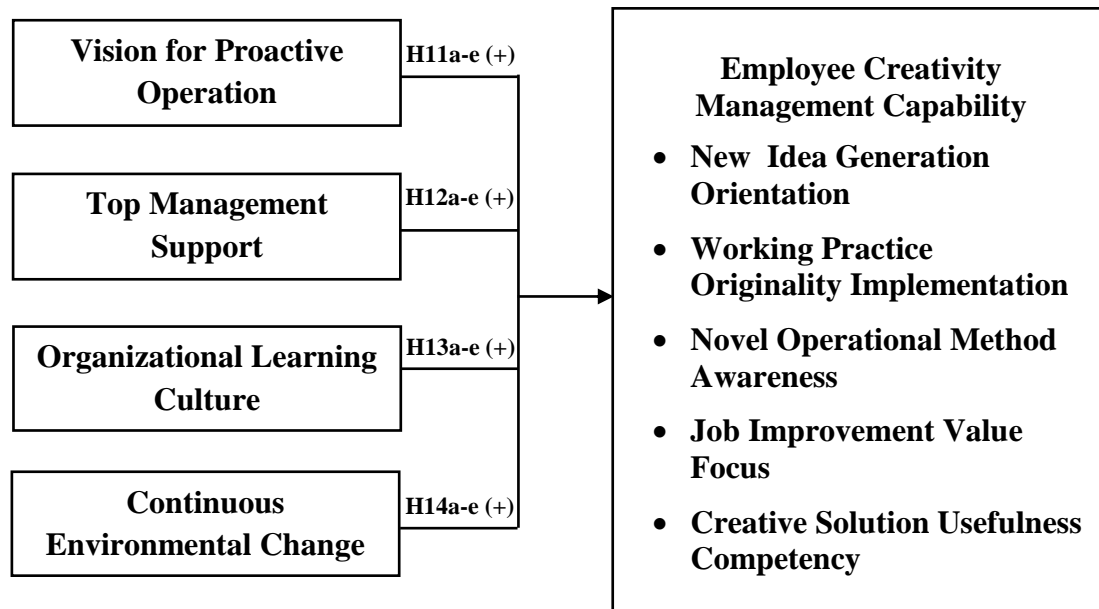
Corporate sustainability is associated with long-term profits, responding to customer need, corporate reputation, creating shareholder value, and the quality of products and services, which are ways to make a business more sustainable (Szekely and Knirsch, 2005). Hockerts and Wustenhagen (2010) proposed that innovation to help create corporate sustainability by incremental innovation is an increasingly important factor in supporting activities that value the environment, determining corporate social responsibility and eco-efficient construction, which can build a long-term competition. Developing of corporate sustainability is a prime tool in reducing the cost of production, risk management process, and new product development for a corporation to enjoy sustained, above-normal returns in the long-term (Branco and Rodrigues, 2006; Azapagic, 2003).

The Effects of the Antecedent Variables on Employee Creativity Management Capability

This research proposes that employee creativity management capability is gained from the influence of both endogenous and exogenous organizational determinants. It includes four antecedents of employee creativity management capability. Vision for proactive operation, top management support, and organizational learning culture are the endogenous determinants of a firm; whereas, continuous environment change is the exogenous determinant of a firm. This research tests what and how the antecedents of employee creativity management capability have a significant effect on the five dimensions of employee creativity management, including new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency as shown in Figure 5 below.



Figure 5 The Effects of the Antecedent Variables on Employee Creativity Management Capability



Vision for proactive operations

Proactivity is preparing for the environment by initiative and change that are a reaction to the requirements of surrounding circumstances (Bateman and Crant, 1999). Kirkpatrick, Wofford, and Baum (2002) argue that vision is defined as foresight to achieve the goal and objective of an organization in the future. Rauch et al. (2009) showed that proactivity is the perspective of seeking opportunity and initiative for looking forward, which respond to customer demand in the future by offering new products and services.

Proactive vision is managing the complex and high dynamic that supports learning constantly in adapting to a rapidly-changing environment in which there are increasing market opportunities (Hughes and Morgan, 2007). Proactive operations is broadly perceived as the understanding, application, and continuous improvement in response to finding strategy, infrastructure, and technology, which are generating a long-term commitment to professionalism and optimized operations performance for an organization (Golonka, 2015). In this research, vision for proactive operations refers to the direction and goals of the organization that are careful to cope with change in the future that is associated with the objective of the organization by analyzed opportunity



and the threat of concept change which improves the current situation and develops efficiency (Elenkov, Judge, and Wright, 2005; Montani, Odoardi, and Battistelli, 2014; Moore, Konrad, and Hunt, 2010).

Vision for proactive operations is positively associated with innovation through creativity which is important to new idea generation and creative solutions with new ways to solve organizational problems (Haeckel, 2004). Proactive vision is related to the implementation of the working practice and behavior of employee to generate innovation which, is born of learning goals for the organization, and an environment conducive to creativity (Montani, Odoardi, and Battistelli, 2014). Vision for proactive operations is important to support and promote the use of working practice in the workplace. It also enhances the role of the executive management of the organization that helped facilitate the operations method (Moore, Konrad, and Hunt, 2010). The role of vision for proactive operations that relies upon the important mechanism for the direction, operations, and performance of organizations is regarded as the driving force that affects appropriate job improvement to achieve organizational goals in order to adapt to change in a business environment (Rondinelli, 2004). Based on the relevant literature, vision for proactive operation has a positive influence on new idea generation orientation, working practice originality implementation, novel operational method awareness, job implement value focus, and creative solution usefulness competency. Therefore, the hypotheses are posited as follows:

Hypothesis 11a: Vision for proactive operations has a positive influence on new idea generation orientation.

Hypothesis 11b: Vision for proactive operations has a positive influence on working practice originality implementation.

Hypothesis 11c: Vision for proactive operations has a positive influence on novel operational method awareness.

Hypothesis 11d: Vision for proactive operations has a positive influence on job improvement value focus.

Hypothesis 11e: Vision for proactive operations has a positive influence on creative solution usefulness competency.



Top management support

Top management support has a key executive role in boosting employee performance that is important in determining the use of an enterprise resource planning system for responding to complex environmental challenges (Elbanna, 2013).

Krumwiede, Suessmair, and MacDonald (2007) showed that top management support is defined as providing guidelines for executives that emphasize, promote, and dedicate to helping its members to gain confidence in the ability of executives to solve problems, make decisions and perform tasks, and thus lead to achieve more in the organization. Empirical research has found that top management support is the driving mechanism which provides change in an organization to make sure that the working practices has a congruent relationship between skills and the ability of the organization (Santhosh and Baral, 2015).

Top management support is the essential attribute for promoting the new idea generation that originates from the executives dedicated to helping employee in timely way can lead to better new idea generation in an organization (Elbanna, 2013). The role of top management in supporting for employees can bring benefit by communicating the objectives and the working practice for employees, which is using its authority to overcome various obstacles that can promote the competence and potential of a firm to achieve a good operation method and encourage usage for job improvement (Ifinedo, 2008). Therefore, top management support in this research is defined as the emphasis of executives in implementation of time, cost and resources to operate activities within the organization to achieve its objectives (Al Shaar et al., 2015; Elbanna, 2013; Khan, Lederer, and Mirchandani, 2013).

Top management support is the prime factor which enhances an organization's ability to create both product innovation and process innovation, and is also a significant tool that affects the organizational structure and information technology (Al Shaar et. al., 2015). The support of top management is essential to performance, which demonstrates a management predilection for planning over improvisation, and adaptation in response to searching creative solutions to firm problems (Khan, Lederer, and Mirchandani, 2013). Based on the relevant literature, top management support has a positive influence on new idea generation orientation, working practice originality implementation, novel operational method awareness, job implement value focus, and



creative solution usefulness competency. Therefore, the hypotheses are posited as follows:

Hypothesis 12a: Top management support has a positive influence on new idea generation orientation.

Hypothesis 12b: Top management support has a positive influence on working practice originality implementation.

Hypothesis 12c: Top management support has a positive influence on novel operational method awareness.

Hypothesis 12d: Top management support has a positive influence on job improvement value focus.

Hypothesis 12e: Top management support has a positive influence on creative solution usefulness competency.

Organizational learning culture

Organizational learning culture is one that promotes openness to new ideas, innovation capacity, and organizational learning that happens in organizations. These ideas contribute to the development of new knowledge and create a competitive advantage. The generation of learning culture within an organization reflects the relationships among culture, capacity and performance, which are associated with organizational learning culture (Kandemir and Hult, 2005). A learning culture is described in terms of organizational climate which is highly regarded as the mechanism in creating learning environments that response to opportunities and challenging situations for renewal, change, and adaptation in a rapidly-changing environment. The role of learning culture within an organization identifies the prime role of communication and collaboration, and also can be used to collect data and information which is the crucial driving force of creative solutions to achieve a novel operational efficiency (Daft, 2007). Organizational learning culture is defined as a set of values or norms related to the work of the organization. These elements consist of seeking, interpreting and understanding change.

Creating a learning culture has a significant, positive relationship with technical and administrative innovation, which originates from creativity within



organizations (Škerlavaj, Song, and Lee, 2010). An organizational learning culture affects increased performance which is the outcome of an organization. While dynamic capability originates from organizational learning, it enables an organization to remain competitive in a rapidly-changing marketplace. Organizational learning culture is related to a firm's dynamic capabilities are driven by depending upon working practice originality (Hung et al., 2010). The benefits of implementing learning culture is a core requirement for the modification of employees' behaviors; is a mechanism for acquisition, transfer, and generation of knowledge that provide an implementation of effective knowledge; and is regarded as the foremost factor of new idea generation in business competitiveness (Kandemir and Hult, 2005). Therefore, organizational learning culture in this research is defined as the generating of values, norms, and beliefs for the employees in the organization, and is encouraging behavior and the common sense of learning, obtaining continual learning, and creating new knowledge and knowledge utilization for the benefit of the organization (Hahn, Lee, and Lee, 2015; Škerlavaja, Song, and Lee, 2010; Hung et al., 2010).

Enhancing employee creativity is important to successful performance in a highly competitive business environment that responds to an organization's need through effective management and learning cultures, positively influenced by employee creativity (Hahn, Lee, and Lee, 2015). The culture of a learning organization is giving priority to improve the mechanisms and structures of creation, retention, transfer and implementation of knowledge to increase and improve the efficiency of operational methods for an organization (Edvinsson and Sullivan, 1996). Moreover, the concept of organizational learning culture is supporting knowledge-sharing of employees which can increase optimum performance. Effective learning culture brings a great advance in the value of job improvement that also helps promote individual and organizational performance (Škerlavaj, Štemberger, and Dimovski, 2007). Based on the relevant literature, organizational learning culture has a positive influence on new idea generation orientation, working practice originality implementation, novel operational method awareness, job implement value focus, and creative solution usefulness competency. Therefore, the hypotheses are posited as follows:



Hypothesis 13a: Organizational learning culture has a positive influence on new idea generation orientation.

Hypothesis 13b: Organizational learning culture has a positive influence on working practice originality implementation.

Hypothesis 13c: Organizational learning culture has a positive influence on novel operational method awareness.

Hypothesis 13d: Organizational learning culture has a positive influence on job improvement value focus.

Hypothesis 13e: Organizational learning culture has a positive influence on creative solution usefulness competency.

Continuous environmental change

The impact of social, economic, political, and technological changes are part of the external environment of an organization. Continuous environmental change brings both opportunities and threats for an organization. Many organizations assess that their environmental change is a prime tool in competition. Environmental change is a major influence on the performance of the organization, affecting the operation methods of the organization, which increases or decreases competitiveness (Lissack and Gunz, 2005).

Environments are changing rapidly; as a result, an organization enhances its action for adaptation in the context of environmental stresses. The effectiveness of the ability of an organization to adapt working practice is the basis of good performance for building a competitive advantage (Sirmon, Hitt, and Ireland, 2007). The environmental volatility of competition has resulted in many organizations needing to adapt to changes due to the increase of pressure, such as in a short product life cycle, changing consumer demands, or manufacturing complexity. These are the factors critical to the adaptation of the organization that can promote creative solutions in response to problems. (Hamood, Omar, and Sulaiman, 2011). In this research, continuous environmental change is defined as the ongoing increase of differences, diversity, and uncertainty in the external environment of the organization. It is both short and long-term which cannot be predicted (Giedraitis, 2014; Lissack and Gunz, 2005; Luo, 2001; Zhou, Yim and Tse, 2005).



The concept of globalization is related to the process of the aggravation of economy, politics, society and culture, to guide job improvement of an organization in responding to continuous environmental change (Hjalager, 2007). The economy, technology, society, and politics are external factors of an environment that affect the adaptive operation; as a result, an organization must realize the importance of new ideas generation to finding operational methods which are the foremost factors in response to a rapidly-changing organizational environment (Lissack and Gunz, 2005). Based on the relevant literature, continuous environmental change has a positive influence on new ideas generation orientation, working practice originality implementation, novel operational method awareness, job implement value focus, and creative solution usefulness competency. Therefore, the hypotheses are posited as follows:

Hypothesis 14a: Continuous environmental change has a positive influence on new ideas generation orientation.

Hypothesis 14b: Continuous environmental change has a positive influence on working practice originality implementation.

Hypothesis 14c: Continuous environmental change has a positive influence on novel operational method awareness.

Hypothesis 14d: Continuous environmental change has a positive influence on job improvement value focus.

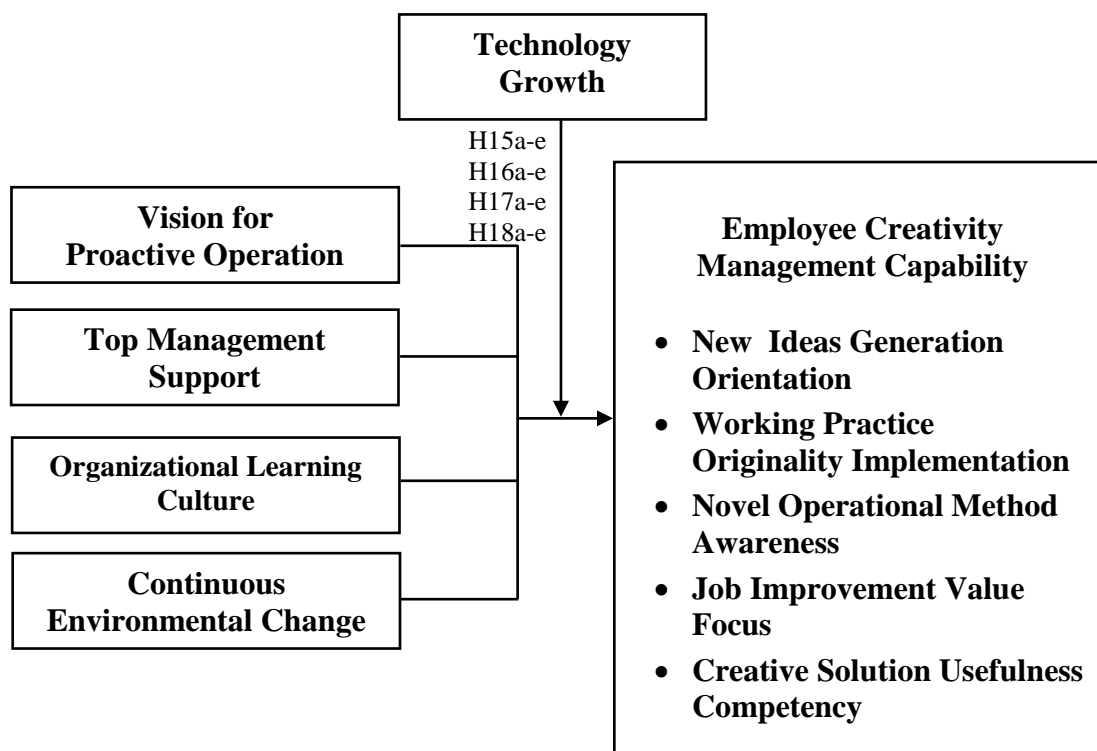
Hypothesis 14e: Continuous environmental change has a positive influence on creative solution usefulness competency

The Moderating Effects of Technology Growth on the Relationships between Antecedents and Employee Creativity Management Capability

This part describes the influences of technology growth as a moderator, as it strengthens the relationships between employee creativity management capability and the consequences which are shown in Figure 6.



Figure 6 The Moderating Effects of Technology Growth on the Relationships between Antecedents and Employee Creativity Management Capability



Technology Growth

Technology growth refers to the rapid advancement of technology. Advances in technology growth lead to an organization's rapid expansion. Technology allows an organization the opportunity to increase performance by using technology which acts as tool of economic growth (Glazer and Weiss, 1993). The growth of technology allows organizations to strengthen their ability of technology, which is the engine for enhancing its competitiveness, the ability to develop new products and services, and improve existing products and services for their successful operation (Prasnikar et al., 2008). The growth of technology is important to facilitate the expansion of the business through its networking, hardware, software, and internet, that are powerful tools; and on its influence in the development of products, and responding to market demand (Rygielski et al., 2002)



The growth of technology enhances the development of processes and practices in an organization, which are expanding and facilitate work. These technology factors make for a rapid response to market demands under an economy with rapid growth (Allred and Swan, 2004). Technology is critical to the development of the organization. The advancement of technology changes the enhancement of the performance of the organization, which are benefits to a great advance in business (Kraaijenbrink, Wijnhoven, and Groen, 2007). Sheth and Parvatiyar (1995) demonstrate that technological growth is technological progress, which is a key factor supporting the implementation of the organization in response to the global market. In this research, technology growth is defined as the rapid advances of technology which make utilization and empowerment to better work and enables organizations to respond quickly (Allred and Swan, 2004; Cragg and Mills, 2011; Konthong and Ussahawanitchakit, 2010).

Growing technology creates opportunities and reduces barriers to work for the organization by technology management which is powerful and dynamic, and which enhances competitiveness for organizations that face the challenge (Rudez and Mihalic, 2007). The organization requires advanced technology to generate creativity in a learning environment. These affect business processes and culture development. The organization also uses technology to enhance its ability to conduct high-quality performance (Allred and Swan, 2004). Organizations use both hardware and software, which are the technological resources, to support learning activities for storing, searching, and retrieving knowledge. These give organizations the ability to manage knowledge in order to increase company competitiveness (Jitnom and Ussahawanitchakit, 2010). The application of technology in work practices help simplify production processes and build the capacity of a staff by applying technology in practical applications which is a key determinant of an organization's success (Bresnahan, Brynolfsson, and Hitt, 2002).

Therefore, a higher level of technological growth will positively moderate the relationships among the antecedent variables consisting of vision for proactive operation, top management support, organizational learning culture, and continuous environmental change on five dimensions of employee creativity management capability that consist of new ideas generation orientation, working practice originality



implementation, novel operational method awareness, job implement value focus, and creative solution usefulness. Based on the above literature, the hypotheses are proposed as follows:

Hypothesis 15: The relationships between vision for proactive operation and (a) new ideas generation orientation, (b) working practice originality implementation, (c) novel operational method awareness, (d) job improvement value focus, and (e) creative solution usefulness competency will be positively moderated by technology growth.

Hypothesis 16: The relationships between top management support and (a) new ideas generation orientation, (b) working practice originality implementation, (c) novel operational method awareness, (d) job improvement value focus, and (e) creative solution usefulness competency will be positively moderated by technology growth.

Hypothesis 17: The relationships between organizational learning culture and (a) new ideas generation orientation, (b) working practice originality implementation, (c) novel operational method awareness, (d) job improvement value focus, and (e) creative solution usefulness competency will be positively moderated by technology growth.

Hypothesis 18: The relationships between continuous environmental change and (a) new ideas generation orientation, (b) working practice originality implementation, (c) novel operational method awareness, (d) job improvement value focus, and (e) creative solution usefulness competency will be positively moderated by technology growth.

Summary

In conclusion, employee creativity management capability is the main concern of this research that is focused on its antecedents and its consequences. In this research, employee creativity management capability has five dimensions, composed of new ideas generation orientation, working practice originality, novel operational method awareness, job improvement value focus, and creative solution usefulness competency.



Furthermore, this research investigates the impact of organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success on corporate sustainability. In addition, this research also investigates the influence of four antecedents, including vision for proactive operation, top management support, organizational learning culture, and continuous environmental change on each dimension of employee creativity management capability. In addition, one variable as the moderator is technology growth which stimulates the relationships among the antecedents of employee creativity management capability (vision for proactive operation, top management support, organizational learning culture, and continuous environmental change) and five dimensions of employee creativity management capability; whereas, technology growth stimulates the relationships among five dimensions of employee creativity management capability.

This chapter has detailed the literature review; the two theories, including the dynamic capability theory, and organizational learning theory; the conceptual framework; and the proposed set of eighteen testable hypotheses. Employee creativity management capability is the main concern of this research that is focused on its antecedents and consequences. Moreover, technology growth is the moderator of the relationships between the antecedents and employee creativity management capability. Table 3 presents the summaries of all hypotheses relationships as shown below.

The next chapter focuses on describing the research method, including the population selection and collection procedure, the variable measurements of each construct, the instrumental verification, the statistics and equations to test the hypotheses, and a summary of the variable definitions and operations for research.



Table 3 Summary of Hypothesized Relationships

Hypotheses	Description of Hypothesized Relationships
H1a	New ideas generation orientation has a positive influence on organizational innovation.
H1b	New ideas generation orientation has a positive influence on organizational productivity.
H1c	New ideas generation orientation has a positive influence on organizational excellence.
H1d	New ideas generation orientation has a positive influence on business competitiveness.
H1e	New ideas generation orientation has a positive influence on firm success.
H2a	Working practice originality implementation has a positive influence on organizational innovation.
H2b	Working practice originality implementation has a positive influence on organizational productivity.
H2c	Working practice originality implementation has a positive influence on organizational excellence.
H2d	Working practice originality implementation has a positive influence on business competitiveness.
H2e	Working practice originality implementation has a positive influence on firm success.
H3a	Novel operational method awareness has a positive influence on organizational innovation.
H3b	Novel operational method awareness has a positive influence on organizational productivity.
H3c	Novel operational method awareness has a positive influence on organizational excellence.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H3d	Novel operational method awareness has a positive influence on business competitiveness.
H3e	Novel operational method awareness has a positive influence on firm success.
H4a	Job improvement value focus has a positive influence on organizational innovation.
H4b	Job improvement value focus has a positive influence on organizational productivity.
H4c	Job improvement value focus has a positive influence on organizational excellence.
H4d	Job improvement value focus has a positive influence on business competitiveness.
H4e	Job improvement value focus has a positive influence on firm success.
H5a	Creative solution usefulness competency has a positive influence on organizational innovation.
H5b	Creative solution usefulness competency has a positive influence on organizational productivity.
H5c	Creative solution usefulness competency has a positive influence on organizational excellence.
H5d	Creative solution usefulness competency has a positive influence on business competitiveness.
H5e	Creative solution usefulness competency has a positive influence on firm success.
H6a	Organizational innovation has a positive influence on organizational productivity.
H6b	Organizational innovation has a positive influence on organizational excellence.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H6c	Organizational innovation has a positive influence on business competitiveness.
H6d	Organizational innovation has a positive influence on firm success.
H7a	Organizational productivity has a positive influence on business competitiveness.
H7b	Organizational productivity has a positive influence on firm success.
H8a	Organizational excellence has a positive influence on business competitiveness.
H8b	Organizational excellence has a positive influence on firm success.
H9a	Business competitiveness has a positive influence on firm success.
H9b	Business competitiveness has a positive influence on corporate sustainability.
H10	Firm success has a positive influence on corporate sustainability.
H11a	Vision for proactive operations has a positive influence on new idea generation orientation.
H11b	Vision for proactive operations has a positive influence on working practice originality implementation.
H11c	Vision for proactive operations has a positive influence on novel operational method awareness.
H11d	Vision for proactive operations has a positive influence on job implement value focus.
H11e	Vision for proactive operations has a positive influence on creative solution usefulness competency.
H12a	Top management support has a positive influence on new ideas generation orientation.
H12b	Top management support has a positive influence on working practice originality implementation.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H12c	Top management support has a positive influence on novel operational method awareness.
H12d	Top management support has a positive influence on job implement value focus.
H12e	Top management support has a positive influence on creative solution usefulness competency.
H13a	Organizational learning culture has a positive influence on new ideas generation orientation.
H13b	Organizational learning culture has a positive influence on working practice originality implementation.
H13c	Organizational learning culture has a positive influence on novel operational method awareness.
H13d	Organizational learning culture has a positive influence on job implement value focus.
H13e	Organizational learning culture has a positive influence on creative solution usefulness competency.
H14a	Continuous environmental change has a positive influence on new ideas generation orientation.
H14b	Continuous environmental change has a positive influence on working practice originality implementation.
H14c	Continuous environmental change has a positive influence on novel operational method awareness.
H14d	Continuous environmental change has a positive influence on job implement value focus.
H14e	Continuous environmental change has a positive influence on creative solution usefulness competency.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H15a	The relationships between vision for proactive operations and new ideas generation orientation will be positively moderated by technology growth.
H15b	The relationships between vision for proactive operations and working practice originality implementation will be positively moderated by technology growth.
H15c	The relationships between vision for proactive operations and novel operational method awareness will be positively moderated by technology growth.
H15d	The relationships between vision for proactive operations and job improvement value focus will be positively moderated by technology growth.
H15e	The relationships between vision for proactive operations and creative solution usefulness competency will be positively moderated by technology growth.
H16a	The relationships between top management support and new ideas generation orientation will be positively moderated by technology growth.
H16b	The relationships between top management supports working practice originality implementation will be positively moderated by technology growth.
H16c	The relationships between top management support and novel operational method awareness will be positively moderated by technology growth.
H16d	The relationships between top management support and job improvement value focus will be positively moderated by technology growth.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H16e	The relationships between top management support and creative solution usefulness competency will be positively moderated by technology growth.
H17a	The relationships between organizational learning culture and new ideas generation orientation will be positively moderated by technology growth.
H17b	The relationships between organizational learning culture and working practice originality implementation will be positively moderated by technology growth.
H17c	The relationships between organizational learning culture and novel operational method awareness will be positively moderated by technology growth.
H17d	The relationships between organizational learning culture and job improvement value focus will be positively moderated by technology growth.
H17e	The relationships between organizational learning culture and creative solution usefulness competency will be positively moderated by technology growth.
H18a	The relationships between continuous environmental change and new ideas generation orientation will be positively moderated by technology growth.
H18b	The relationships between continuous environmental change and working practice originality implementation will be positively moderated by technology growth.
H18c	The relationships between continuous environmental change and novel operational method awareness will be positively moderated by technology growth.



Table 3 Summary of Hypothesized Relationships (continued)

Hypotheses	Description of Hypothesized Relationships
H18d	The relationships between continuous environmental change and job improvement value focus will be positively moderated by technology growth.
H18e	The relationships between continuous environmental change and creative solution usefulness competency will be positively moderated by technology growth.



CHAPTER III

RESEARCH METHODS

The previous chapter describes the literature review in the perspective of employee creativity management capability from the previous studies and other variables in the conceptual framework, including the theoretical foundation, literature reviews, conceptual framework and the hypotheses development. In this chapter, the research methods provide an understanding of the testable hypotheses, which comprises four parts as follows. Firstly, the sample selection and data collection procedures, which include the population and sample, the data collection, and the test of non-response bias, are detailed. Secondly, the variable measurements are developed. Thirdly, the method part comprises a test of validity and reliability, analytical statistics and related equations of regression analysis. Finally, the table provides the summary of definitions, and the operational variables of constructs are included.

Sample Selection and Data Collection Procedure

Population and Sample Selection

This research is to investigate the antecedents and the consequences of employee creativity management capability of furniture exporting businesses. The context of furniture exporting businesses in Thailand represents potential industries and development opportunities (Colak, Cetin, and Engin, 2015; Guimarães et al., 2015). Furniture exporting businesses in Thailand were chosen on the basis of this research for three reasons.

Firstly, the furniture exporting business is one of the creative industries that provide innovative socioeconomic potential (Reis, 2008; Shuaib and Enoch, 2012). Exporting furniture businesses are confronted with increasing competition from domestic markets and international markets, and respond quickly to dynamic changes in the global economy (Department of International Trade Promotion, 2016). Moreover, the survey of the Kasikorn Research Center (2016) demonstrates that the furniture exporting business in Thailand are a more likely growth, due to increasing adaptability and responsiveness of firms which are an effort to maintain a market share.



Secondly, the furniture exporting businesses trends are expected to have an increased rate of growth in every year, that originates from the needs of the US market, ASEAN market, and Chinas and India markets likely to expand which are in urbanization (Kasikorn Research Center, 2016). Secondly, the furniture exporting businesses trends are expected to increase in growth rate every year, since the needs of the US market, ASEAN market, and Chinas and India is likely to expand urbanization (Kasikorn Research Center, 2016). The current condition of the furniture exporting businesses in Thailand under the ASEAN Economic Community and the ASEAN Free Trade Area (AFTA) have a competitive advantage to expand investment because of using preferential taxes, raw materials quality control, and better design (The Federation of Thai Industries, 2015).

Finally, the sample of this research is the furniture exporting business due to it is regarded as an important industry to promote economic growth of the country. This demonstrates the benefits of resource utilization in production which reflects the country's economic development. A growing number of exports affect national income, which has meaning for the economic development of a country (Gauthier, G  linas, and Marcotte, 2012; Ratnasingam et al., 2012; Sonmez and Arslan, 2007).

The sample of this research was derived from the online database of the Department of International Trade Promotion Ministry of Commerce in Thailand at [http:// www.dipt.go.th](http://www.dipt.go.th), accessed on March 15, 2016. It demonstrated the lists of member states of the furniture exporting businesses in Thailand and contact details. The total number of furniture exporting businesses obtained from this database is 740 firms. According to Yamane (1973) provides a simplified formula to calculate sample sizes for a population with a 95% confidence level and a 5% sample error. Therefore, the required sample size in this research is determined by the formula as the following:

$$n = N / [1 + Ne^2]$$

n = sample size or respondents for this research

N = a population size

e = the level of precision (95% confidence level or 5% precision level)

Following the above formula, the sample size of this research is calculated as follows:



$$n = 740 / [1 + 740 (0.05)^2]$$

$$n = 259.65$$

$$\text{Thus, sample size} = 260$$

Therefore, the sample size was 260 firms. The response rate calculation procedures was performed using Aaker, Kumar, and Day, (2001) to calculate the sample size to send questionnaires, which will accepted at 20% and without an appropriate follow-up procedure, are considered a sufficient sample size. Therefore, calculating an acceptable response rate is proposed as follows:

$$\text{The required respondents as a 20\% response rate} = 260$$

$$\text{Therefore, the sample size as} = [260 \times 100] / 20 = 1,300$$

This research was required to send a questionnaire mailing survey, totaling 1,300 firms. However, the database was derived from Department of International Trade Promotion Ministry of Commerce in Thailand provided a total of 740 firms. Therefore, the source of the data in this research utilized 740 furniture exporting businesses in Thailand which is the sample population. The questionnaires were directly distributed to managing directors or managing partners of each of furniture exporting businesses in Thailand. With regard to the questionnaires mailed to respondents, 68 surveys were undeliverable because some of these firms had moved to unknown locations and some were no longer in business. The undeliverable surveys were deducted from the original 740 surveys. As a result, the valid mailing was 672 surveys and 144 of them were received. Hence, there were only 139 surveys which were usable for further analysis. The effective response rate was approximately 20.68 %. The acceptance criterion recommends that the minimum sample size should exceed five observations for each variable for regression analysis (Hair et al., 2010). Therefore, 139 firms are an acceptable sample size for employing multiple regression analysis. The details of the questionnaire mailing process are illustrated in Table 4.



Table 4 The Details of Questionnaire Mailing

Details	Numbers
Amount of questionnaire mailed	740
Number of undelivered questionnaires	68
Number of successful questionnaire mailed	672
Received questionnaires	144
Unusable questionnaires	5
Usable questionnaires	139
Response Rate $(139/672) \times 100$	20.68%

Data Collection

This research used a questionnaire as the research instrument and tool for data collection, which is one of the most frequently used. The mail questionnaire survey is the appropriate tool and a widely-used method because it is a cost-effective method and one spends less time for a large-scale data collection (Neuman, 2006). The 740 questionnaires were delivered directly to the managing director or managing partner of each firm of furniture exporting businesses in Thailand. The completed questionnaires were returned directly to the researcher with a pre-paid reply envelope, which were assured of the confidentiality and for the attention of the respondents.

The questionnaires were divided into seven sections. The first part of the questionnaire illustrated the personal information of respondents, such as gender, age, marital status, educational level, working experience, monthly salary, and current position. The second part of the questionnaire illustrated the businesses information that is relevant to the furniture exporting businesses in Thailand, such as business owner type, location of business, operating capital, number of full time employees, period of time in business operation, average annual income, and experience in exporting, and major market abroad. The third part of the questionnaire measures each construct in the conceptual model. The third part is about the measurement of employee creativity management capability that consists of new idea generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. The fourth part of the



questionnaire is the consequences and evaluation of employee creativity management capability that include organizational productivity, organizational innovation, organizational excellence, business competitiveness, firm success, and corporate sustainability. The fifth part of the questionnaire is questions about the perceptions of internal firm factors of employee creativity management capability consisting of vision for proactive operation, top management support, and organizational learning culture. The sixth part of the questionnaire is questions about the perceptions of external firm factors of employee creativity management capability consisting of continuous environmental change and technology growth. The last part of the questionnaire is an open-ended question for the informant's recommendations and suggestions of furniture exporting businesses in Thailand.

Test of Non-Response Bias

To detect possible response bias problems between respondents and nonrespondents, a t-test comparison of the demographics between early and late respondents was conducted, corresponding with the test for non-response bias by Armstrong and Overton (1977). Therefore, responses from the first group mailing were used to compare with those received from the second group mailing on the basis of demographic information including operational years, number of employees, current operation capital and average annual income of the business. To test non-response bias by a t-test, the results should show no significant differences between early and lately responses (Lewis, Hardy, and Snaith, 2013). In this research, all 139 received questionnaires were divided into two equal groups: the first 69 responses were treated as the early group of respondents (the first group) and the other 70 responses were treated as the late group of respondents (the second group). Then, 69 responses from the early group were employed to test the differences with the 70 responses received from the late group by the t-test statistics in various firm characteristics which consisted of business owner type, period of time in business operation, average annual revenues, experience in exporting, and major markets abroad.

The results of the t-test statistics reveal that there are no statistically significant differences between the two groups in the overall variables including, business owner type ($t = 1.022, p > 0.05$), period of time in business operation ($t = -.863, p > 0.05$), average



annual incomes ($t = -1.493$, $p > 0.05$), experience in exporting ($t = -.462$, $p > 0.05$), and major market abroad ($t = .875$, $p > 0.05$). These results demonstrate that there was no statistically significant difference between groups, at a 95% confidence level. Therefore, a non-response bias does not pose a significant problem in this research (Armstrong and Overton, 1977). The results of the non-response bias test are shown in Appendix B.

Measurements

The developmental procedures of measurements are involving the multiple items adapted for measuring each variable in the conceptual model, because the abstraction of the construct cannot be observed and measured directly. The attribute measure of the construct should use multiple items (Churchill and Iacobucci, 2002). These variables are transformed from the definitions and are adapted from the related literature as shown in Table 4 which demonstrates the definition of each variable, the operational variables, and scale source. The measurement for each of the variables in the conceptual framework, and all variables obtained from the survey are measured through a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Therefore, the variable measurements of the dependent variable, independent variables, antecedent variables, mediating variables, moderating variables, and control variables of this research are elaborated as follows.

Dependent Variable

Corporate sustainability. Corporate sustainability is measured by the long-term performance of firms that are increasing continuously and maintaining profitability in both profit and non-profit success (Dyllick and Hockerts, 2002; Szekely and Knirsch, 2005). The measurement scale is adapted from Kuckertz and Wagner (2010) consisting of a four-item scale.

Independent Variables

This research consists of 14 independent variables divided into three groups consisting of core constructs, consequences, and antecedents. The first group is the core construct of this research, employee creativity management capability, which comprises

five dimensions: new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. The measure of each construct depends on its definition as detailed below.

New Ideas Generation Orientation. New ideas generation orientation is evaluated by the organization's ability that promotes and encourages employees, by focusing on creating, developing, and communicating ideas effectively, and can transform from abstract ideation into something more concrete which brings the important benefits to the organization (Gallupe et al., 1992; Garfield et al., 2001; Grandi and Grimaldi, 2005; Guilford, 1967). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Working Practice Originality Implementation. Working practice originality implementation is evaluated by the organization's ability to understand and utilize patterns of work activity by supporting and developing the skills, knowledge, abilities and behavior necessary to perform the work, which is an essential aspect to building a successful business (Gatewood and Riordan, 1997; Johnson, 1995; Zacarias and Martins, 2012). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Novel Operational Method Awareness. Novel operational method awareness is evaluated by the organization's ability to realize the potential of new thinking, new methods and new techniques to increase operational efficiency and effectiveness, which are critical for organizations to achieve goals and gain competitive advantage over competitors (Hammer, 2004; Oke and Kach, 2012; Wu, Melnyk, and Flynn, 2010). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Job Improvement Value Focus. Job improvement value focus is evaluated by the organization's ability to inspire employees by concentrating worth adding to daily tasks and taking more responsibility to create meaningful, challenging, and interesting tasks which is important and helps organizations become successful (Cook and Salvendy, 1999; Rey-Martí, Ribeiro-Soriano, and Sánchez-García, 2016). The measurement scale of this construct is developed as a new scale from the related literature, and consists of a four-item scale.



Creative Solution Usefulness Competency. Creative solution usefulness competency is evaluated by the organization's ability that provides support to employees to find a way to be more diverse, pursue new possibilities, create new alternatives, and think outside the box for the problem-solving of organizations in order to help achieve organizational business goals and objectives (Althuizen and Wierenga, 2014; Caughron and Mumford, 2008; Puccio, 1999; Ray and Romano, 2013). The measurement scale of this construct is developed as a new scale from the related literature, and consists of a four-item scale.

Consequential Variables

The second group is the consequences of employee creativity management capability, namely, organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success. The measure of each dimension conforms to its definition to be discussed as follows.

Organizational Innovation. Organizational innovation is measured by the innovative outcomes of firms which are developed by the new work process, new methods, new products, new services, or new technologies in response to customer demand (Damanpour, 1996 ; Seaden et al., 2003). The measurement scale is adapted from Kittikunchotiwut, Ussahawanitchakit, and Pratoom (2013) and consists of a four-item scale.

Organizational Productivity. Organizational productivity is measured by the efficient use of resources to attain successful achievement of goals and the appropriate use of firm resources, which is indicated by the output value that arises from the use of input-efficiency (Kumar and Gulati, 2010; Ostroff and Schmitt, 1993). The measurement scale is adapted from Prempre, Ussahawanitchakit, and Boonlua (2013) and consists of a four-item scale.

Organizational Excellence. Organizational excellence is measured by working systems that are outstanding and modern, to help improve process efficiency, and using resources efficiently in response to customer need and superior value (Amir Bolboli and Reiche, 2013; Jankalová, 2012; Metaxas and Koulouriotis, 2014; Ritchie and Dale, 2000). The measurement scale of this construct is developed as a new scale from the related literature and consists of a four-item scale.



Business Competitiveness. Business competitiveness is measured by the potential of organizations to manage and operate business better than a competitor, which is the ability to provide good customer service, generate innovation, and maintain quality (Anca, 2012; Gao et al., 2013; Liana-Eugenia and Nicoleta-Georgeta, 2014; Testa, Iraldo, and Frey, 2011). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Firm Success. Firm success is evaluated by the objective achievement of the business to have income and profits according to the goals, the growth rate of market share, the financial position and performance that is higher (Cadez and Guilding, 2008; Maltz, Shenhar, and Reilly, 2003; Neely, Adams, and Kennerley, 2002). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Antecedent Variables

The third group is the antecedents of employee creativity management capability which include four variables - vision for proactive operation, top management support, organizational learning culture, and continuous environmental change. All antecedents depend on their definitions. The measure of each factor is discussed as follows.

Vision for Proactive Operation. Vision for proactive operation is measured by the direction and goals of the organization that are careful to cope with change in the future that is associated with the objective of the organization by analyzed opportunity and the threat of concept change which improves the current situation and develops efficiency (Elenkov, Judge, and Wright, 2005; Montani, Odoardi, and Battistelli, 2014; Moore, Konrad, and Hunt, 2010). The measurement scale of this construct is developed as a new scale from the related literature and consists of a four-item scale.

Top Management Support. Top management support is measured by the emphasis of executives in the implementation of time, cost and resources to operate activities within the organization to achieve its objectives (Al Shaar et al., 2015; Elbanna, 2013; Khan, Lederer, and Mirchandani, 2013). The measurement scale of this construct is developed as a new scale from the related literature and consists of a four-item scale.



Organizational Learning Culture. Organizational learning culture is measured by generating the values, norms, and beliefs for the employees in the organization, encouraging behavior and the common sense of learning, obtaining continual learning, and creating new knowledge and knowledge utilization for the benefit of the organization (Hahn, Lee, and Lee, 2015; Hung et al., 2010; Škerlavaja, Song, and Lee, 2010). The measurement scale of this construct is developed as a new scale from the related literature, and consists of a four-item scale.

Continuous Environment Change. Continuous environment change is evaluated by the ongoing increase of differences, diversity, and uncertainty in the external environment of the organization. It is both short and long-term which cannot be predicted (Giedraitis and Algirdas, 2014; Lissack and Gunz, 2005; Luo, 2001; Zhou, Yim, and Tse, 2005). The measurement scale of this construct is developed as a new scale from the related literature, consisting of a four-item scale.

Moderating Variables

Technology Growth. Technology growth is measured by the rapid advances of technology which make utilization and empowerment to work better and enables organizations to respond quickly (Allred and Swan, 2004; Cragg and Mills, 2011; Konthong and Ussahawanitchakit, 2010). The measurement scale is adapted from Konthong and Ussahawanitchakit (2010), consisting of a four-item scale.

Control Variables

This research recognizes the importance of firm age and firm size that may affect the hypothesized relationships, and both variables are determined as control variables.

Firm Age. Firm age is measured by the number of years that the firm has operated in business (Brush and Chaganti, 1999 ; Mosakowski, 1993). A firm is operating in business for a long time may affect firm performance due to the ability to allocate resources and accumulated experience more effectively than the late entrants into a business market (Lau et al., 2008). Therefore, firm age may affect the employee creativity management capability in this research. In this research, firm age is a dummy variable, in which 0 means the firm has been in business less than or equal to 15 years, and 1 means the firm has been in business for more than 15 years.



Firm Size. Firm size is evaluated by the number of employees currently registered full-time in an organization (Delmotte and Sels, 2008; Majocchi, Bacchiocchi, and Mayrhofer, 2005; Zahra, Neubaum, and Larrañeta, 2007). In previous studies, evidence to support larger firms involves large-scale production for the purpose of exploiting economies of scale. These are the cost advantages that manufacturers have obtained from size, output, or scale of operation, and larger firms are more likely to adopt a firm's ability to maintain competitiveness than smaller firms (Park and Jang, 2009). Therefore, firm size may affect employee creativity management capability. In this research, firm size is a dummy variable, in which 0 means the firm has less than or equal to 150 fulltime employees and 1 means the firm has more than 150 full-time employees.

Methods

The methods illustrated the test of appropriate data collection instruments and the developing credibility constructs. The pre-test method is appropriately conducted to assure validity and reliability of the questionnaire as well as to ensure a clear and accurate understanding before using the real data collection. This research employs a pre-test as a technique for preliminary analysis to improved data collection instruments. The first 30 received surveys are selected to test the validity and reliability of the instrument. As a consequence of the small number of the population, these 30 questionnaires comprise the final data analysis.

Validity and Reliability

Validity. Validity refers to the degree of the data that is correct and accurate, which is an instrument for measuring data from the questionnaires (Hair et al., 2010). Validity refers to the degree of assessment that is actually a measure for the constructs that it is intended to measure (Peter, 1979). This research focuses on the problems of accuracy assessment which is necessary to assess the questionnaire quality as an efficient factor. This is to anticipate events that require precision (Piercy and Morgan, 1994). Three types of validity in research consist of face, content, and construct validity, which were tested.



The Face And Content Validity. Face validity is an instrument for measuring to determine the actual measure that is based on feelings, emotions and personal opinions, and is accepted by the judgments of an individual or professionals (Trochim, 1999). It is indicating the extent to what it is intended to measure, which is the contents assessment of the scale logically are sufficient to cover individual items and the concept. (Hair et al., 2010). Content validity is gained from the extent to which a measurement indicates the intended content domain of the theoretical construct (Kwok and Sharp, 1998). In this research, face and content validity are developed through a careful literature review of related literature about construct measurement in the model.

Furthermore, two professionals in academic research have been requested to review and suggest the essential recommendations for improving the quality of instrument in order to assure that all constructs are enough to cover the contents of the variables. These experts revised recommendations for some questions so as to achieve the best measurement, which is the scale of measure corresponding with the conceptual definitions.

Construct Validity. Construct validity is a set of measured items that reflect the congruence between a theoretical concept and a specific concept measuring the instrument or procedure. It is the testing of convergent and discriminant validity which are evaluated by internally consistent (Trochim, 1999). Convergent validity reflects the degree to which two measures are used to measure the same construct that it is supposed to be highly correlated. Discriminant validity reflects the degree to which different concepts of items that it is supposed to be to be lowly correlated with another item in a non-similar concept. Therefore, each item must be loaded on a single factor only. (Nosek, Greenwald, and Banaji, 2005).

Therefore, exploratory factor analysis (EFA) is utilized to examine the construct validity in this research. It is operated to explore the constructs that are newly developed and the constructs that are adapted from related literature. The use of exploratory factor analysis is appropriate for this research (Ariño, 2003). Exploratory factor analysis in this research, all factor loadings are greater than the 0.40 cut-offs indicates that statistical significance according to the rule-of-thumb (Nunnally and Bernstein, 1999).



Table 5 demonstrates the factor loading and the Cronbach's alpha coefficient of all constructs from thirty of furniture exporting businesses in Thailand in the pre-test (Perneger et al., 2015), of which the factor loadings range from 0.637 to 0.818. These values are greater than the cut-off score of 0.4, which indicate acceptable construct validity (Nunnally and Bernstein, 1994) (see Appendix C).

Table 5 Results of Validity and Reliability Testing

Constructs	Factor Loadings	Cronbach's Alpha
Corporate Sustainability (CSU)	0.725 - 0.818	0.764
New Ideas Generation Orientation (NIG)	0.693 - 0.788	0.750
Working Practice Originality Implementation (WPO)	0.673 - 0.783	0.748
Novel Operational Method Awareness (NOM)	0.725 - 0.806	0.748
Job Improvement Value Focus (JIV)	0.675 - 0.789	0.728
Creative Solution Usefulness Competency (CSC)	0.706 - 0.793	0.732
Organizational Innovation (ORI)	0.699 - 0.787	0.726
Organizational Productivity (ORP)	0.660 - 0.813	0.743
Organizational Excellence (ORE)	0.743 - 0.806	0.760
Business Competitiveness (BUC)	0.712 - 0.814	0.767
Firm Success (FSU)	0.687 - 0.795	0.734
Vision for Proactive Operations (VPO)	0.640 - 0.809	0.716
Top Management Support (TMS)	0.714 - 0.775	0.722
Organizational Learning Culture (OLC)	0.684 - 0.785	0.711
Continuous Environmental Change (CEC)	0.710 - 0.757	0.711
Technology Growth (TEG)	0.637 - 0.800	0.706



Reliability. Reliability is the degree assessment of consistency or stability of measurement. It is indicated the degree of internal consistency between multiple measurements of a variable (Hair et al., 2010). Furthermore, it is the extent to which a test measures are repeatable (Nunnally and Bernstein, 1994). The tests of the reliability of each construct, Cronbach's alpha coefficient have been utilized in this research due to it is the most common measure of internal consistency reliability (Hair et al., 2010). Therefore, Cronbach's alpha is applied to measure the reliability in this research, which should be greater than 0.70 is widely accepted (Hair et al., 2010). Table 5 illustrates the Cronbach's alpha coefficients range from 0.706 to 0.767. These values are greater than 0.70, which indicate acceptable Cronbach's alpha coefficient. (Hair et al., 2006) (see Appendix D).

Statistical Techniques

Before hypotheses testing, the primary assumptions of checking all of the raw data were checked by using the ordinary least squares method (OLS) to testing the normality, linearity, heteroscedasticity, and multicollinearity. Furthermore, this research also uses the Durbin-Watson test for testing the autocorrelation. The Durbin-Watson values are ranged from 1.622 to 2.252. The results of basic assumptions testing are demonstrated in Appendix D.

Variance Inflation Factors (VIFs) is utilized as an indicator of multicollinearity by testing the severity of multicollinearity between independent variables and Pearson's correlation. It illustrated an indication that measures how much an estimated regression coefficient's variance is increased as a result of collinearity. The cut-off of a VIF should be smaller than 10 to consider that the degree of multicollinearity between the independent variables are not problematic (Stevens, 2002; Hair, 2006). Therefore, the results of regression analysis in this research demonstrate the VIF values of each regression model are ranged from 1.098 to 2.267, which indicate acceptable the cut-off value (Hair et al., 2010).

Correlation Analysis. Correlation analysis refer to the measurement of the relationships between variables is provide the direction of a positive or a negative relationship. Pearson correlation coefficient (r) is used to measure the correlation between the variables. For the consideration value of the correlation coefficient close to 1.00 or -1.00, it indicates the stronger the linear correlation. The relationships between variables should be less than 0.8, which means that each independent variable is not a



multicollinearity problem (Hair et al., 2010). The results of an examination of the correlation matrix for employee creativity management capability and all constructs reveal that the correlations among employee creativity management capability and all constructs are in a range from 0.280 to 0.537. Therefore, the primary assumption in this research is that there are no multicollinearity problems and are illustrated in Table 6 (Chapter four).

Multiple Regression Analysis. The Ordinary Least Squares (OLS) regression analysis is appropriate to test all postulated hypotheses in a conceptual model. This research, both the independent and dependent variables are categorical variable and an interval-scaled variable. OLS regression analysis is utilized to examining the hypothesized relationships (Hair et al., 2010). Therefore, eighteen hypotheses in this research are transformed into twenty-one statistical equations. Each equation conforms to the hypothesis development, which is explained in the prior chapter. The details for each equation are presented in the following:

The investigation of the relationships among five dimensions composed of employee creativity management capability and organizational innovation is presented in Equation 1 as shown:

$$\text{Equation 1: ORI} = \alpha_1 + \beta_1\text{NIG} + \beta_2\text{WPO} + \beta_3\text{NOM} + \beta_4\text{JIV} + \beta_5\text{CSC} + \beta_6\text{FAG} + \beta_7\text{FSI} + \varepsilon_1$$

The investigation of the relationships among five dimensions composed of employee creativity management capability and organizational productivity is presented in Equation 2 as shown:

$$\text{Equation 2: ORP} = \alpha_2 + \beta_8\text{NIG} + \beta_9\text{WPO} + \beta_{10}\text{NOM} + \beta_{11}\text{JIV} + \beta_{12}\text{CSC} + \beta_{13}\text{FAG} + \beta_{14}\text{FSI} + \varepsilon_2$$



The investigation of the relationships among five dimensions composed of employee creativity management capability and organizational excellence is presented in Equation 3 as shown:

$$\text{Equation 3: ORE} = \alpha_3 + \beta_{15}\text{NIG} + \beta_{16}\text{WPO} + \beta_{17}\text{NOM} + \beta_{18}\text{JIV} + \beta_{19}\text{CSC} + \beta_{20}\text{FAG} + \beta_{21}\text{FSI} + \varepsilon_3$$

The investigation of the relationships among five dimensions composed of employee creativity management capability and business competitiveness is presented in Equation 4 as shown:

$$\text{Equation 4: BUC} = \alpha_4 + \beta_{22}\text{NIG} + \beta_{23}\text{WPO} + \beta_{24}\text{NOM} + \beta_{25}\text{JIV} + \beta_{26}\text{CSC} + \beta_{27}\text{FAG} + \beta_{28}\text{FSI} + \varepsilon_4$$

The investigation of the relationships among five dimensions composed of employee creativity management capability and firm success is presented in Equation 5 as shown:

$$\text{Equation 5: FSU} = \alpha_5 + \beta_{29}\text{NIG} + \beta_{30}\text{WPO} + \beta_{31}\text{NOM} + \beta_{32}\text{JIV} + \beta_{33}\text{CSC} + \beta_{34}\text{FAG} + \beta_{35}\text{FSI} + \varepsilon_5$$

The investigation of the relationships among organizational innovation and organizational productivity is presented in Equation 6 as shown:

$$\text{Equation 6: ORP} = \alpha_6 + \beta_{36}\text{ORI} + \beta_{37}\text{FAG} + \beta_{38}\text{FSI} + \varepsilon_6$$

The investigation of the relationships among organizational innovation and organizational excellence is presented in Equation 7 as shown:

$$\text{Equation 7: ORE} = \alpha_7 + \beta_{39}\text{ORI} + \beta_{40}\text{FAG} + \beta_{41}\text{FSI} + \varepsilon_7$$



The investigation of the relationships among organizational productivity, organizational innovation, organizational excellence, and business competitiveness is presented in Equation 8 as shown:

$$\text{Equation 8: } BUC = \alpha_8 + \beta_{42}ORI + \beta_{43}ORP + \beta_{44}ORE + \beta_{45}FAG + \beta_{46}FSI + \varepsilon_8$$

The investigation of the relationships among organizational productivity, organizational innovation, organizational excellence, and firm success is presented in Equation 9 as shown:

$$\text{Equation 9: } FSU = \alpha_9 + \beta_{47}ORI + \beta_{48}ORP + \beta_{49}ORE + \beta_{50}FAG + \beta_{51}FSI + \varepsilon_9$$

The investigation of the relationships between business competitiveness and firm success is presented in Equation 10 as shown:

$$\text{Equation 10: } FSU = \alpha_{10} + \beta_{52}BUC + \beta_{53}FAG + \beta_{54}FSI + \varepsilon_{10}$$

The investigation of the relationships between business competitiveness, firm success and corporate sustainability is presented in Equation 11 as shown:

$$\text{Equation 11: } CSU = \alpha_{11} + \beta_{55}BUC + \beta_{56}FSU + \beta_{57}FAG + \beta_{58}FSI + \varepsilon_{11}$$

The investigation of the relationships between four antecedents and new ideas generation orientation is presented in Equation 12 as shown:

$$\text{Equation 12: } NIG = \alpha_{12} + \beta_{59}VPO + \beta_{60}TMS + \beta_{61}OLC + \beta_{62}CEC + \beta_{63}FAG + \beta_{64}FSI + \varepsilon_{12}$$



The investigation of the roles of the moderator, namely, technology growth which moderates between four antecedents and new ideas generation orientation, is presented in Equation 13 as shown:

$$\begin{aligned} \text{Equation 13: NIG} = & \alpha_{13} + \beta_{65} \text{VPO} + \beta_{66} \text{TMS} + \beta_{67} \text{OLC} + \beta_{68} \text{CEC} \\ & + \beta_{69} \text{TEG} + \beta_{70} (\text{VPO} * \text{TEG}) + \beta_{71} (\text{TMS} * \text{TEG}) \\ & + \beta_{72} (\text{OLC} * \text{TEG}) + \beta_{73} (\text{CEC} * \text{TEG}) + \beta_{74} \text{FAG} \\ & + \beta_{75} \text{FSI} + \varepsilon_{13} \end{aligned}$$

The investigation of the relationships between four antecedents and working practice originality implementation, is presented in Equation 14 as shown:

$$\begin{aligned} \text{Equation 14: WPO} = & \alpha_{14} + \beta_{76} \text{VPO} + \beta_{77} \text{TMS} + \beta_{78} \text{OLC} + \beta_{79} \text{CEC} + \\ & \beta_{80} \text{FAG} + \beta_{81} \text{FSI} + \varepsilon_{14} \end{aligned}$$

The investigation of the roles of the moderator, namely, technology growth which moderates between four antecedents and working practice originality implementation, is presented in Equation 15 as shown:

$$\begin{aligned} \text{Equation 15: WPO} = & \alpha_{15} + \beta_{82} \text{VPO} + \beta_{83} \text{TMS} + \beta_{84} \text{OLC} + \beta_{85} \text{CEC} \\ & + \beta_{86} \text{TEG} + \beta_{87} (\text{VPO} * \text{TEG}) + \beta_{88} (\text{TMS} * \text{TEG}) \\ & + \beta_{89} (\text{OLC} * \text{TEG}) + \beta_{90} (\text{CEC} * \text{TEG}) + \beta_{91} \text{FAG} \\ & + \beta_{92} \text{FSI} + \varepsilon_{15} \end{aligned}$$

The investigation of the relationships between four antecedents and novel operational method awareness is presented in Equation 16 as shown:

$$\begin{aligned} \text{Equation 16: NOM} = & \alpha_{16} + \beta_{93} \text{VPO} + \beta_{94} \text{TMS} + \beta_{95} \text{OLC} + \beta_{96} \text{CEC} + \\ & \beta_{97} \text{FAG} + \beta_{98} \text{FSI} + \varepsilon_{16} \end{aligned}$$



The investigation of the roles of the moderator, namely, technology growth which moderates the relationships between four antecedents and working practice originality implementation, is presented in Equation 17 as shown:

$$\begin{aligned} \text{Equation 17: NOM} = & \alpha_{17} + \beta_{99}\text{VPO} + \beta_{100}\text{TMS} + \beta_{101}\text{OLC} + \beta_{102}\text{CEC} \\ & + \beta_{103}\text{TEG} + \beta_{104}(\text{VPO} * \text{TEG}) + \beta_{105}(\text{TMS} * \text{TEG}) \\ & + \beta_{106}(\text{OLC} * \text{TEG}) + \beta_{107}(\text{CEC} * \text{TEG}) + \beta_{108}\text{FAG} \\ & + \beta_{109}\text{FSI} + \varepsilon_{17} \end{aligned}$$

The investigation of the relationships between four antecedents and job improvement value focus is presented in Equation 18 as shown:

$$\begin{aligned} \text{Equation 18: JIV} = & \alpha_{18} + \beta_{110}\text{VPO} + \beta_{111}\text{TMS} + \beta_{112}\text{OLC} + \\ & \beta_{113}\text{CEC} + \beta_{114}\text{FAG} + \beta_{115}\text{FSI} + \varepsilon_{18} \end{aligned}$$

The investigation of the roles of the moderator, namely, technology growth which moderates the relationships between four antecedents and job improvement value focus, is presented in Equation 19 as shown:

$$\begin{aligned} \text{Equation 19: JIV} = & \alpha_{19} + \beta_{116}\text{VPO} + \beta_{117}\text{TMS} + \beta_{118}\text{OLC} + \beta_{119}\text{CEC} \\ & + \beta_{120}\text{TEG} + \beta_{121}(\text{VPO} * \text{TEG}) + \beta_{122}(\text{TMS} * \text{TEG}) \\ & + \beta_{123}(\text{OLC} * \text{TEG}) + \beta_{124}(\text{CEC} * \text{TEG}) + \beta_{125}\text{FAG} \\ & + \beta_{126}\text{FSI} + \varepsilon_{19} \end{aligned}$$

The investigation of the relationships between four antecedents and creative solution usefulness competency is presented in Equation 20 as shown:

$$\begin{aligned} \text{Equation 20: CSU} = & \alpha_{20} + \beta_{127}\text{VPO} + \beta_{128}\text{TMS} + \beta_{129}\text{OLC} + \beta_{130}\text{CEC} \\ & + \beta_{131}\text{FAG} + \beta_{132}\text{FSI} + \varepsilon_{20} \end{aligned}$$



The investigation of the roles of the moderator, namely, technology growth which moderates the relationships between four antecedents and creative solution usefulness competency, is presented in Equation 21 as shown:

$$\begin{aligned} \text{Equation 21: } CSU = & \alpha_{21} + \beta_{133}VPO + \beta_{134}TMS + \beta_{135}OLC + \beta_{136}CEC \\ & + \beta_{137}TEG + \beta_{138}(VPO * TEG) + \beta_{139}(TMS * TEG) \\ & + \beta_{140}(OLC * TEG) + \beta_{141}(CEC * TEG) + \beta_{141}FAG \\ & + \beta_{143}FSI + \varepsilon_{21} \end{aligned}$$

Where,

<i>NIG</i>	=	New Ideas Generation Orientation
<i>WPO</i>	=	Working Practice Originality Implementation
<i>NOM</i>	=	Novel Operational Method Awareness
<i>JIV</i>	=	Job Improvement Value Focus
<i>CSC</i>	=	Creative Solution Usefulness Competency
<i>ORI</i>	=	Organizational Innovation
<i>ORP</i>	=	Organizational Productivity
<i>ORE</i>	=	Organizational Excellence
<i>BUC</i>	=	Business Competitiveness
<i>FSU</i>	=	Firm Success
<i>CSU</i>	=	Corporate Sustainability
<i>VPO</i>	=	Vision for Proactive Operation
<i>TMS</i>	=	Top Management Support
<i>OLC</i>	=	Organizational Learning Culture
<i>CEC</i>	=	Continuous Environmental Change
<i>TEG</i>	=	Technology Growth
<i>FA</i>	=	Firm Age
<i>FS</i>	=	Firm Size
ε	=	Error Term



Summary

This chapter demonstrates the methods of data collection and the examinations of the relationships among constructs of employee creativity management capability, based on the conceptual model, to answer the research questions. This chapter comprises four parts that are: the sample selection and data collection procedures, measurement of variables, verification of instrument, and statistical techniques. The population of this research was 740 firms drawn from the databases of the Department of International Trade Promotion, Ministry of Commerce in Thailand (<http://www.dipt.go.th>), accessed on March 15, 2016. The key informant is the managing director or managing partner of the furniture exporting business. This research used a questionnaire as the research instrument for data collection. Furthermore, this chapter also demonstrated the construct measurement for each variable in the model and provides that twenty-one testable statistical equations were formulated for multiple regression analysis. Finally, Table 6 concludes the definition of each construct, the operational variables, the scale sources, and the sample questions and items.



Table 6 Definitions and Operational Variables of Constructs

Constructs	Definition	Operational Variables	Scale Source
<u>Dependent Variable</u>			
<i>Corporate Sustainability</i>	The long-term performance of firms that are increasing continuously and maintain profitability in both profit and non-profit success.	The degree to evaluate the increase continuously and maintain profitability such as maintain quality of products and services, market share, business growth, continuous profitability, reputation, acceptance.	Kuckertz and Wagner (2010)
<u>Independent Variable</u>			
<i>New Ideas Generation Orientation (NIG)</i>	The organization's ability that promote and encourage employee, by focusing on creating, developing, and communicating ideas effectively and can transformed from abstract ideation into something more concrete which bring the important benefit to the organization.	The degree to evaluate the new notion of employee on product, service, administration, procurement, technology, operations, and marketing.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definition	Operational Variables	Scale Source
<u>Independent Variable</u>			
<i>Working Practice Originality Implementation (WPO)</i>	The organization's ability to understand and utilize to patterns of work activity by supporting and developing the skills, knowledge, abilities and behavior necessary to perform the work, which are an essential aspect to building a successful business.	The degree to evaluate understanding and utilizing working practice to provide benefits to employees in an organization that leads to achieve the organization's goal.	New scale
<i>Novel Operational Method Awareness (NOM)</i>	The organization's ability to realize the potential of new thinking, new methods and new techniques to increase operational efficiency and effectiveness, which are critical for organizations to achieve goals and gain competitive advantage over competitors.	The degree to evaluate an emphasis on thinking, methods and techniques to increase operational efficiency and effectiveness.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definition	Operational Variables	Scale Source
<u>Independent Variable</u>			
<i>Job Improvement Value Focus (JIV)</i>	The organization's ability to inspire employees by concentrating worth adding to daily tasks and more responsibility to create meaningful, challenging, and interesting tasks which is important that helps organization become successful.	The degree to evaluate changing the behavior of the employee value and the staff expertise to get the best work performance.	New scale
<i>Creative Solution Usefulness Competency (CSU)</i>	The organization's ability that provides support to employee to find a way to be more diverse, pursue new possibilities, create new alternative, and think outside the box for a problem-solving of organization in order to help achieve organizational business goals and objective.	The degree to evaluate the variety of a way to more diverse, the pursuit of new possibilities, finding new options, thinking outside the box to fix an organization.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definition	Operational Variables	Scale Sources
<u>Consequent variables</u>			
<i>Organizational Innovation (ORI)</i>	The innovative outcomes of firms which is developed by the new work process, new method, new products, new services, or new technologies in response to customer demand.	The degree to evaluate the outcomes of innovative development such as work process, method, products, services, technology.	Adapt from Kittikunchotiwut and Ussahawanitchakit (2013)
<i>Organizational Productivity (ORP)</i>	The efficient use of resources to attain its successful achievement of goals and the appropriate use of firm resources, which is indicated by the output value that arises from the use of input-efficiency.	The degree to evaluate implementing resource efficiency to support operation which the proportion of the factors of production is less than the proportion of the output, such as cost effective, cost reduction, product quality.	Adapt from Prempre and Ussahawanitchaki (2013)

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definition	Operational Variables	Scale Sources
<u>Consequent variables</u>			
<i>Organizational Excellence (ORE)</i>	Working systems, that is outstanding and modern to help improve process efficiency, and using resources efficiently in response to customer need and superior value .	The degree to evaluate responding to customer needs, best management practices, great work system.	Adapt from Hardjono and Marrewijk (2001)
<i>Business Competitiveness (BUC)</i>	The potential of organizations to manage and operate business better than a competitor, which is the ability to provide good customer service, generate innovation, and maintain quality.	The degree to evaluate business management and operations that better than competitor in competition such as superior customer service, superior value products, superior working process.	New scale
<i>Firm Success (FSU)</i>	The objective achievement of the business to have income and profits according to the goals, the growth rate of market share, the financial position and the performance that are higher.	The degree to evaluate outperforming of sales growth, higher profitability, continuous market share, and increase new products or services.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Sources
<u><i>Antecedent variables</i></u>			
<i>Vision for Proactive Operation (VPO)</i>	The direction and goals of the organization that is careful to cope with change in the future that is associated with the objective of the organization by analyzed opportunity and the threat of concept change which improves the current situation and develops efficiency.	The degree to evaluate providing direction and goals of the organization to employee in organization to be achieved objective of the organization in the future.	New scale
<i>Top Management Support (TMS)</i>	The emphasis of executives in implementation of time, cost and resources to operate activities within the organization to achieve its objectives.	The degree to evaluate perceptions of support personnel from executives in agreeing to time, cost and resource to operate activities within the organization.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Sources
<u>Antecedent variables</u>			
<i>Organizational Learning Culture (OLC)</i>	The generating values, norms, and beliefs for the employees in the organization and are encouraging behavior and the common sense of learning, obtaining continual learning, and creating new knowledge and knowledge utilization for the benefit of the organization.	The degree to evaluate participation in continuous learning, knowledge transfer and sharing, knowledge creation and development, and knowledge implementation.	New scale
<i>Continuous Environment Change (CEC)</i>	The ongoing increase of differences, diversity, and uncertainty in the external environment of the organization. It is both short and long-term which cannot be predicted.	The degree to evaluate the firm's ability in planning, adapting, and creating strategy to manage unpredictable and rapid changes of the firm's surroundings, such as the economic, technological, political, legal, social, changes of customers, and suppliers.	New scale

Table 6 Definitions and Operational Variables of Constructs (continued)

Constructs	Definitions	Operational Variables	Scale Sources
<u>Moderating variables</u>			
<i>Technology Growth (TEG)</i>	The rapid advances of technology which make utilization and empowerment to better work and enables organizations to respond quickly.	The degree to evaluate the perceptions of changes in technology environment, innovation, and communication system.	Adapt from Konthong and Ussahawanitchakit (2010)
<u>Control variables</u>			
<i>Firm size (FS)</i>	The number of employees currently registered full-time in an organization.	Dummy variable 0 = less than or equal to 150 employees, 1 = more than 150 employees	Charoenroop, Janjarasjit, and Ussahawanitchakit, (2014)
<i>Firm age (FA)</i>	The number of years that the organization has operated in the business.	Dummy variable 0 = less than or equal to 15 years, 1 = more than 15 years	Siriyota, Jhundra-indra, and Muenthaisong, (2014)

CHAPTER IV

RESULTS AND DISCUSSION

Early chapter III introduced the research methods which comprise the data collection instrument and procedure for the sample selection, and the testing for a non-response bias in sample surveys. Furthermore, the data analysis procedures for hypothesis testing are described. This chapter is structured as follows. Firstly, this chapter demonstrates the details of the respondents, the sample characteristics, and correlation analysis. Secondly, the hypothesis testing and the results are detailed. Finally, the summary of all hypotheses testing and conclusions are included.

Respondents Characteristics

Respondent Characteristics

In this research, the respondents are the managing directors or managing partners of each firm who have the most comprehensive knowledge relevant to corporate strategy, and the competitive environment of furniture exporting businesses in Thailand. The respondent characteristics are described by the personal information of respondents, consists of gender, age, marital status, education level, working experience, average monthly income, and working position.

The demographic characteristics of 139 respondents are the majority of male (59 percent). The age span of the managing directors or partners is 41 to 50 years old (40.3 percent). The majority of respondents are married (83.5 percent). A total of 64 percent of participants achieved a bachelor's degree or lower, and the most of the respondents (35.3 percent) have working experience of more than 20 years. The average monthly income of respondents ranges between 50,000 and 70,000 baht (35.3 percent). Finally, most respondents hold positions as general managers (54 percent). For more detail, see the Appendix A.



Firm Characteristics

The results of demographic characteristics of 139 furniture exporting businesses indicate that the majority of the firm respondents have registered as a limited company (97.1 percent) and are located in the central region of Thailand (70.5 percent). The majority of average annual income is less than 10,000,000 baht (35.3 percent). Approximately 75.5 percent of firm respondents have been operating in the furniture exporting businesses over 15 years. The number of employees in the business is more than 150 full-time employees (43.20 percent). The majority of the firm respondents have operating capital less than 25,000,000 baht (31.7 percent). Mostly, the experience in exporting is more than 15 years (43.2 percent). Finally, the majority of the respondents export to Asian markets abroad (75.5 percent). For more detail see Appendix A.

Correlation Analysis

This research employs a bivariate correlation analysis of Pearson's correlation in each variable pair 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 the inter-correlation between independent variables exceeds 0.80 (Hair et al., 2010). In this research, the bivariate correlation procedure is subject to a two-tailed test of statistical significance at two levels as $p < 0.05$, and $p < 0.01$. The results of the correlation analysis of all variables in this research are shown in Table 7.

Accordingly, Table 7 shows that all of five dimensions of employee creativity management capability have significant, positive relationships with organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and corporate sustainability ($r = 0.219 - 0.529$, $p < 0.01$). For the antecedents, including vision for proactive operations, top management support, organizational learning culture, and continuous environmental change, are significantly related to all dimensions of employee creativity management capability ($r = 0.229 - 0.433$, $p < 0.01$). The moderating effects of technology growth have correlations with all variables between 0.284 and 0.615, $p < 0.01$. In addition to the relationships among the variables, the correlations among all variables in the



conceptual model are in the range of 0.219 to 0.636, $p < 0.01$, which is lower than 0.8 (Hair et al., 2010). Therefore, the results denote that no multicollinearity problems exist in this research.



Table 7 Descriptive Statistics and Correlation Matrix of Employee Creativity Management Capability and All Constructs

Variables	NIG	WPO	NOM	JIV	CSC	ORI	ORP	ORE	BUC	FSU	CSU	VPO	TMS	OLC	CEC	TEG
Mean	4.40	4.38	4.46	4.43	4.48	4.52	4.45	4.43	4.44	4.43	4.48	4.61	4.44	4.46	4.49	4.50
S.D.	.42	.43	.39	.40	.39	.39	.41	.42	.43	.42	.43	.37	.40	.40	.38	.39
WPO	.411***															
NOM	.331***	.537***														
JIV	.326***	.343***	.414***													
CSC	.280***	.370***	.353***	.521***												
ORI	.448***	.458***	.411***	.314***	.383***											
ORP	.322***	.529***	.377***	.472***	.457***	.567***										
ORE	.219***	.477***	.430***	.336***	.408***	.472***	.461***									
BUC	.346***	.413***	.366***	.444***	.364***	.418***	.470***	.434***								
FSU	.348***	.324***	.326***	.395***	.400***	.395***	.378***	.369***	.572***							
CSU	.345***	.436***	.438***	.359***	.359***	.440***	.404***	.490***	.483***	.636***						
VPO	.301***	.302***	.349***	.285***	.349***	.481***	.423***	.336***	.320***	.378***	.444***					
TMS	.294***	.433***	.370***	.235***	.271***	.350***	.320***	.336***	.244***	.377***	.277***	.400***				
OLC	.240***	.313***	.279***	.375***	.356***	.293***	.258***	.399***	.245***	.332***	.343***	.370***	.318***			
CEC	.229***	.377***	.251***	.361***	.354***	.288***	.290***	.302***	.283***	.302***	.332***	.438***	.466***	.636***		
TEG	.318***	.384***	.411***	.284***	.413***	.428***	.411***	.450***	.395***	.415***	.440***	.447***	.615***	.461***	.563***	
FA	.140	.186**	.137	.107	.087	.233***	.059	.113	.104	.059	.205**	.034	.008	-.106	-.122	-.096
FS	.090	.102	.160	.094	.034	.122	.087	.058	.021	.047	.026	.085	.111	-.006	.109	.034

*** p<0.01, ** p<0.05



Hypothesis 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. The results of descriptive statistics and hypotheses testing are discussed according to regression equations as follows:

The Relationships among Each Dimension of Employee Creativity Management Capability and Its Consequences

Figure 7 The Relationships among Each Dimension of Employee Creativity Management Capability and Its Consequences

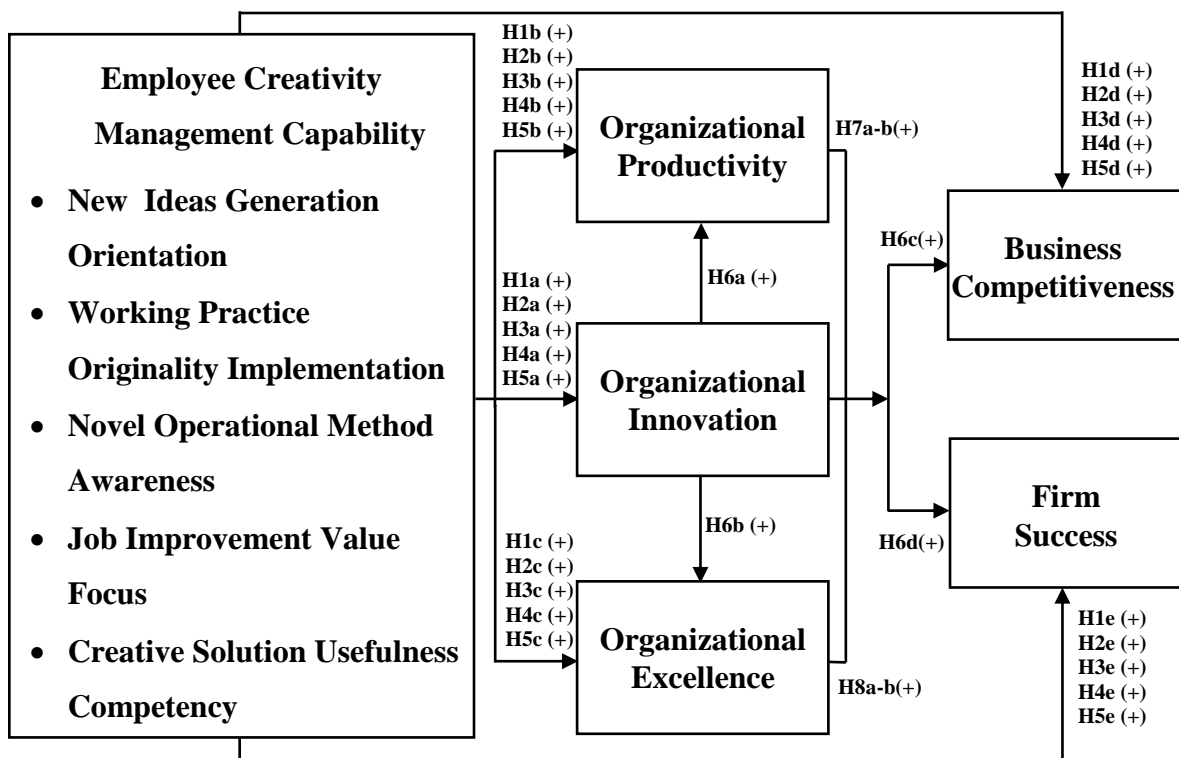


Figure 7 demonstrates that the relationships between five dimensions of employee creativity management capability (new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency) and its consequent variables are positively associated with the overall consequents which are organizational productivity, organizational innovation, organizational excellence, business competitiveness, and firm success which are proposed in Hypotheses 1(a-e) - 5(a-e). The relationship in each hypothesis is proposed to be in a positive direction. These hypotheses can be transformed into the regression equation in Models 1, 2, 3, 4, and 5.

Table 8 Descriptive Statistics and Correlation Matrix of Each Dimension of Employee Creativity Management Capability, and Its Consequences

Variables	NIG	WPO	NOM	JIV	CSC	ORI	ORP	ORE	BUC	FSU
Mean	4.40	4.38	4.46	4.43	4.48	4.52	4.45	4.43	4.44	4.43
S.D.	.42	.43	.39	.40	.39	.39	.41	.42	.43	.42
WPO	.411***									
NOM	.331***	.537***								
JIV	.326***	.343***	.414***							
CSC	.280***	.370***	.353***	.521***						
ORI	.448***	.458***	.411***	.314***	.383***					
ORP	.322***	.529***	.377***	.472***	.457***	.567***				
ORE	.219***	.477***	.430***	.336***	.408***	.472***	.461***			
BUC	.346***	.413***	.366***	.444***	.364***	.418***	.470***	.434***		
FSU	.348***	.324***	.326***	.395***	.400***	.395***	.378***	.369***	.572***	
FA	.140	.186**	.137	.107	.087	.233***	.059	.113	.104	.059
FS	.090	.102	.160	.094	.034	.122	.087	.058	.021	.047

***p<0.01, **p<0.05



Table 8 indicates the correlations among each dimension of employee creativity management capability and its consequences. In the first dimension, the results illustrate the positive correlation between new ideas generation orientation and organizational innovation ($r = 0.448$, $p < 0.01$), organizational productivity ($r = 0.322$, $p < 0.01$), organizational excellence ($r = 0.219$, $p < 0.01$), business competitiveness ($r = 0.346$, $p < 0.01$), and firm success ($r = 0.348$, $p < 0.01$). In the second dimension, working practice originality implementation is significantly and positively correlated to organizational innovation ($r = 0.458$, $p < 0.01$), organizational productivity ($r = 0.529$, $p < 0.01$), organizational excellence ($r = 0.477$, $p < 0.01$), business competitiveness ($r = 0.413$, $p < 0.01$), and firm success ($r = 0.324$, $p < 0.01$). For the third dimension, novel operational method awareness has a significant and positive correlation with organizational innovation ($r = 0.411$, $p < 0.01$), organizational productivity ($r = 0.377$, $p < 0.01$), organizational excellence ($r = 0.430$, $p < 0.01$), business competitiveness ($r = 0.366$, $p < 0.01$), and firm success ($r = 0.326$, $p < 0.01$). As to the fourth dimension, job improvement value focus is significantly and positively correlated to organizational innovation ($r = 0.314$, $p < 0.01$), organizational productivity ($r = 0.472$, $p < 0.01$), organizational excellence ($r = 0.336$, $p < 0.01$), business competitiveness ($r = 0.444$, $p < 0.01$), and firm success ($r = 0.395$, $p < 0.01$). The last dimension, creative solution usefulness competency, has a significant and positive correlation with organizational innovation ($r = 0.383$, $p < 0.01$), organizational productivity ($r = 0.457$, $p < 0.01$), organizational excellence ($r = 0.408$, $p < 0.01$), business competitiveness ($r = 0.364$, $p < 0.01$), and firm success ($r = 0.400$, $p < 0.01$). The findings in Table 8 indicate that all correlations are less than 0.80 as recommended by Hair et al. (2010). Furthermore, the variance inflation factors (VIF) in equation models 1 to 5 indicate the maximum value as 1.612, which are presented in Table 9. As mentioned earlier, the VIF value was lower than 10 as recommended by Hair et al. (2010), meaning that the independent variables are not correlated with each other. Therefore, multicollinearity is not a problem in this research.

Next, Table 9 exhibits the multiple regression analysis of the relationships among employee creativity management capability (new ideas generation orientation, NIG; working practice originality implementation, WPO; novel operational method awareness, NOM; job improvement value focus, JIV; and creative solution usefulness



competency, CSC), and its consequences (organizational innovation, ORI; organizational productivity, ORP; organizational excellence, ORE; business competitiveness, BUC; and firm success, FSU), as shown below.



Table 9 Results of Regression Analysis for the Effects of Each Dimension of Employee Creativity Management Capability on Its Consequences

Independent Variables		Dependent Variables				
		ORI (a)	ORP (b)	ORE (c)	BUC (d)	FSU (e)
		Equation 1	Equation 2	Equation 3	Equation 4	Equation 5
New Ideas Generation Orientation (NIG)	(H1a-e)	.256*** (.079)	.046 (.076)	-.044 (.082)	.132 (.082)	.180** (.085)
Working Practice Originality Implementation (WPO)	(H2a-e)	.183** (.089)	.366*** (.085)	.293*** (.092)	.193** (.093)	.074 (.095)
Novel Operational Method Awareness (NOM)	(H3a-e)	.145 (.088)	.005 (.084)	.187** (.090)	.087 (.091)	.088 (.094)
Job Improvement Value Focus (JIV)	(H4a-e)	-.001 (.087)	.234*** (.083)	.061 (.089)	.254*** (.090)	.172* (.093)
Creative Solution Usefulness Competency (CSC)	(H5a-e)	.182** (.085)	.190** (.082)	.213** (.087)	.093 (.088)	.204** (.091)
Firm age (FA)		.409* (.245)	-.225 (.236)	.060 (.253)	.062 (.255)	-.087 (.263)
Firm size (FS)		.032 (.148)	.072 (.142)	-.031 (.152)	-.113 (.154)	-.013 (.158)
Adjusted R ²		.324	.375	.283	.267	.224
Maximum VIF		1.612	1.612	1.612	1.612	1.612

*** p < 0.01, **. p < 0.05, * p < 0.10, Beta coefficients with standard errors in parenthesis

Regarding Table 9, the results of OLS regression analysis illustrates that the first dimension, new ideas generation orientation, is significantly and positively related to its consequences: organizational innovation (H1a: $\beta_{01}=0.256$, $p<0.01$), and firm success (H1e: $\beta_{29}= 0.180$, $p < 0.05$). These results consistent with the study of Nikolowa (2014); Heong et al. (2012) indicated that the organization's new ideas generation is the important source of organizational innovation to achieve developing a successful product, and it has a significant influence on the firm success, which new ideas generation is regarded as one of an engine of firm success. **Therefore, Hypotheses 1a and 1e are supported.** Meanwhile, the regression results show that new ideas generation orientation has no a significant influence on organizational productivity (H1b: $\beta_{08}=0.046$, $p>0.10$), organizational excellence (H1c: $\beta_{15} = -0.044$, $p>0.10$), and business competitiveness (H1d: $\beta_{22}= 0.132$, $p>0.10$). Pritchard (1990) mentions that new ideas generation is crucial to organizational productivity in the workplace and are the prime factor to produce business competitiveness. Moreover, Phipps, Prieto, and Ndinguri (2013) propose that new ideas generation is positively related to organizational productivity, which as a key instrument to achieving organizational excellence. Walsh, Lee, and Nagaoka (2016) stated that new ideas generation will positively relate to productivity and competitiveness of an organization. However, dissimilarity on organizational culture in the USA context, which is Western culture, will lead to lower collaboration and commitment to new ideas generation for furniture exporting businesses in Thailand. There is not necessarily being a way that will guarantee to a bright and successful for organization. Škerlavaj, Černe, and Dysvik (2014) also recommended excessive idea generation can lead to diminished organizational productivity, and demonstrates a resource allocation and support needed for idea generation are regarded as priority elements due to it can increase or decrease the levels of new idea generation to achieving organizational excellence. There is not earned merely through new ideas generation that support business competitiveness and organizational productivity. Likewise, new ideas generation of the firm that is not efficient enough to provide organizational excellence, and it is also likely to reduce business competitiveness. Therefore, new ideas generation orientation has no associate with organizational productivity, organizational excellence, and business competitiveness. **Thus, Hypotheses 1b, 1c and 1d are not support.**



Secondly, it is found that working practice originality implementation, the second dimension, also illustrated significant and positive effects on all of its outcomes: organizational innovation (H2a: $\beta_{02}=0.183$, $p < 0.10$), organizational productivity (H2b: $\beta_{09} = 0.366$, $p < 0.01$), organizational excellence (H2c: $\beta_{16} = 0.293$, $p < 0.01$), and business competitiveness (H2d: $\beta_{23} = 0.193$, $p < 0.05$). These results consistent with the study of Mazzei, Flynn, and Haynie, (2016) shows that working practice promotes organizational innovation and organizational productivity. Zacarias and Martins (2012) suggested that working practice has the potential to significantly change with business competitiveness for building business performance and success. Okpara and Wynn (2007) demonstrate the relationship between working practice originality implementation and organizational excellence, it is clear that working practice is related to organizational excellence which can be used as a competitive weapon to make a business more sustainable. **Thus, Hypotheses 2a, 2b, 2c, and 2d are supported.** Meanwhile, working practice originality implementation has no significant effect on firm success (H2e: $\beta_{30}= 0.074$, $p > 0.10$). Notwithstanding, the working practice is positively related to firm success due to a working practice can increase performance by improving the efficiency and effectiveness but do not have enough to encourage organizational productivity that leads to success. However, if employee have not engaged in planning of working practice, and it is also possible that employee don't feel strongly connected with the working practice, which is not intended or appropriate for their the organization (Mendelson, 2000). In the context of life insurance businesses in Canada, Gatewood, and Riordan (1997) provided evidence to support the linkage between working practices and employees' perceptions, which are positively related to firm success. On the other hand, the finding is that in furniture exporting businesses in Thailand of this study, which is not earned merely through the specific working practices that can be used only for some organizations and the context of risk and uncertainty. Possibility, this empirical examination of furniture exporting businesses in Thailand might be indirect effect on firm success; due to working practice originality implementation will vary depending on the work environment, situations, conditions, and individual personality differences. There are many varied working practice on how to improve performance efficiency and do not cover every eventuality. The possible explanations for the finding, working practice focuses on helping an individual



employee, resulting in no significant influence on firm success. Likewise, working practice is inefficient enough that organizations launch change initiatives for firm success. **Thus, Hypothesis 2e is not support.**

Thirdly, novel operational method awareness (the third dimension) is only significantly and positively affect organizational excellence (H3c: $\beta_{17} = 0.187$, $p < 0.05$). The relationship between novel operational method awareness and organizational excellence can be explained as a firm with operational method effectiveness that is likely to contribute positively to organizational excellence (Flynn, Wu, and Melnyk, 2010). **Therefore, Hypothesis 3c is supported.** The findings indicate that novel operational method awareness shows a non-significant influence on organizational innovation (H3a: $\beta_{03}=0.145$, $p > 0.10$), organizational productivity (H3b: $\beta_{10} = 0.005$, $p > 0.10$), business competitiveness (H3d: $\beta_{24} = 0.087$, $p > 0.10$), and firm success (H3e: $\beta_{31}= 0.088$, $p > 0.10$). These results are inconsistent with previous researches shows that the operational method is related to organizational innovation (Hammer, 2004), organizational productivity (Cua, McKone, and Schroeder, 2001), business competitiveness (Azadegan, 2011), and firm success (Oke and Kach, 2012). There are several reasons why novel operational method awareness has no significant effect on organizational innovation, organizational productivity, business competitiveness, and firm success for furniture exporting businesses in Thailand. One key reason for interpretation, it is possible that organizational orientation may not have enough resources to support novel operational method, which will enhances the impact and effectiveness of action through combined and more efficient use of operational method (Helfat and Winter, 2011). Due to the limitation of the appropriation of resource, time, and budget that have been verified by the firms characteristic response, which the majority of furniture exporting businesses in Thailand has firm capital less than 10,000,000 Baht. The perspective of organizational resources which consists of time and budget are extremely difficult to managing the required resources for operation which can reduced the effectiveness of an organization due to improper resource allocations (Hamilton, Eskin, and Michaels, 1998). As a result, the novel operational method awareness has no effect on organizational innovation, organizational productivity, business competitiveness, and firm success. **Hence, Hypotheses 3a, 3b, and 3d are not supported.**



Fourthly, the findings indicate that job improvement value focus is significantly and positively associated with organizational productivity (H4b: $\beta_{11} = 0.234$, $p < 0.01$), business competitiveness (H4d: $\beta_{25} = 0.254$, $p < 0.01$), and firm success (H4e: $\beta_{32} = 0.172$, $p < 0.10$). The significant relationship between job improvement value focus and organizational productivity can be clarified by job improvement that is making reasonable progress towards organizational productivity (Mizgier et al., 2015). An organization with job improvement enhances the long-term business value and business competitiveness (Doloi, 2007). Job improvement is a significant factor that is essential to produce firm success in order to rapidly adapt to change in the organization (Aina and Omoniyi, 2014). **Thus, hypotheses 4b, 4d, and 4e are supported.** However, the results in this research indicate that job improvement value focus shows non-significant influence on organizational innovation (H4a: $\beta_{04} = -0.001$, $p > 0.10$), and organizational excellence (H4c: $\beta_{18} = 0.061$, $p > 0.10$). These results are inconsistent with previous researchers who have suggested that job improvement affects organizational innovation (Rey-Martí, Ribeiro-Soriano, and Sánchez-García, 2016). Likewise, the study of Mizgier et al. (2015) show that job improvement is involved in organizational excellence. It seems likely that job improvement value focus of furniture exporting businesses in Thailand is unable to foster organizational innovation and organizational excellence. Although prior researches demonstrate that job improvement can be directly related to organizational innovation and organizational excellence (Rey-Martí, Ribeiro-Soriano, and Sánchez-García, 2016; Mizgier et al., 2015). However, an initial way to job improvement value focus that may create difficulties for employees through learning new things, a number of different things on job, and development of skills and abilities (Yang and Lee, 2009). Due to the fact that job improvement value focus is a part of creating change within organizations which it is possible that employees may be feeling frustrated, sulky, indignant, and resistant to change. **Thus, Hypotheses 4a and 4c are not supported.**

Finally, the present study reveals that creative solution usefulness competency is significantly and positively associated with organizational innovation (H5a: $\beta_{05} = 0.182$, $p < 0.10$), organizational productivity (H5b: $\beta_{12} = 0.190$, $p < 0.05$), organizational excellence (H5c: $\beta_{19} = 0.213$, $p < 0.05$), and firm success (H5e: $\beta_{33} = 0.204$, $p < 0.05$). The results imply that creative solutions of the employees are essential



tools for the success of an organization in order to create organizational innovation and improve organizational productivity (Kirton, 2003). Furthermore, Caughron and Mumford (2008) suggest that creative solution has affected organizational excellence. Besides, Kuo, Chen, and Hwang (2014) indicate that creative solution influences firm success. **Therefore, Hypotheses 5a, 5b, 5c and 5e are supported.** Meanwhile, creative solution usefulness competency has no significant effect on business competitiveness (H5d: $\beta_{26} = 0.093$, $p > 0.10$). The result is inconsistent with Ray and Romano (2013) who propose that the creative solution of organizations is positively related to business competitiveness. Likewise, the study of Althuizen and Wierenga (2014) shows that creative solution affects the increasing efficiency of business competitiveness. This may be in part because of creative solution usefulness competency in business is important, but in the context of furniture exporting businesses in Thailand have the intensity of global market and growing extensity are a high cost operating environment which may affect decreased business competitiveness (Gokiene and Dagiliene, 2011). Moreover, the results in this research demonstrated that creative solution usefulness competency has no significant effect on business competitiveness, but it is necessary and linked to the effectiveness of organizational innovation, organizational productivity, and organizational excellence in supporting business competitiveness. From the reason above creative solution usefulness competency has no significant effect on business competitiveness. **Therefore, Hypothesis 5d is not supported.**

For the control variables, firm age has no significant effect on organizational productivity ($\beta_{13} = -0.225$, $p > 0.10$), organizational excellence ($\beta_{20} = 0.060$, $p > 0.10$), business competitiveness ($\beta_{27} = 0.062$, $p > 0.10$), and firm success ($\beta_{34} = -0.087$, $p > 0.10$). Therefore, the relationships among employee creativity management capability's dimensions, organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are not influenced by firm age. Meanwhile, firm age has significant relationship with organizational innovation ($\beta_{06} = 0.409$, $p < 0.10$). It means that the relationship among employee creativity management capability's dimensions and organizational innovation are influenced by firm age. Consistently, Ravichandran et al. (2009) indicate that, a large firm is likely to create performance much more than a small firm. Likewise, firm size



has no significant effect on organizational innovation ($\beta_{07} = 0.032, p > 0.10$), organizational productivity ($\beta_{14} = 0.072, p > 0.10$), organizational excellence ($\beta_{21} = -0.031, p > 0.10$), business competitiveness ($\beta_{28} = -0.113, p > 0.10$), and firm success ($\beta_{35} = -0.013, p > 0.10$). Hence, the relationship among employee creativity management capability's dimensions, organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are not influenced by firm size.

The Relationships among Organizational Innovation, Organizational Productivity, Organizational Excellence, Business Competitiveness, and Firm Success

According to Figure 8, the relationship among organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are shown. This research proposes positive relationships among the aforementioned relationships, in hypotheses 6-8. These hypotheses are transformed to regression equations 6 to 9. Moreover, the results of regression analyses are presented in Table 10 below.

Figure 8 The Relationships among Organizational Innovation, Organizational Productivity, Organizational Excellence, Business Competitiveness, and Firm Success

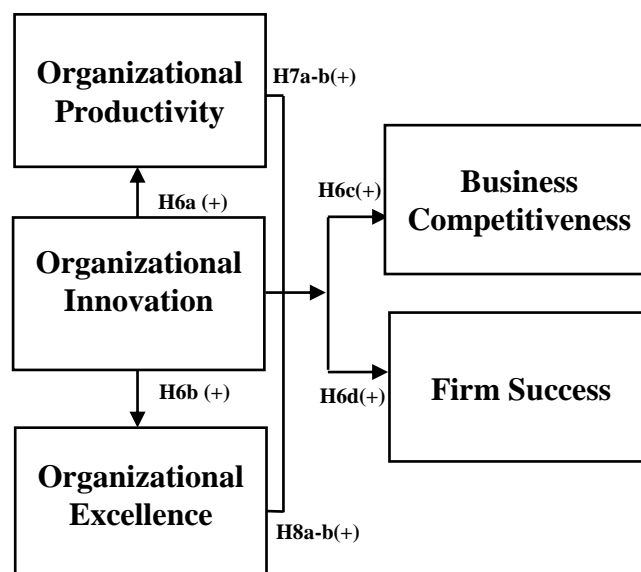


Table 10 Descriptive Statistics and Correlation Matrix of Organizational Innovation, Organizational Productivity, Organizational Excellence, Business Competitiveness, and Firm Success

Variables	ORI	ORP	ORE	BUC	FSU
Mean	4.52	4.45	4.43	4.44	4.43
S.D.	.39	.41	.42	.43	.42
ORP	.567***				
ORE	.472***	.461***			
BUC	.418***	.470***	.434***		
FSU	.395***	.378***	.369***	.572***	
FA	.233***	.059	.113	.104	.059
FS	.122	.087	.058	.021	.047

*** p<0.01, ** p<0.05

Table 11 Results of Regression Analysis for the Effects of Organizational Innovation, Organizational Productivity, Organizational Excellence on Business Competitiveness, and Firm Success

Independent Variables	Dependent Variables			
	ORP	ORE	BUC	FSU
	Equation 6	Equation 7	Equation 8	Equation 9
Organizational Innovation (ORI) (H6a-d)	.582*** (.073)	.471*** (.078)	.144 (.095)	.213** (.100)
Organizational Productivity (ORP) (H7a-b)			.281*** (.092)	.170* (.097)
Organizational Excellence (ORE) (H8a-b)			.234*** (.086)	.193** (.090)
Firm age (FA)	-.293 (.249)	.009 (.268)	.134 (.258)	-.076 (.272)
Firm size (FS)	.083 (.148)	.000 (.159)	-.092 (.153)	.003 (.161)
Adjusted R ²	.313	.205	.271	.189
Maximum VIF	1.136	1.136	1.693	1.693

*** p < 0.01, **. p < 0.05, * p < 0.10, Beta coefficients with standard errors in parenthesis



For the hypothesis testing, the results of regression analysis are identified in Table 11. As expected, it was found that organizational innovation has a significant and positive effect on organizational productivity (H6a: $\beta_{36} = 0.582$, $p < 0.01$), organizational excellence (H6b: $\beta_{39} = 0.471$, $p < 0.01$), and firm success (H6d: $\beta_{47} = 0.213$, $p < 0.05$). For organizational innovation, it confirms that organizational innovation is related to organizational productivity (Alshammari et al., 2014), organizational excellence (Therrien, Doloreux, and Chamberlin, 2011), and firm success (Bessant et al., 2005). Consistently, previous research asserts that organizations with leveraging and improvement of organizational innovation that can build and maintain organizational productivity which are always the first ones to lead to firm success (Alshammari et al., 2014). Furthermore, the result of the relationship between organizational innovation and organizational excellence are consistent with Therrien, Doloreux and Chamberlin (2011), organizational innovation is positively related to organizational excellence. The evidence suggests that firms with organizational innovation are likely to effectively and efficiently achieve firm success because firms have a better ability to create or adopt an idea or new behavior (Bessant et al., 2005). **Therefore, Hypotheses 6a, 6b and 6d are supported.** In contrast, organizational innovation has no significant effect on business competitiveness (H6c: $\beta_{42} = 0.144$, $p > 0.10$). Organizational innovation is not positively related to business competitiveness. The result is inconsistent with Testa, Iraldo, and Frey (2011) who demonstrated that organizational innovation is directly related to the nature of competitiveness, and organizational innovation has long been recognized as a source of business competitiveness, which the organization requires proper organizational innovation in order to retain business competitiveness. The possible reason for this is organizational innovation alone is not the key to create business competitiveness. Business competitiveness required the several of resources and capabilities of firm through cumulative experience and knowledge that the firm uses to efficiently in order to launch a new product to market faster than competitors. The relationships between organizational innovation, various resources, experience, and capabilities of the firm are the crucial factors influencing business competitiveness (Nieto and Santamaría, 2007). The result in this research indicated that organizational innovation has no direct



affection but also has indirect affection on business competitiveness through organizational productivity and organizational excellence. A possible explanation for this finding is that organizational innovation indirectly effects to business competitiveness. This result is consistent with Carayannis and Grigoroudis (2014) who found that organizational productivity has a mediating effect on the relationship between organizational innovation and competitiveness. Also, Hasan et al. (2016) who showed that the mediating role of productivity, which can help facilitate the generation of innovation and competitiveness of U.S. manufacturing firms. **Therefore, Hypothesis 6c is not supported.**

For the hypothesis testing, the results from Table 10 suggest that organizational productivity has a significant and positive effect on business competitiveness (H7a: $\beta_{43} = 0.281$, $p < 0.01$) and firm success (H7b: $\beta_{48} = 0.170$, $p < 0.10$). Consistent with Neely, Adams, and Kennerley (2002), organizational productivity is the capacity of the firm that to have both efficiency and effectiveness, which can be used as competitive weapons that lead to business competitiveness. The possible explanation might be that organizational productivity is an essential factor for achieving firm success. Moreover, organizational productivity is positively related to firm success. Oeij et al. (2012) indicate that organizational productivity is about assessing and improving the efficiency and effectiveness of organizations can constitute a source of firm success. **Hence, Hypotheses 7a and 7b are supported.**

The results of regression analysis are identified in Table 11. As expected, it was found that organizational excellence has a significant and positive effect on business competitiveness (H8a: $\beta_{44} = 0.234$, $p < 0.01$) and firm success (H8b: $\beta_{49} = 0.193$, $p < 0.05$). The previous literature suggested that organizational excellence is a prime factor that can lead to improved business competitiveness, and enable the employee to achieve firm success (Oakland and Tanner, 2008). Furthermore, previous studies indicate that organizational excellence can be used to help build firm success (Kaynak and Hartley 2005). **Thus, Hypotheses 8a and 8b are supported.**

For the control variables, firm age has no significant effect on organizational productivity ($\beta_{37} = -0.293$, $p > 0.10$), organizational excellence ($\beta_{40} = 0.009$, $p > 0.10$), business competitiveness ($\beta_{45} = 0.134$, $p > 0.10$), and firm success ($\beta_{50} = -0.076$, $p > 0.10$). Thus, the relationships among organizational innovation, organizational productivity,



organizational excellence, business competitiveness, and firm success are not influenced by firm age. Likewise, firm size has no significant effect on organizational productivity ($\beta_{38} = 0.083$, $p > 0.10$), organizational excellence ($\beta_{41} = 0.000$, $p > 0.10$), business competitiveness ($\beta_{46} = -0.092$, $p > 0.10$), and firm success ($\beta_{51} = 0.003$, $p > 0.10$). Therefore, the relationships among organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success are not influenced by firm size.

The Relationships among Business Competitiveness, Firm Success, and Corporate Sustainability

Figure 9 The Relationships among Business Competitiveness, Firm Success, and Corporate Sustainability

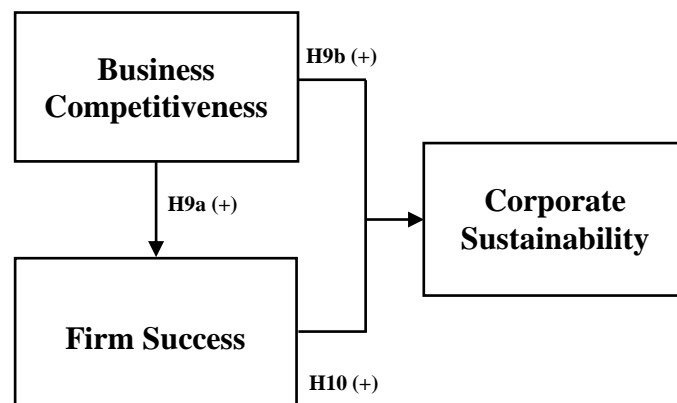


Table 12 Descriptive Statistics and Correlation Matrix of Business Competitiveness, Firm Success, and Corporate Sustainability

Variables	BUC	FSU	CSU
Mean	4.44	4.43	4.48
S.D.	.43	.42	.43
FSU	.572***		
CSU	.483***	.636***	
FA	.104	.059	.205**
FS	.021	.047	.026

*** $p < 0.01$, ** $p < 0.05$



Table 12 shows the correlation matrix of business competitiveness, firm success, and corporate sustainability. Firstly, the results show that business competitiveness is significantly and positively correlated to firm success ($r = 0.572$, $p < 0.01$) and corporate sustainability ($r = 0.483$, $p < 0.01$). Secondly, firm success has positive correlations with corporate sustainability ($r = 0.636$, $p < 0.01$). It is clear that these correlations are less than 0.90 as recommended by Hair et al. (2010). The maximum value of VIF is 1.499 which is lower than the cut-off value of 10 (Hair et al., 2006). Both criteria point out that the multicollinearity problem should not be of concern.

Table 13 Results of Regression Analysis for the Effects of Business Competitiveness on Firm Success, and Corporate Sustainability

Independent Variables	Dependent Variables	
	FSU	CSU
	Equation 10	Equation 11
Business Competitiveness (BUC) (H9a-b)	.572*** (.071)	.158** (.078)
Firm Success (FSU) (H10)		.538*** (.078)
Firm age (FA)	-.038 (.245)	.568*** (.222)
Firm size (FS)	.076 (.148)	-.102 (.134)
Adjusted R ²	.313	.436
Maximum VIF	1.098	1.499

*** $p < 0.01$, ** $p < 0.05$, Beta coefficients with standard errors in parenthesis

For the hypothesis testing, the results from Table 13 suggest that business competitiveness has significant effect on firm success (H9a: $\beta_{52} = 0.572$, $p < 0.01$), and corporate sustainability (H9b: $\beta_{55} = 0.158$, $p < 0.05$). Business competitiveness is a firm's ability to acquire, develop, and exploit existing resources, which is a critical factor required for driving a firm's success (Testa, Iraldo, and Frey, 2011). Thus,



business competitiveness is a tool for resisting competition by improvement of a firm's ability. Moreover, business competitiveness tends to lead to firm success and corporate sustainability. **Hence, Hypotheses 9a and 9b are supported.**

As can be seen from Table 13, the significant effect of firm success on corporate sustainability was found (H10: $\beta_{56} = 0.538$, $p < 0.01$). The results imply that firm success affects corporate sustainability due to firms accomplishing, developing, can creating more effectiveness that can lead to corporate sustainability. The previous research shows that firm success are critical to the development and execution of long-term success, which can then lead to corporate sustainability (Lozano, Carpenter, and Huisingh, 2015). **Thus, Hypothesis 10 is supported.**

For the control variables, firm age has no significant influence on firm success ($\beta_{53} = -0.038$, $p > 0.10$). Hence, the relationships between business competitiveness and firm success are not influenced by firm age. Whereas, firm age has a significant positive on corporate sustainability ($\beta_{57} = 0.568$, $p < 0.10$). Therefore, the relationships between business competitiveness and corporate sustainability are influenced by firm age. Furthermore, firm size has no significant influence on firm success ($\beta_{54} = 0.076$, $p > 0.10$), and corporate sustainability ($\beta_{58} = -0.102$, $p > 0.10$). As a result, the overall relationships among business competitiveness, firm success, and corporate sustainability are not affected by firm size.



The Relationships among the Antecedents, Employee Creativity Management Capability, and Moderating Role of Technology Growth

Figure 10 The Relationships among the Antecedents, Employee Creativity Management Capability, and Moderating Role of Technology Growth

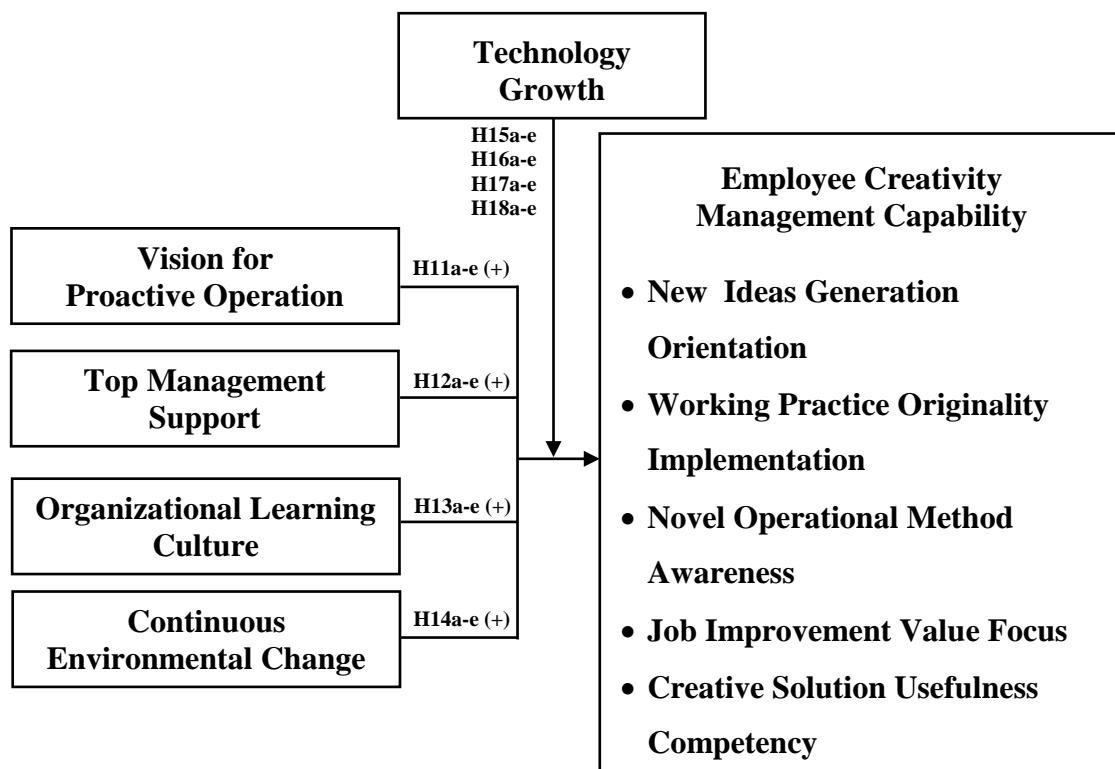


Figure 10 illustrates the relationships among four antecedent constructs: vision for proactive operations, top management support, organizational learning culture, and continuous environmental change which are proposed in hypotheses 11a-e to 14a-e. The relationships in each hypothesis are all proposed in a positive direction. These hypotheses can be transformed into the regression models 12, 14, 16, and 18. Moreover, the moderating role of technology growth is proposed to positively moderate the relationships among antecedents and each of five dimensions of employee creativity management capability. The aforementioned relationships are presented in hypotheses 15a-e to 18a-e. According to these hypotheses, the regression equations in models 13, 15, 17, and 21 are developed.



Table 14 Descriptive Statistics and Correlation Matrix of Each Dimension of Employee Creativity Management Capability, Its Antecedents, and Technology Growth

Variables	NIG	WPO	NOM	JIV	CSC	VPO	TMS	OLC	CEC	TEG
Mean	4.40	4.38	4.46	4.43	4.48	4.61	4.44	4.46	4.49	4.50
S.D.	.42	.43	.39	.40	.39	.37	.40	.40	.38	.39
WPO	.411***									
NOM	.331***	.537***								
JIV	.326***	.343***	.414***							
CSC	.280***	.370***	.353***	.521***						
VPO	.301***	.302***	.349***	.285***	.349***					
TMS	.294***	.433***	.370***	.235***	.271***	.400***				
OLC	.240***	.313***	.279***	.375***	.356***	.370***	.318***			
CEC	.229***	.377***	.251***	.361***	.354***	.438***	.466***	.636***		
TEG	.318***	.384***	.411***	.284***	.413***	.447***	.615***	.461***	.563***	
FA	.140	.186**	.137	.107	.087	.034	.008	-.106	-.122	-.096
FS	.090	.102	.160	.094	.034	.085	.111	-.006	.109	.034

*** $p < 0.01$, ** $p < 0.05$

The correlation among each dimension of employee creativity management capability, its antecedents, and technology growth, are shown in Table 14. The technology growth and the antecedents were treated as independent variables which were concerned about the multicollinearity problem. The results illustrate that the relationship of technology growth and the antecedents are comprised of vision for proactive operations, top management support, organizational learning culture, and continuous environmental change which have a significant effect on independent variables. Accordingly, the result exhibits the correlation coefficient among variables as 0.229-0.433 ($p < 0.01$) which does not exceed the critical value of 0.8 (Hair et al., 2010). In detail, firstly, vision for proactive operations is correlated with new ideas generation orientation ($r = 0.301$, $p < 0.01$), working practice originality implementation ($r = 0.302$, $p < 0.01$), novel operational method awareness ($r = 0.349$, $p < 0.01$), job improvement value focus ($r = 0.285$, $p < 0.01$), and creative solution usefulness competency ($r = 0.349$, $p < 0.01$). Secondly, top management support is correlated with new ideas



generation orientation ($r = 0.294, p < 0.01$), working practice originality implementation ($r = 0.433, p < 0.01$), novel operational method awareness ($r = 0.370, p < 0.01$), job improvement value focus ($r = 0.235, p < 0.01$), and creative solution usefulness competency ($r = 0.271, p < 0.01$). Thirdly, organizational learning culture has a positive correlation with new ideas generation orientation ($r = 0.240, p < 0.01$), working practice originality implementation ($r = 0.313, p < 0.01$), novel operational method awareness ($r = 0.279, p < 0.01$), job improvement value focus ($r = 0.375, p < 0.01$), and creative solution usefulness competency ($r = 0.356, p < 0.01$). Lastly, continuous environmental change has a positive correlation with new ideas generation orientation ($r = 0.229, p < 0.01$), working practice originality implementation ($r = 0.377, p < 0.01$), novel operational method awareness ($r = 0.251, p < 0.01$), job improvement value focus ($r = 0.361, p < 0.01$), and creative solution usefulness competency ($r = 0.354, p < 0.01$). For technology growth as a moderator, it has a significant and positive correlation with new ideas generation orientation ($r = 0.318, p < 0.01$), working practice originality implementation ($r = 0.384, p < 0.01$), novel operational method awareness ($r = 0.411, p < 0.01$), job improvement value focus ($r = 0.284, p < 0.01$), creative solution usefulness competency ($r = 0.413, p < 0.01$), vision for proactive operations ($r = 0.447, p < 0.01$), top management support ($r = 0.615, p < 0.01$), organizational learning culture ($r = 0.461, p < 0.01$), and continuous environmental change ($r = 0.563, p < 0.01$).

These mean that the relationship of those variables is independent of one another and are without a multicollinearity problem in this research. Moreover, the variance inflation factors (VIF) in equations 12 to 21 (Table 15) indicate the maximum value of 2.267. Since the VIF values are not more than 10 (Hair et al., 2010; Stevens, 2002), therefore, the independent variables are not correlated with others and the findings confirm that there is no multicollinearity problem to analyze (Hair et al., 2010).

Next, the results of regression analysis are explained in Table 15. Firstly, the results indicated that vision for proactive operations is playing a critical role in enhancing employee creativity management capability. The result illustrated that vision for proactive operations has significant effect on new ideas generation orientation (H11a: $\beta_{59} = 0.173, p < 0.10$), novel operational method awareness (H11c: $\beta_{93} = 0.198, p < 0.05$), and creative solution usefulness competency (H11e: $\beta_{127} = 0.188, p < 0.05$). In terms of vision for proactive operations, the finding is consistent with the view that



vision for proactive operations is associated with new ideas generation orientation (Griffin, Parker, and Mason, 2010), novel operational method awareness (Azadegan, 2011), and creative solution usefulness competency (Haeckel, 2004). As vision is one of the most important factors influencing corporate performance and innovation.

Therefore, Hypotheses 11a, 11c, and 11e are supported.

Conversely, vision for proactive operations has no significant effect on working practice originality implementation (H11b: $\beta_{76} = 0.064$, $p > 0.10$) and job improvement value focus (H11d: $\beta_{110} = 0.104$, $p > 0.10$). The finding of this research that is inconsistent with Moore, Konrad, and Hunt (2010) demonstrated that the vision of an organization directly related to the nature of working practice for sport organizations in the USA. Likewise, the study of Yang and Lee (2009) demonstrated that the vision of an organization is involved in job improvement. With regard to the context of furniture exporting businesses in Thailand, the results in this research indicated the vision for proactive operations does not support both working practice originality implementation, and job improvement value focus. This is probably because an organization does not let everyone into the organization and does not encourage participation and accomplishment of the vision for the future. This is though the vision for proactive operations refer to the direction and goals of the organization that are careful to cope with change in the future that is associated with the objective of the organization by analyzed opportunity and the threat of concept change which improves the current situation and develops efficiency. Because vision for proactive operations takes time to change taking place in the organization and takes time to change ideas of employee that lead to achieving the objectives of the organization, it unable effect on both working practice originality implementation, and job improvement value focus for a short period of time (Alt, Díez-de-Castro, and Lloréns-Montes, 2015). Thus, the vision for proactive operations could not affect working practice originality implementation and job improvement value focus. **Hence, Hypotheses 11b and 11d are not supported.**

Secondly, the regression results show that top management support has significant effect on new ideas generation orientation (H12a: $\beta_{60} = 0.179$, $p < 0.10$), working practice originality implementation. (H12b: $\beta_{77} = 0.293$, $p < 0.01$), and novel operational method awareness (H12c: $\beta_{94} = 0.252$, $p < 0.01$). The finding of this



research is consistent with Islam et al. (2009) demonstrated that top management support that is associated with new ideas generation as the foremost factor for the development of successful new products. In terms of working practice originality implementation and novel operational method awareness, the finding is also confirmed top management support can facilitate working practice and operational methods of an organization (Al Shaar et al., 2015; Elbanna, 2013). **Therefore, Hypotheses 12a, 12b, and 12c are supported.**

Nevertheless, the finding exhibited that top management support has no significant effect on job improvement value focus (H12d: $\beta_{111} = 0.039$, $p > 0.10$), and creative solution usefulness competency (H12e: $\beta_{128} = 0.076$, $p > 0.10$). The results are inconsistent with the study of Elbanna (2013) demonstrated that top management support is absolutely essential for an organization. The insignificant results may imply that top management support may not directly affect job improvement value focus and creative solution usefulness competency. For possible reasons from previous studies, Nah, Islam, and Tan (2009) found top management support has not been considered the foremost critical factor for the use of the problem solution in the operating procedures of the organization. That is the problem solution of organization can achieve success by without any effect of top management support. Likewise, Marble (2003) who suggested that top management support is not critical factor affecting the problem solution and cannot reducing efficiency and flexibility of the operating procedures in organization, even without the support of top management. From the reason above, there is appropriate description for the reason that top management support has no significant effect on job improvement value focus and creative solution usefulness competency. **Thus, Hypotheses 12d and 12e are not supported.**

Thirdly, hypothesis 13 shows that organizational learning culture has significant effect on novel operational method awareness (H13c: $\beta_{95} = 0.178$, $p < 0.05$), job improvement value focus (H13d: $\beta_{112} = 0.237$, $p < 0.05$), and creative solution usefulness competency (H13e: $\beta_{129} = 0.188$, $p < 0.10$). From the result, it can be stated that organizational learning culture supports operational methods in the workplace (Kandemir and Hult, 2005) and can support employee efficiency, productivity, and satisfaction by providing learning opportunities to improve essential skills for daily operational problem-solving (Škerlavaj, Song, and Lee, 2010), and job efficiency



improvement in the workplace (Hung et al., 2010). The firms with higher organizational learning culture appear to have greater novel operational method awareness, job improvement value focus, and creative solution usefulness competency. **Therefore, Hypotheses 13c, 13d, and 13e are supported.** In contrast, organizational learning culture has no significant effect on new ideas generation orientation (H13a: $\beta_{61} = 0.134$, $p > 0.10$) and working practice originality implementation (H13b: $\beta_{78} = 0.111$, $p > 0.10$). This implies that organizational learning culture does not play a significant role in new ideas generation orientation and working practice originality implementation, even if organizational learning culture is associated with the generation of ideas for an organization (Martins and Terblanche, 2003), and working practice (Billett, 2004). However, the results in this research are inconsistent with prior studies. The possible reason for this is, the organizational learning culture relates the learning process by individuals in organization which are different depends on employees who believe that organizational learning culture and commitment that can developing their skills, which they may not support systematic to achieving organizational learning goals when perceived lower learning culture (Joo and Lim, 2009). Moreover, the concept of organizational learning culture is understood as a set of individual and organizational learning, which are composed of norms, values, and attitudes, that depend on individual's role among different units within an organization. Organizational learning culture is a variety complex of learning and knowledge through interaction between individuals and other individuals, which difficult to acknowledge anyone in an organization and is a challenge for organizations to create the capability of learning new knowledge (Škerlavaj, Štemberger, and Dimovski, 2007). Therefore, organizational learning culture has no positive significant impact on new ideas generation orientation and working practice originality implementation. **Hence, Hypotheses 13a and 13b are not supported.**

Lastly, the results indicate that continuous environmental change has no significant effect on five dimensions of employee creativity management capability, including new ideas generation orientation (H14a: $\beta_{62} = 0.001$, $p > 0.10$), working practice originality implementation (H14b: $\beta_{79} = 0.171$, $p > 0.10$), novel operational method awareness (H14c: $\beta_{96} = -0.063$, $p > 0.10$), job improvement value focus (H14d: $\beta_{113} = 0.161$, $p > 0.10$), and creative solution usefulness competency (H14e: $\beta_{130} = 0.138$,



$p > 0.10$). The result indicates that continuous environmental change cannot gain the outcomes of employee creativity management capability. Although, prior research demonstrates the role of continuous change within the business environment as a driving force that influences organizational effectiveness and individual task performance (Audia, Locke, and Smith, 2000). On the other hand, the results in this research indicate that continuous environmental change has no positive effect on new ideas generation orientation and working practice originality implementation. This is consistent with Bradley et al. (2011) who found that continuous environmental change is a barrier to stimulate the generation of ideas and working practice because adaptation to environmental change is often based on insufficient information that also is an obstacle to subsidiary organizations of the manufacturing and technology sectors in Sweden. The generation of ideas and working practice under continuous environmental change, are depended on the congruency relationship between strategic processes and organizational structure. In addition, Inoue and Lee (2011) found that environmental change has no significant impact on the methods of operation in a business for the short-term profitability in tourism-related industries, such as the restaurant, casino, hotel, and airline industries. In the same way, continuous change in the business environment can reduced the appropriateness of improved jobs to protect market position in U.S. bicycle industry (Dowell and Swaminathan, 2006). **Therefore**, continuous environmental change does not play significant role for explaining new ideas generation orientation and working practice originality implementation. **Thus, Hypotheses 14a, 14b, 14c, 14d, and 14e are not supported.**

For the control variables, firm age has significant effect on new ideas generation orientation ($\beta_{63} = 0.473$, $p < 0.10$), working practice originality implementation ($\beta_{80} = 0.724$, $p < 0.10$), and job improvement value focus ($\beta_{114} = 0.466$, $p < 0.10$). Thus, the relationships among antecedent variables, new ideas generation orientation, working practice originality implementation, and job improvement value focus are influenced by firm age. Whereas, firm age has no significant effect on novel operational method awareness ($\beta_{91} = 0.377$, $p > 0.10$), and creative solution usefulness competency ($\beta_{131} = 0.427$, $p > 0.10$). Therefore, the relationship among the antecedent variables, novel operational method awareness, and creative solution usefulness competency are not influenced by firm age. Likewise, firm size has no significant effect on new ideas



generation orientation ($\beta_{64} = 0.033$, $p > 0.10$), working practice originality implementation ($\beta_{81} = -0.031$, $p > 0.10$), novel operational method awareness ($\beta_{98} = 0.182$, $p > 0.10$), job improvement value focus ($\beta_{115} = 0.050$, $p > 0.10$), and creative solution usefulness competency ($\beta_{132} = -0.082$, $p > 0.10$). Therefore, the relationships among antecedent and each dimension of employee creativity management capability are not influenced by firm size.



Table 15 Results of Regression Analysis for the Effects of the Antecedent and Moderator on Employee Creativity Management Capability

Independent Variables	Dependent Variables									
	NIG		WPO		NOM		JIV		CSC	
	Equation 12	Equation 13	Equation 14	Equation 15	Equation 16	Equation 17	Equation 18	Equation 19	Equation 20	Equation 21
Vision for Proactive Operations (VPO) (H11a-e)	.173* (.093)	.103 (.110)	.064 (.086)	-.035 (.102)	.198** (.089)	.049 (.101)	.104 (.090)	-.017 (.105)	.188** (.090)	.114 (.103)
Top Management Support (TMS) (H12a-e)	.179* (.093)	.120 (.106)	.293*** (.086)	.274*** (.098)	.252*** (.089)	.179* (.098)	.039 (.091)	.047 (.101)	.076 (.090)	-.024 (.100)
Organizational Learning Culture (OLC) (H13a-e)	.134 (.105)	.117 (.111)	.111 (.097)	.131 (.103)	.178* (.101)	.180* (.102)	.237** (.102)	.256** (.106)	.188* (.102)	.153 (.104)
Continuous Environmental Change (CEC) (H14a-e)	.001 (.115)	-.013 (.120)	.171 (.106)	.140 (.111)	-.063 (.110)	-.126 (.111)	.161 (.112)	.162 (.115)	.138 (.111)	.076 (.113)
Technology Growth (TEG)		.197* (.118)		.153 (.109)		.337*** (.109)		.132 (.113)		.308*** (.111)
VOP x TEG (H15a-e)		-.081 (.094)		-.128 (.087)		-.206** (.087)		-.120 (.090)		-.001 (.089)
TMS x TEG (H16a-e)		.102 (.104)		.069 (.096)		.046 (.096)		.124 (.099)		-.038 (.098)
OLC x TEG (H17a-e)		-.093 (.101)		.029 (.093)		-.013 (.093)		.061 (.096)		.134 (.095)
CEC x TEG (H18a-e)		.101 (.101)		.045 (.093)		.153 (.093)		.113 (.097)		.066 (.095)
Firm age (FA)	.473* (.281)	.476* (.285)	.724*** (.259)	.753*** (.263)	.377 (.269)	.446* (.263)	.466* (.273)	.516* (.272)	.427 (.272)	.558** (.268)
Firm size (FS)	.033 (.170)	.071 (.172)	-.031 (.157)	.015 (.159)	.182 (.163)	.259 (.159)	.050 (.165)	.104 (.165)	-.082 (.165)	-.052 (.162)
Adjusted R ²	.120	.118	.252	.247	.191	.249	.167	.195	.176	.220
Maximum VIF	2.064	2.267	2.064	2.267	2.064	2.267	2.064	2.267	2.064	2.267

*** p < 0.01, ** p < 0.05, * p < 0.10, Beta coefficients with standard errors in parenthesis

The Moderating Role of Technology Growth

The results of the regression analysis in Table 15 illustrate the moderating effects of technology growth on the relationships among the four antecedents comprising vision for proactive operations, top management support, organizational learning culture, and continuous environmental change on each dimension of employee creativity management capability. The result and discussion on hypotheses testing are as follows.

Firstly, the firm's technology growth shows no influencing effect on the relationships among vision for proactive operations, new ideas generation orientation (H15a : $\beta_{70} = -0.081$, $p > 0.10$), working practice originality implementation (H15b : $\beta_{87} = -0.128$, $p > 0.10$), novel operational method awareness (H15c : $\beta_{104} = -0.206$, $p < 0.10$), job improvement value focus (H15d : $\beta_{121} = -0.120$, $p > 0.10$), and creative solution usefulness competency (H15e : $\beta_{138} = -0.001$, $p > 0.10$). Despite the fact that the role of vision for proactive operations are the major determinant and the most influential factor determines organizational policy to enhance business competitiveness. The implementations of employee creativity management capability, is due to the integration of an organization's management capabilities and employee's creativity which needs to be supported by vision for proactive operations (Haeckel, 2004). For the non-significant results, it is possible that the moderating role of technology growth is not strong enough to support the relationship between vision for proactive operations and its consequences. This is probably because that vision for operations does not provide meaning in both the present and the future potential, which cannot be empowered and support leaders and followers in the organization for making proactive changes. It will result in a vision that is just the attitude of the executive (Montani, Odoardi, and Battistelli, 2014). Due to technology growth contributes to the adaptation of firms in order to respond to continuing technological progress, which is enhancing the ability of firm to adapt successfully to growth economic (Kishore, Agrawal, and Rao, 2004). As a consequence, top executives who work closely with operation management under technology growth and changing environment. They try to determine firm strategies, which is an appropriate and consistent approach to the situation (Lee, Shiue, and Chen, 2016). These is barriers to adapting successfully of firms to achieve employee creativity management due to firms must have creating a abilities, experience and skill to adapt to



technology growth, which is absolutely essential to increase employee creativity management that can makes firm strong than the competition in business (Chandra and Skinner, 2012). In order to survive in technology growth environment, firms must adapt strategy, skill, and policy in response to changing, which may be unable to adapt to develop specific management that cannot help firm improve skills, abilities, and expertise, which are barriers to generate employee creativity management capability, including new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. **Therefore, Hypotheses 15a, 15b, 15c, 15d, and 15e are not supported.**

Secondly, the results also present the moderating role of technology growth in the relationships among top management support, new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. For the non-significant results, technology growth failed to illustrate the significant moderating effect on the relationships among top management support, new ideas generation orientation ($H16a : \beta_{71} = 0.102, p > 0.10$), working practice originality implementation ($H16b : \beta_{88} = 0.069, p > 0.10$), novel operational method awareness ($H16c : \beta_{105} = 0.046, p > 0.10$), job improvement value focus ($H16d : \beta_{122} = 0.124, p > 0.10$), and creative solution usefulness competency ($H16e : \beta_{139} = -0.038, p > 0.10$). Indeed, technology growth, as an environmental munificence, can influence the goals and improved processes of the organization through the support of top management deemed critical for organizational success. Top management is the key influence to inspire, encourage, enable and facilitate change opportunities for individuals within the organization to work collaboratively to take it forward (Al Shaar, et al., 2015). The technology growth is the external environment of an organization which is necessary to enhance a potential employee because it is used as important mechanism to driving the success of organizational business goals and objectives through the support offered by top management (Ridge, et al., 2017). However, if a firm is giving top priority to technology growth but it's not fit for organizational operation, can lead to a workplace conflict that occur between executive and employees. Workplace conflict is barriers to teamwork to respond to rapidly changing to finding problems solution for organization



due to the lack of effective exchange of information among memberships of the organization (Nesterkin, et al., 2016). Moreover, an organization must take a lot of time and effort to develop the working practice and cannot generate the organizational innovation to response to customer need before its competitors and also lead to reduce a customer's expectations which is greatly affected by technology growth and business environment change (Estrada and López-Salido, 2004). Additionally, the high concentrations of organization in response to the technology growth may also lead to the lack of adequate and appropriate materials due to it is not easy to get effective and efficiency of a business operation which required a lot of money and time to be support from top management (García-Sánchez, García-Morales, and Bolívar-Ramo, 2015). Moreover, it is clear that the moderating role of technology growth is not strong enough to boost the relationships between top management support and all of the five employee creativity management capability dimensions (new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus and creative solution usefulness competency). **Thus, Hypotheses 16a, 16b, 16c, 16d and 16e are not supported.**

Thirdly, the insignificant results demonstrate the moderating role of technology growth on the relationships among organizational learning culture, new ideas generation orientation (H17a : $\beta_{72} = -0.093$, $p > 0.10$), working practice originality implementation (H17b : $\beta_{89} = 0.029$, $p > 0.10$), novel operational method awareness (H17c : $\beta_{106} = -0.013$, $p > 0.10$), job improvement value focus (H17d : $\beta_{123} = 0.061$, $p > 0.10$), and creative solution usefulness competency (H17e : $\beta_{140} = 0.134$, $p > 0.10$). The results of this study indicated that the relationship between organizational learning culture and all of the five employee creativity management capability dimensions cannot be influenced by technology growth alone. According, Hung et al. (2010) organizational learning culture is influenced by technology growth used in conjunction with creating and developing the dynamic capabilities of firms that can lead to greater opportunities and contribute to the success of a business. Technology growth contributes to the firm's adaptation that lead firms to invest technology infrastructure such as computer hardware, operating system, internet, networking and telecommunications, are very important to response to competition in the current business environment, which relate to both ability and skills of firm that lead to superior firm's performance (Luftman, et al. 2012). The results



indicate that firm cannot produce organizational learning culture to support operation under technology growth. Rapidly changing technology environment cannot create and reinforce organizational learning culture because do not increase organizational learning, which originate from firm cannot utilize the ability to adopt new technologies to organizational operations. Moreover, firms lack the adoption of new technology to resolve organizational problem. This is consistent with Masopust (2016) who demonstrates that technology growth is regarded as important factor for organizations, but if firm lack transferring appropriate technologies to employee of organization that can adversely affect ability of organizational operation in decreasing efficiency and effectiveness. **Therefore, Hypotheses 17a, 17b, 17c, 17d and 17e are not supported.**

Fourth, technology growth does not significantly moderate the relationships between continuous environmental change and all of five dimensions of employee creativity management capability, consistent with new ideas generation orientation (H18a : $\beta_{73} = 0.101$, $p > 0.10$), working practice originality implementation (H18b : $\beta_{90} = 0.045$, $p > 0.10$), novel operational method awareness (H18c : $\beta_{107} = 0.153$, $p > 0.10$), job improvement value focus (H18d : $\beta_{124} = 0.113$, $p > 0.10$), and creative solution usefulness competency (H18e : $\beta_{141} = 0.066$, $p > 0.10$). The reason for technology growth does not force the relationship between continuous environmental change and all of five dimensions of employee creativity management capability that may be possible in environmental change. Giedraitis (2014) demonstrates that current firms confront the various natures of continuous environmental change that are inevitable in managing overall business operations. It is noticeable that technology growth used in conjunction with responding to customer needs and can stimulate the firms to remain and maintain organizational innovation and business competitiveness in long-term. The results indicate that technology growth scenarios does not have a direct effect on firm to recognize the need to response to rapid technological change, which it is very difficult to understand the perspective of rapidly changing technology that is happening in business environment of firm. The possible reason is that because of firms insufficient deeper learning about the business contextual in Thailand may not fit with technology growth and continuous environmental change (Intarakumnerd, Chairatana, and Tangchitpiboon, 2002). Furthermore, it is possible that a lack of insight into the technology potential of firm and cannot respond to the impact of rapidly changing



technology, which firm cannot find a way to gain and maintain business competitiveness (Wu, et al., 2014). The possible explanation is that the moderating role of technology growth is not strong enough to enhance the relationship between continuous environmental change and all of the five dimensions of employee creativity management capability. **Hence, Hypotheses 18a, 18b, 18c, 18d, and 18e are not supported.**

For the control variables, firm age has significant influences on the moderating effect of technology growth on the relationships among employee creativity management capability's antecedents, new ideas generation orientation ($\beta_{74} = 0.476$, $p < 0.10$), working practice originality implementation ($\beta_{91} = 0.753$, $p < 0.01$), novel operational method awareness ($\beta_{108} = 0.446$, $p < 0.10$), job improvement value focus ($\beta_{125} = 0.516$, $p < 0.10$), and creative solution usefulness competency ($\beta_{142} = 0.558$, $p < 0.05$). Thus, the moderating effect of technology growth on the relationships among employee creativity management capability's dimensions and its antecedent are influenced by firm age. Moreover, firm size also illustrates no significant influences on the moderating effect of technology growth on the relationship among employee creativity management capability's antecedents, new ideas generation orientation ($\beta_{75} = 0.071$, $p > 0.10$), working practice originality implementation ($\beta_{81} = 0.015$, $p > 0.10$), novel operational method awareness ($\beta_{98} = 0.259$, $p > 0.10$), job improvement value focus ($\beta_{126} = 0.104$, $p > 0.10$), and creative solution usefulness competency ($\beta_{143} = -0.052$, $p > 0.10$). Therefore, the moderating effect of technology growth on the relationships among employee creativity management capability's dimensions and its antecedents are not influenced by firm size.

Summary

The brief summary of the main content in this chapter demonstrated a multiple regression analysis result by eighteen hypotheses. The research results reveal that new ideas generation orientation, working practice originality implementation, and job improvement value focus have a partial direct effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success. Interestingly, a firm's novel operational method on the outcomes is only



meaningful to organizational excellence. On the other hand, creative solution usefulness competency has no meaning only in relationship with business competitiveness.

In the consequence factors, organizational innovation has significant effect on organizational productivity, business competitiveness, and firm success. In addition, organizational productivity has positive significance on business competitiveness and firm success. Moreover, organizational excellence has significant effect on business competitiveness and firm success. Business competitiveness has positive significance on firm success and corporate sustainability. Meanwhile, firm success has significant effect on corporate sustainability.

In the antecedent factors, vision for proactive operations has significant effect on new ideas generation orientation, novel operational method awareness, and creative solution usefulness competency. In addition, top management support has significant effect on new ideas generation orientation, working practice originality implementation, and novel operational method awareness. Meanwhile, organizational learning culture has significant effect on novel operational method awareness, job improvement value focus, and creative solution usefulness competency. However, continuous environmental change is no significance to all dimensions of employee creativity management capability.

The moderating role of technology growth does not seem to have a particular effect on the relationships among vision for proactive operations, top management support, organizational learning culture, and continuous environmental change and each dimension of employee creativity management capability. In summary, the results of testing eighteen hypotheses shown in Hypotheses 7, 8, 9, and 10 are fully supported. Similarly, Hypotheses 1, 2, 3, 4, 5, 6, 11, 12, and 13 are partially supported. However, Hypotheses 14, 15, 16, 17, And 18 are not supported. Also, the summary of hypotheses results are provided in Table 16.



Table 16 Summary of the Results of Hypothesis Testing

Hypotheses	Description of Hypothesized Relationships	Results
H1a	New ideas generation orientation has a positive influence on organizational innovation.	Supported
H1b	New ideas generation orientation has a positive influence on organizational productivity.	Not Supported
H1c	New ideas generation orientation has a positive influence on organizational excellence.	Not Supported
H1d	New ideas generation orientation has a positive influence on business competitiveness.	Not Supported
H1e	New ideas generation orientation has a positive influence on firm success.	Supported
H2a	Working practice originality implementation has a positive influence on organizational innovation.	Supported
H2b	Working practice originality implementation has a positive influence on organizational productivity.	Supported
H2c	Working practice originality implementation has a positive influence on organizational excellence.	Supported
H2d	Working practice originality implementation has a positive influence on business competitiveness.	Supported
H2e	Working practice originality implementation has a positive influence on firm success.	Not Supported
H3a	Novel operational method awareness has a positive influence on organizational innovation.	Not Supported
H3b	Novel operational method awareness has a positive influence on organizational productivity.	Not Supported
H3c	Novel operational method awareness has a positive influence on organizational excellence.	Supported
H3d	Novel operational method awareness has a positive influence on business competitiveness.	Not Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H3e	Novel operational method awareness has a positive influence on firm success.	Not Supported
H4a	Job improvement value focus has a positive influence on organizational innovation.	Not Supported
H4b	Job improvement value focus has a positive influence on organizational productivity.	Supported
H4c	Job improvement value focus has a positive influence on organizational excellence.	Not Supported
H4d	Job improvement value focus has a positive influence on business competitiveness.	Supported
H4e	Job improvement value focus has a positive influence on firm success.	Supported
H5a	Creative solution usefulness competency has a positive influence on organizational innovation.	Supported
H5b	Creative solution usefulness competency has a positive influence on organizational productivity.	Supported
H5c	Creative solution usefulness competency has a positive influence on organizational excellence.	Supported
H5d	Creative solution usefulness competency has a positive influence on business competitiveness.	Not Supported
H5e	Creative solution usefulness competency has a positive influence on firm success.	Supported
H6a	Organizational innovation has a positive influence on organizational productivity.	Supported
H6b	Organizational innovation has a positive influence on organizational excellence.	Supported
H6c	Organizational innovation has a positive influence on business competitiveness.	Not Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H6d	Organizational innovation has a positive influence on firm success.	Supported
H7a	Organizational productivity has a positive influence on business competitiveness.	Supported
H7b	Organizational productivity has a positive influence on firm success.	Supported
H8a	Organizational excellence has a positive influence on business competitiveness.	Supported
H8b	Organizational excellence has a positive influence on firm success.	Supported
H9a	Business competitiveness has a positive influence on firm success.	Supported
H9b	Business competitiveness has a positive influence on corporate sustainability.	Supported
H10	Firm success has a positive influence on corporate sustainability.	Supported
H11a	Vision for proactive operations has a positive influence on new ideas generation orientation.	Supported
H11b	Vision for proactive operations has a positive influence on working practice originality implementation.	Not Supported
H11c	Vision for proactive operations has a positive influence on novel operational method awareness.	Supported
H11d	Vision for proactive operations has a positive influence on job improvement value focus	Not Supported
H11e	Vision for proactive operations has a positive influence on creative solution usefulness competency.	Supported
H12a	Top management support has a positive influence on new ideas generation orientation	Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H12b	Top management support has a positive influence on working practice originality implementation.	Supported
H12c	Top management support has a positive influence on novel operational method awareness.	Supported
H12d	Top management support has a positive influence on job improvement value focus.	Not Supported
H12e	Top management support has a positive influence on creative solution usefulness competency.	Not Supported
H13a	Organizational learning culture has a positive influence on new ideas generation orientation.	Not Supported
H13b	Organizational learning culture has a positive influence on working practice originality implementation.	Not Supported
H13c	Organizational learning culture has a positive influence on novel operational method awareness.	Supported
H13d	Organizational learning culture has a positive influence on job improvement value focus	Supported
H13e	Organizational learning culture has a positive influence on creative solution usefulness competency.	Supported
H14a	Continuous environmental change has a positive influence on new ideas generation orientation.	Not Supported
H14b	Continuous environmental change has a positive influence on working practice originality implementation.	Not Supported
H14c	Continuous environmental change has a positive influence on novel operational method awareness.	Not Supported
H14d	Continuous environmental change has a positive influence on job improvement value focus	Not Supported
H14e	Continuous environmental change has a positive influence on creative solution usefulness competency.	Not Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H15a	The relationships between vision for proactive operations and new ideas generation orientation will be positively moderated by technology growth.	Not Supported
H15b	The relationships between vision for proactive operations and working practice originality implementation will be positively moderated by technology growth.	Not Supported
H15c	The relationships between vision for proactive operations and novel operational method awareness will be positively moderated by technology growth.	Not Supported
H15d	The relationships between vision for proactive operations and job improvement value focus will be positively moderated by technology growth.	Not Supported
H15e	The relationships between vision for proactive operations and creative solution usefulness competency will be positively moderated by technology growth.	Not Supported
H16a	The relationships between top management support and new ideas generation orientation will be positively moderated by technology growth.	Not Supported
H16b	The relationships between top management support and working practice originality implementation will be positively moderated by technology growth.	Not Supported
H16c	The relationships between top management support and novel operational method awareness will be positively moderated by technology growth.	Not Supported
H16d	The relationships between top management support and job improvement value focus will be positively moderated by technology growth.	Not Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H16e	The relationships between top management support and creative solution usefulness competency will be positively moderated by technology growth.	Not Supported
H17a	The relationships between organizational learning culture and new ideas generation orientation will be positively moderated by technology growth.	Not Supported
H17b	The relationships between organizational learning culture and working practice originality implementation will be positively moderated by technology growth.	Not Supported
H17c	The relationships between organizational learning culture and novel operational method awareness will be positively moderated by technology growth.	Not Supported
H17d	The relationships between organizational learning culture and job improvement value focus will be positively moderated by technology growth.	Not Supported
H17e	The relationships between organizational learning culture and creative solution usefulness competency will be positively moderated by technology growth.	Not Supported
H18a	The relationships between continuous environmental change and new ideas generation orientation will be positively moderated by technology growth.	Not Supported
H18b	The relationships between continuous environmental change and working practice originality implementation will be positively moderated by technology growth.	Not Supported
H18c	The relationships between continuous environmental change and novel operational method awareness will be positively moderated by technology growth.	Not Supported



Table 16 Summary of the Results of Hypothesis Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H18d	The relationships between continuous environmental change and job improvement value focus will be positively moderated by technology growth.	Not Supported
H18e	The relationships between continuous environmental change and creative solution usefulness competency will be positively moderated by technology growth.	Not Supported



CHAPTER V

CONCLUSION

The previous chapter reveals the results and discussion that involve respondent characteristics and descriptive statistics, correlation analysis, and hypotheses testing and results. Therefore, this chapter details the overview of all findings, and consists of the summary of the findings and hypothesis testing, theoretical and managerial contributions; and then concludes with a discussion of the research and directions for future research.

Summary of Results

This research investigates the relationships among employee creativity management capability, organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and corporate sustainability of furniture exporting businesses in Thailand. The newly proposed dimensions of employee creativity management capability are comprised of new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. Moreover, this research also investigated the relationships among each dimension of employee creativity management capability, organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success. In addition, this research investigates the relationships among business competitiveness, firm success, and corporate sustainability. Furthermore, vision for proactive operations, top management support, organizational learning culture, and continuous environmental change are assigned as the antecedents of employee creativity management capability. Moreover, technology growth is designed to moderate the relationships among the four antecedents and each of five dimensions of employee creativity management capability.

The key research question of this research is, “How does employee creativity management capability relate to corporate sustainability?” In detail, there are eight specific research questions as follows: 1) How does of each of five dimensions of



employee creativity management capability (new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency) have an effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success? 2) How does organizational innovation influence organizational productivity, organizational excellence, business competitiveness, and firm success? 3) How does organizational productivity influence business competitiveness, and firm success? 4) How does organizational excellence influence business competitiveness, and firm success? 5) How does business competitiveness influence firm success, and corporate sustainability? 6) How does firm success influence corporate sustainability? 7) How do vision for proactive operations, top management support, organizational learning culture, and continuous environmental change influence each of the five dimensions of employee creativity management capability? and, 8) How does technology growth moderate the influence of vision for proactive operations, top management support, organizational learning culture, and continuous environment change which influence each of five dimensions of employee creativity management capability?

In this research, two theories were integrated in explaining the relationship and phenomena that are found in the research; namely the resource-advantage theory and contingency theory. For the empirical study, the furniture exporting businesses in Thailand are selected as the population and sample because of a highly competitive business environment and the context of support for creativity. The population sample of this research is provided by the Department of International Trade Promotion Ministry of Commerce in Thailand, accessed in March 2016. For the data collection, the self-administrated questionnaire was employed to gather the data. Thus, 740 questionnaires were sent to managing directors and managing partners of exporting furniture firms in Thailand, who are the key informants. The conceptual model was tested by using the mail survey result of 144 returned and 139 usable mailings; 20.68 % response rate. Moreover, the research instrument was developed from a review of the related literature. To evaluate, a measurement scale in research methodology is considered suitable for further analysis and is considered acceptable for validity and reliability. In hypothesis testing, a multiple regression analysis in this research was applied to conduct the hypothesis test following the conceptual model.



According to the first specific research question, the findings indicate that new ideas generation orientation, working practice originality implementation, and job improvement value focus, which have a partial, direct effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success. Furthermore, novel operational method awareness has a positive relationship with only organizational excellence. Interestingly, creative solution usefulness competency has positive relationships with all of its consequences, but business competitiveness does not. Therefore, the relationships among each dimension of employee creativity management capability and its consequences, based on hypotheses 1, 2, 3, 4 and 5, are partially supported.

For the second specific research question, the findings also indicate that organizational innovation has a significant, positive effect on organizational productivity, business competitiveness, and firm success. Thus, hypothesis 6 is partially supported. With regard to the third specific research question, the results demonstrate that organizational productivity has a significant, positive effect on business competitiveness and firm success, based on hypotheses 7 that are fully supported. For the fourth specific research question, organizational excellence has a significant, positive effect on business competitiveness and firm success, based on hypotheses 8 that is fully supported. According to the fifth specific research question, business competitiveness has a significant, positive effect on firm success and corporate sustainability, based on hypotheses 9 that are fully supported. The sixth specific research question, firm success has a significant, positive effect on corporate sustainability, based on hypotheses 10 is fully supported.

For the seventh specific research question, vision for proactive operations has a significant, positive effect on new ideas generation orientation, novel operational method awareness, and creative solution usefulness competency. Top management support has a significant, positive effect on new ideas generation orientation, working practice originality implementation, and novel operational method awareness. Organizational learning culture has a significant, positive effect on novel operational method awareness, job improvement value focus, and creative solution usefulness competency. However, continuous environmental change is not significant to all dimensions of employee creativity management capability. Therefore, hypotheses 11, 12 and 13 are partially supported; whereas, hypotheses 14 is not supported.



Finally, for the moderating role of technology growth found in the eighth specific research question, the findings indicate that technology growth does not play a significant moderating role in the relationships among vision for proactive operations, top management support, organizational learning culture, and continuous environmental change, and each dimension of employee creativity management capability. Therefore, hypotheses 15 to 18 are not supported.

In summary, it is clear that employee creativity management capability is particularly important to gain and maintain business competitiveness, firm success and corporate sustainability. In particular, new ideas generation orientation, working practice originality implementation, job improvement value focus, and creative solution usefulness competency seem to be the foremost ingredients of employee creativity management capability that lead to increased organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and achieving corporate sustainability. Accordingly, the summary of all research questions and results is included in Table 17 and Figure 11 below.



Table 17 Summary of the Results and Conclusions of All Hypotheses Testing

Research Questions	Hypotheses	Results	Conclusion
Specific Research Questions: (1) How does of each of five dimensions of employee creativity management capability have an effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success?	Hypotheses 1a-e 2a-e 3a-e 4a-e and 5a-e	<ul style="list-style-type: none"> • New ideas generation orientation, working practice originality implementation, and job improvement value focus, which have a partial direct effect on organizational innovation, organizational productivity, organizational excellence, business competitiveness, and firm success. • Novel operational method awareness has a positive relationship with only organizational excellence. • Creative solution usefulness competency has positive relationships with all of its consequences, but business competitiveness does not. 	Partially supported



Table 17 Summary of the Results and Conclusions of All Hypotheses Testing
(continued)

Research Questions	Hypotheses	Results	Conclusion
(2) How does organizational innovation influence organizational productivity, organizational excellence, business competitiveness, and firm success?	Hypotheses 6a-d	<ul style="list-style-type: none"> Organizational innovation has a significant, positive effect on organizational productivity, business competitiveness, firm success 	Partially supported
(3) How does organizational productivity influence business competitiveness, and firm success?	Hypotheses 7a-b	<ul style="list-style-type: none"> Organizational productivity has a significant, positive effect on business competitiveness and firm success. 	Fully Supported
(4) How does organizational excellence influence business competitiveness, firm success?	Hypotheses 8a-b	<ul style="list-style-type: none"> Organizational excellence has a significant, positive effect on business competitiveness and firm success. 	Fully Supported
(5) How does business competitiveness influence firm success, corporate sustainability?	Hypotheses 9a-b	<ul style="list-style-type: none"> Business competitiveness has a significant, positive effect on firm success and corporate sustainability. 	Fully Supported
(6) How does firm success influence corporate sustainability?	Hypotheses 10	<ul style="list-style-type: none"> Firm success has a significant, positive effect on corporate sustainability 	Fully Supported



Table 17 Summary of the Results and Conclusions of All Hypotheses Testing
(continued)

Research Questions	Hypotheses	Results	Conclusion
(7) How do vision for proactive operations, top management support, organizational learning culture, and continuous environmental change influence each of the five dimensions of employee creativity management capability?	Hypotheses 11a-e 12a-e 13a-e 14a-e	<ul style="list-style-type: none"> • Vision for proactive operations has a significant, positive effect on new ideas generation orientation, novel operational method awareness, and creative solution usefulness competency. • Top management support has a significant, positive effect on new ideas generation orientation, working practice originality implementation, and novel operational method awareness. • Organizational learning culture has a significant, positive effect on novel operational method awareness, job improvement value focus, and creative solution usefulness competency. 	Partially Supported

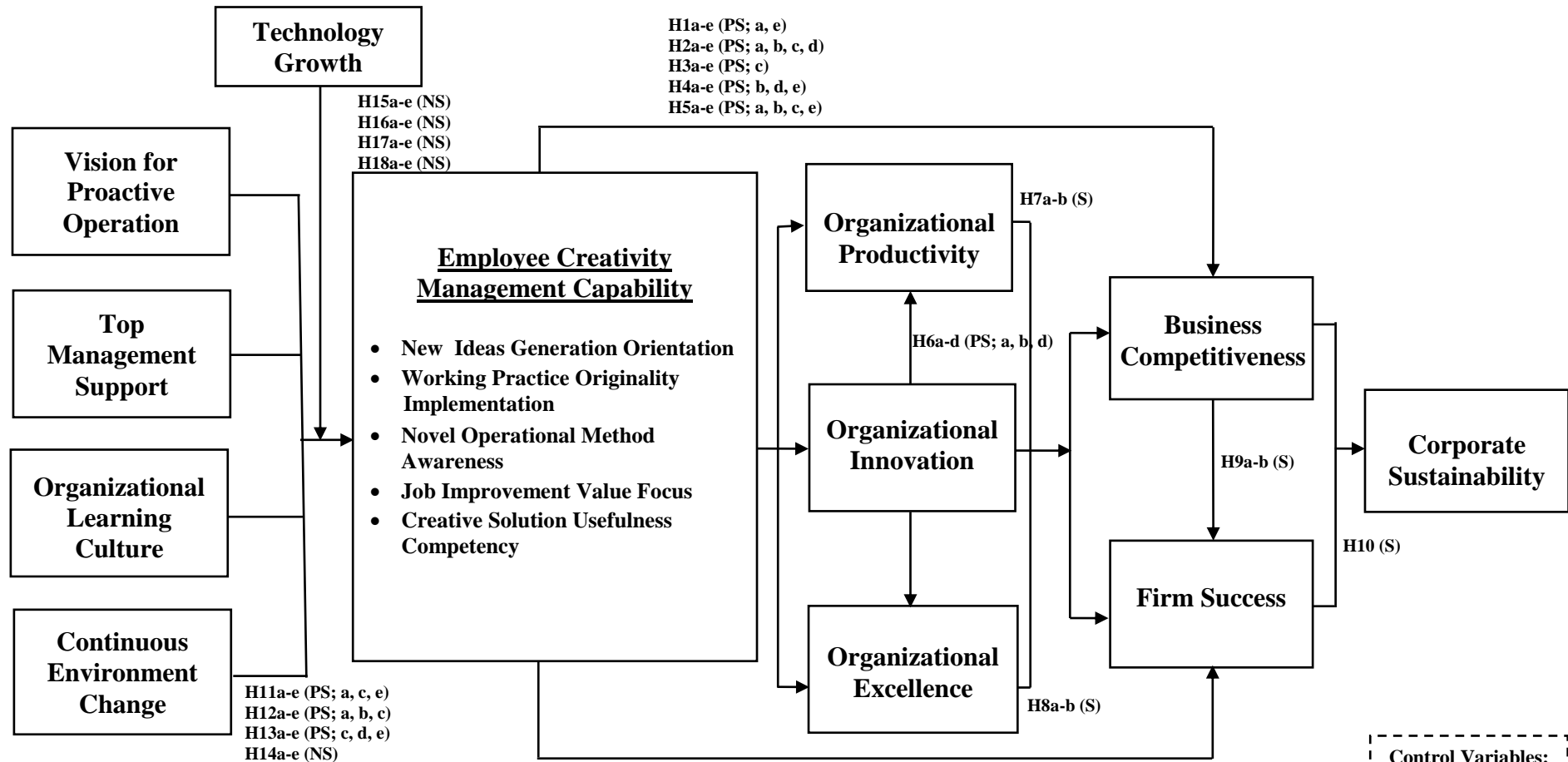


Table 17 Summary of the Results and Conclusions of All Hypotheses Testing
(continued)

Research Questions	Hypotheses	Results	Conclusion
(7) How do vision for proactive operations, top management support, organizational learning culture, and continuous environmental change influence each of the five dimensions of employee creativity management capability?	Hypotheses 11a-e 12a-e 13a-e 14a-e	<ul style="list-style-type: none"> Continuous environmental change is not significant to all dimensions of employee creativity management capability. 	Partially Supported
(8) How does technology growth moderate the influence of vision for proactive operations, top management support, organizational learning culture, and continuous environment change which influence each of five dimensions of employee creativity management capability?	Hypotheses 15a-e 16a-e 17a-e 18a-e	<ul style="list-style-type: none"> Technology growth does not moderates the positive relationships among vision for proactive operations, top management support, organizational learning culture, and continuous environmental change and each dimension of employee creativity management capability. 	Not Supported



Figure 11 Summary of Hypothesis Testing Results



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

The purpose of this research aims to investigate the relationships among employee creativity management capability, organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and corporate sustainability combined with the antecedent variables and the moderating effects as illustrated in Figure 1. Interestingly, the foremost theoretical contributions linked to a comprehensive conceptualization view of employee creativity management capability as a multidimensional construct, are ones that led to the development of new constructs and dimensions, differentiating from previous literature on employee creativity and an organization management capabilities. The understanding of the conceptual framework is linked together by two theories, the resource-advantage theories and contingency theories. The convergence between the two main theories that explain how a firm is to succeed in achieving its goals can bring crucial benefit to a firm by building and maintaining business competitiveness, firm success and corporate sustainability in the changing business environment. It clarifies features of employee creativity management capability for future investigation. As a result, this research suggests three of the foremost theoretical contributions to the employee creativity management capability literature as follows:

Firstly, employee creativity management capability is the combination of congruence between employee creativity and an organization's management capabilities. Based on resource-advantage theory, an organization's management capabilities to stimulate employee creativity are one of the crucial focuses for firm success and business competitiveness that will become increasingly important to corporate sustainability in a rapidly changing competitive environment. A major theoretical contribution provides an understanding of the identification of five dimensions of employee creativity management capability for an empirical examination. The resource-advantage theory demonstrates the firm's ability to achieve competitive advantage by creating organizational innovation, excellence, and productivity to address dynamic and uncertain business environment. The concept of the resource-advantage theory explains how firms can achieve competitive advantage



through optimizing internal and external resources and capabilities that can use to create new potential resources and developed into a sustainable competitive advantage in changing business environment. Therefore, the results confirm that the concept of the resource-advantage theory suitably explains that employee creativity management capability is a firm's ability to generate and integrate resources in order to respond to a rapidly changing environment that can build business competitiveness and firm success for achieving corporate sustainability in future. Furthermore, the contingency theory represents the firm's ability is regarded as prerequisites for success in business to remain flexible and change to suit an organization's structure to adapt quickly in response to dynamic and uncertain competitive environment. Thus, firm's ability is a core requirement for the appropriate adoptions to cope with a complex business environment context depends on optimal resource allocation. The right strategies as the important driving force of successful business are using it for suitably planning under the pressure from the factors of both internal and external environment. Therefore, the contingency theory will encourage employee creativity management capability in terms of the firm's ability to manage both opportunities and threats that can enable firms to cope with the complexity of the internal and external environment to gain a competitive advantage over its rivals. The finding of this research also affirms that flexibility on ways to comply will be able to adapt successfully to changes in the business environment and competition.

Secondly, this research is particularly important for understanding because it can extend the concepts supporting employee creativity management capability by proposing new dimensions of employee creativity management capability comprising new ideas generation orientation, working practice originality implementation, novel operational method awareness, job improvement value focus, and creative solution usefulness competency. Especially, it is highlighted in the essential features of new ideas generation orientation, working practice originality implementation, job improvement value focus, and creative solution usefulness competency that are the prime factors to produce organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and, more importantly, it is also a significant tool in achieving corporate sustainability. Moreover, it understands crucial factors of employee creativity management capability; namely,



vision for proactive operations, top management support, and organizational learning culture.

Lastly, this research proposes a new categorization of consequences, antecedents, and moderator of employee creativity management capability. The consequences of employee creativity management capability, in this research, are composed of organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and corporate sustainability. These are the outcomes that originate from employee creativity management capability, which is dedicated to enhancing an organization's management capability to stimulate employee creativity. The antecedents of employee creativity management capability in this research, including vision for proactive operations, top management support, organizational learning culture, and continuous environmental change, which are composed of both internal and external factors, are the foremost challenge that organizations face in the changing business environment. Moreover, the one of moderator of employee creativity management capability is technology growth. Moreover, the development and testing of a conceptual model of the relationships among employee creativity management capability, the consequents, the antecedents, and the role of moderators have been empirically examined. The testing of a conceptual model is empirically tested with data collected from furniture exporting businesses in Thailand, while a considerable amount of the past research has focused on the conceptual relationships.

Managerial Contribution

The emphasis in this research is on the managerial implications and, in particular, applications for practitioners (including managing directors and managing partners, top management, and executives) who are responding to strong competitive pressure in business. Especially, the intensity of competitive rivalry is strong in the furniture exporting business and can reduce a firm's profit potential. Therefore, a firm's launch change initiatives on improvement and development of its capability can achieve greater business competitiveness and corporate sustainability.

Firstly, this research brings crucial benefits to top management and executives to identify the foremost components of employee creativity management capability that



may be more realized and have more engines, which can enable a firm to achieve and retain performance superiority over its competitors. The finding in this research demonstrates the foremost components of employee creativity management capability that are the significant drivers of a firm's ability, which have led to an increase in organizational innovation, organizational productivity, organizational excellence, business competitiveness, firm success, and corporate sustainability. Nevertheless, top management and executives must respond and adapt to uncontrollable factors which are the external environment affecting organization performance, such as continuous environmental change and technology growth.

Secondly, an increase in productivity demands is important for exporting furniture business to be aware of development and improvement involved with an organizational capabilities perspective. Particularly, organizational learning culture is regarded as the prerequisite for employee creativity management capability due to the concepts of organizational learning that are creating, retaining, and transferring knowledge. This starts with an individual's commitment to learn that brings a crucial benefit to establishing an organization that improves continuously. Therefore, employee creativity management capability becomes the important issue for top management and executives which continuously enhance organizational effectiveness.

Finally, top management and executives are facing various challenges and change with more intense competition in business. Employee creativity management capability has become a crucial concept for the firm to develop the capability of the mechanisms of competitive superiority. Top management and executives should think about how to enhance employee creativity management capability in features that bring benefit to an organization by responding to consumer demand, and supporting and promoting the capabilities of the individual worker in the organization. This ultimately leads to achieving the goals of organization and the sustainability of competitive advantage.



Limitations and Future Research Directions

In this research, some limitations and the suggestions for future research are provided as follows:

Firstly, the furniture exporting business in Thailand is the single population in this research. Limitations of a single sample may have impacted the generalizability of the findings. Therefore, future research may employ the nature of the differences of populations that can compare the attitudes of populations in types and characteristics also can be used to increase credibility, and confirm the generalizability in the research, which would be deemed more credible. Future research can use different groups of samples and can compare different population groups from other businesses in order to verify and expand the potential utility of the results in this research.

Secondly, the measurements of this research are measured by the development of an operational definition from previous relevant research, such as the new dimensions of employee creativity management capability that can be also re-proposed to fit the variety of each industry under conditions of uncertainty and the business environment. Because of each dimension of employee creativity management capability, one must apply to a wide variety of industries. Firms might want to consider where the dimension of employee creativity management capability fits into a firm's operations. Therefore, to examine the same phenomenon, one may be employed to examine it by using several different quantitative methods and techniques, such as in-depth interviews and focus groups, in order to confirm the variable measurements and verify the conceptual framework of employee creativity management capability. Lastly, the moderating role of technology growth is not supported. As a result, future research may further seek other moderating variables to enhance the relationship among variables in this conceptual framework. The results of this research indicate that technology growth does not play a moderating role in the relationship between antecedents and each dimension of employee creativity management capability. Enhancing the relationship among variables of the conceptual framework in this research not only depends on technology growth. However, the explanation and understanding of the moderating role of technology growth are still limited, particularly in regard to developing a mechanism for greater employee creativity management capability and antecedents.



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APPENDICES



APPENDIX A
Respondent Characteristic



Table A1 Demographic Characteristics of Respondents

Description	Categories	Frequency	Percentage
Gender	Male	82	59.0
	Female	57	41.0
	Total	139	100.00
Age	Less than 30 years old	14	10.1
	30 – 40 years old	35	25.2
	41 – 50 years old	56	40.3
	More than 50 years old	34	24.5
	Total	139	100.00
Marital Status	Single	23	16.5
	Married	116	83.5
	Divorced/Separated	0	0.0
	Total	139	100.00
Level of Education	Bachelor's degree or lower	89	64.0
	Higher than Bachelor's degree	50	36.0
	Total	139	100.00
Work Experience	Less than 10 years	20	14.4
	10 – 15 years	37	26.6
	16 – 20 years	33	23.7
	More than 20 years	49	35.3
	Total	139	100.00
Average Monthly Income	Less than 50,000 Baht	27	19.4
	50,000 – 70,000 Baht	49	35.3
	70,001 – 90,000 Baht	15	10.8
	More than 90,000 Baht	48	34.5
	Total	139	100.00
Current Position	Managing director	41	29.5
	Managing partner	23	16.5
	Other	75	54.0
	Total	139	100.00



Table A2 Characteristics of Furniture Exporting Businesses

Description	Categories	Frequency	Percentage
Business owner type	Limited Companies	135	97.1
	Partnership	4	2.9
	Total	139	100.00
Location of business	Northern region	3	2.2
	Northeastern region	6	4.3
	Western region	1	0.7
	Central region	98	70.5
	Eastern region	14	10.1
	South region	17	12.2
Total		139	100.00
Operating capital	Less than 10,000,000 Baht	49	35.3
	10,000,000 - 30,000,000 Baht	39	28.1
	30,000,001 - 50,000,000 Baht	24	17.3
	More than 50,000,000 Baht	27	19.4
Total		139	100.00
Period of time in business operation	Less than 5 years	3	2.2
	5 – 10 years	11	7.9
	11 – 15 years	20	14.4
	More than 15 years	105	75.5
Total		139	100.00
Number of full time employees	Less than 50 employees	46	33.1
	51 – 100 employees	15	10.8
	101 – 150 employees	18	12.9
	More than 150 employees	60	43.2
Total		139	100.00



Table A2 Characteristics of Furniture Exporting Businesses (continued)

Description	Categories	Frequency	Percentage
Average annual revenues	Less than 25,000,000 Baht	44	31.7
	25,000,000-75,000,000 Baht	20	14.4
	75,000,001-125,000,000 Baht	23	16.5
	More than 125,000,000 Baht	52	37.4
Total		139	100.00
Experience in exporting	Less than 5 years	19	13.7
	5 - 10 years	40	28.8
	11 - 15 years	20	14.4
	More than 15 years	60	43.2
Total		139	100.00
Major markets abroad	Asia	105	75.5
	Europe	10	7.2
	America	1	0.7
	Others	23	16.5
Total		139	100.00



APPENDIX B
Test of Non-Response Bias



Table B1 Test of Non-Response Bias

Comparison	N	Mean	S. D.	t	Sig.
Business Owner Type:					
-First Group	69	1.04	.205	1.022	.309
-Second Group	70	1.01	.120		
Period of Time in Business Operation:					
-First Group	69	3.58	.651	-.863	.390
-Second Group	70	3.69	.790		
Average Annual Revenues:					
-First Group	69	2.43	1.289	-1.493	.138
-Second Group	70	2.76	1.256		
Experience in exporting:					
-First Group	69	2.83	1.150	-.462	.645
-Second Group	70	2.91	1.100		
Major markets abroad:					
-First Group	69	1.67	1.184	.875	.383
-Second Group	70	1.50	1.060		



APPENDIX C
Item Factor Loading and Reliability Analyses



Table C1 Item Factor Loading and Reliability Analyses

Constructs	Items	Factor Loading	Reliability (Alpha)
Corporate Sustainability (CSU)	CSU 1	.725	.764
	CSU 2	.736	
	CSU 3	.783	
	CSU 4	.818	
New Ideas Generation Orientation (NIG)	NIG 1	.784	.750
	NIG 2	.770	
	NIG 3	.693	
	NIG 4	.788	
Working Practice Originality Implementation (WPO)	WPO 1	.767	.748
	WPO 2	.673	
	WPO 3	.796	
	WPO 4	.783	
Novel Operational Method Awareness (NOM)	NOM 1	.725	.748
	NOM 2	.743	
	NOM 3	.743	
	NOM 4	.806	
Job Improvement Value Focus (JIV)	JIV 1	.675	.728
	JIV 2	.747	
	JIV 3	.789	
	JIV 4	.758	
Creative Solution Usefulness Competency (CSC)	CSC 1	.706	.732
	CSC 2	.708	
	CSC 3	.772	
	CSC 4	.793	



Table C1 Item Factor Loading and Reliability Analyses (continued)

Constructs	Items	Factor Loading	Reliability (Alpha)
Organizational Innovation (ORI)	ORI 1	.699	.726
	ORI 2	.787	
	ORI 3	.722	
	ORI 4	.758	
Organizational Productivity (ORP)	ORP 1	.723	.743
	ORP 2	.660	
	ORP 3	.807	
	ORP 4	.813	
Organizational Excellence (ORE)	ORE 1	.743	.760
	ORE 2	.749	
	ORE 3	.756	
	ORE 4	.806	
Business Competitiveness (BUC)	BUC 1	.752	.767
	BUC 2	.712	
	BUC 3	.814	
	BUC 4	.790	
Firm Success (FSU)	FSU 1	.687	.734
	FSU 2	.722	
	FSU 3	.775	
	FSU 4	.795	
Vision for Proactive Operations (VPO)	VPO 1	.640	.716
	VPO 2	.732	
	VPO 3	.809	
	VPO 4	.754	



Table C1 Item Factor Loading and Reliability (continued)

Constructs	Items	Factor Loading	Reliability (Alpha)
Top Management Support (TMS)	TMS 1	.729	.722
	TMS 2	.714	
	TMS 3	.775	
	TMS 4	.734	
Organizational Learning Culture (OLC)	OLC 1	.684	.711
	OLC 2	.726	
	OLC 3	.785	
	OLC 4	.734	
Continuous Environmental Change (CEC)	CEC 1	.738	.711
	CEC 2	.710	
	CEC 3	.722	
	CEC 4	.757	
Technology Growth (TEG)	TEG 1	.730	.706
	TEG 2	.637	
	TEG 3	.746	
	TEG 4	.800	



APPENDIX D

Diagnosis of Primary Assumption for Regression Analysis



Table D1 Durbin and Watson Statistic

Equation	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin - Watson value
1	0.598	0.358	0.324	.82226	2.087
2	0.638	0.407	0.375	.79064	2.031
3	0.565	0.319	0.283	.84689	1.928
4	0.552	0.305	0.267	.85594	1.824
5	0.513	0.263	0.224	.88099	2.089
6	0.573	0.328	0.313	.82865	1.914
7	0.472	0.222	0.205	.89153	2.035
8	0.545	0.297	0.271	.85384	2.060
9	0.467	0.218	0.189	.90052	2.183
10	0.573	0.328	0.313	.82859	2.147
11	0.673	0.452	0.436	.75090	2.240
12	0.398	0.158	0.158	.93801	2.123
13	0.434	0.188	0.118	.93909	2.140
14	0.533	0.284	0.252	.86500	1.647
15	0.554	0.307	0.247	.86790	1.622
16	0.476	0.227	0.191	.89924	1.866
17	0.556	0.309	0.309	.86648	1.841
18	0.451	0.203	0.167	.91257	1.682
19	0.509	0.259	0.195	.89728	1.632
20	0.460	0.212	0.176	.90782	2.214
21	0.531	0.282	0.220	.88327	2.252

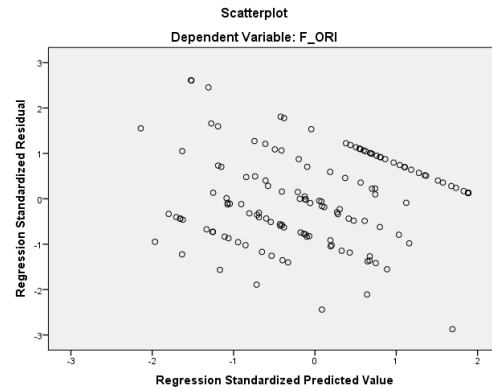
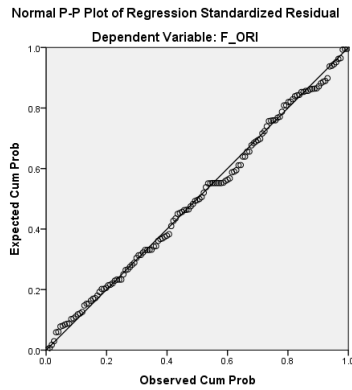


Table D2 Multicollinearity

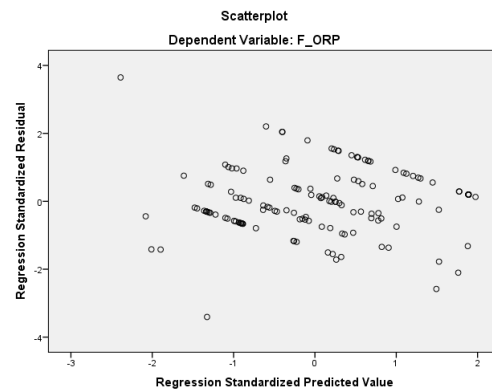
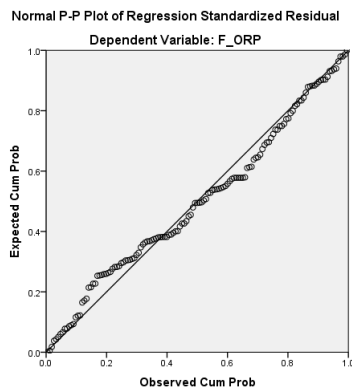
Equation	Dependent Variable	Maximum Variance Inflation Factors (VIF)
1	ORI	1.612
2	ORP	1.612
3	ORE	1.612
4	BUC	1.612
5	FSU	1.612
6	ORP	1.136
7	ORE	1.136
8	BUC	1.693
9	FSU	1.693
10	FSU	1.098
11	CSU	1.499
12	NIG	2.064
13	NIG	2.267
14	WPO	2.064
15	WPO	2.267
16	NOM	2.064
17	NOM	2.267
18	JIV	2.064
19	JIV	2.267
20	CSU	2.064
21	CSU	2.267



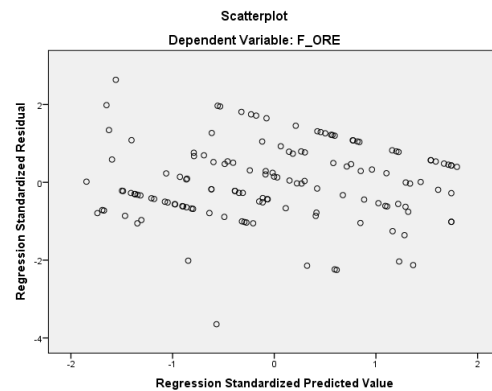
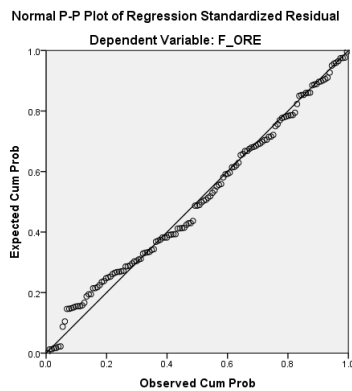
Normality and Heteroscedasticity



$$\text{Equation 1: ORI} = \alpha_1 + \beta_1\text{NIG} + \beta_2\text{WPO} + \beta_3\text{NOM} + \beta_4\text{JIV} + \beta_5\text{CSC} + \beta_6\text{FAG} + \beta_7\text{FSI} + \varepsilon_1$$

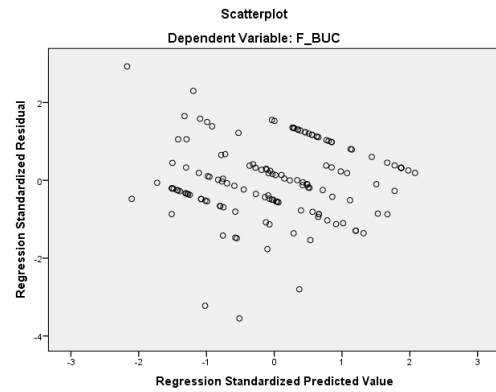
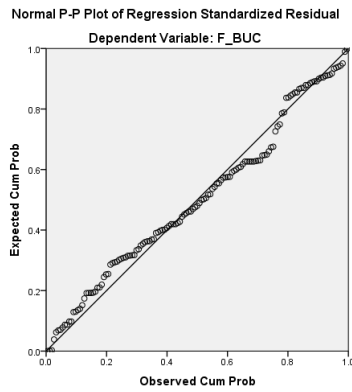


$$\text{Equation 2: ORP} = \alpha_2 + \beta_8\text{NIG} + \beta_9\text{WPO} + \beta_{10}\text{NOM} + \beta_{11}\text{JIV} + \beta_{12}\text{CSC} + \beta_{13}\text{FAG} + \beta_{14}\text{FSI} + \varepsilon_2$$

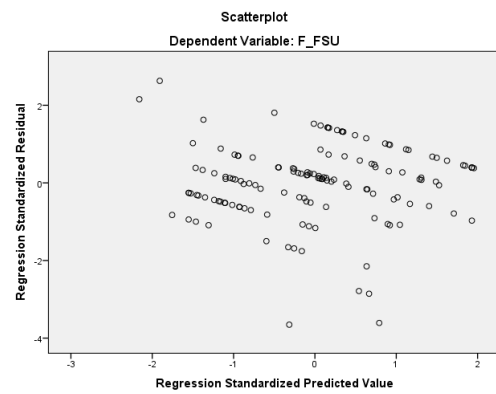
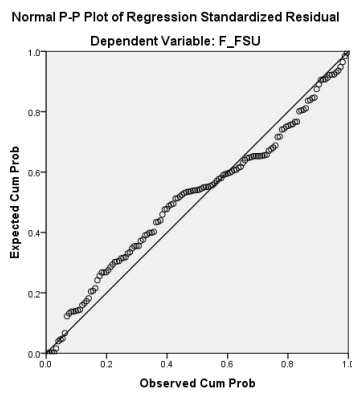


$$\text{Equation 3: ORE} = \alpha_3 + \beta_{15}\text{NIG} + \beta_{16}\text{WPO} + \beta_{17}\text{NOM} + \beta_{18}\text{JIV} + \beta_{19}\text{CSC} + \beta_{20}\text{FAG} + \beta_{21}\text{FSI} + \varepsilon_3$$

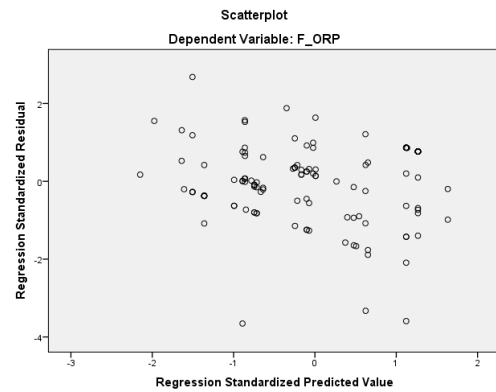
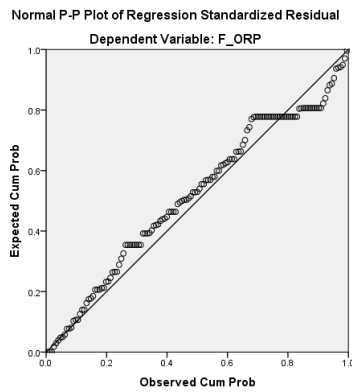




$$\text{Equation 4: } \text{BUC} = \alpha_4 + \beta_{22}\text{NIG} + \beta_{23}\text{WPO} + \beta_{24}\text{NOM} + \beta_{25}\text{JIV} + \beta_{26}\text{CSC} + \beta_{27}\text{FAG} + \beta_{28}\text{FSI} + \varepsilon_4$$

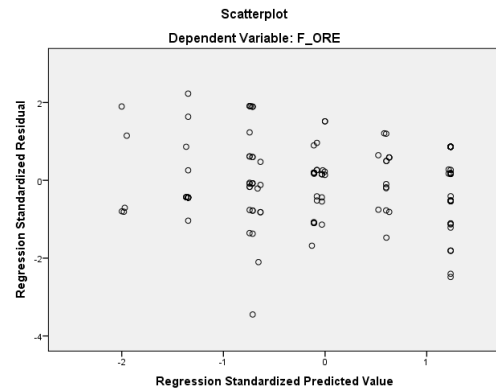
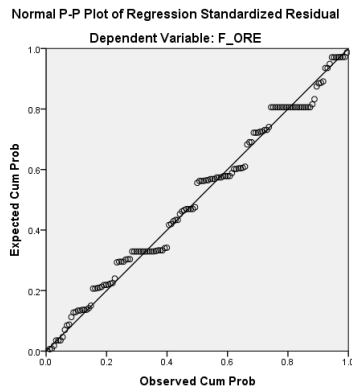


$$\text{Equation 5: } \text{FSU} = \alpha_5 + \beta_{29}\text{NIG} + \beta_{30}\text{WPO} + \beta_{31}\text{NOM} + \beta_{32}\text{JIV} + \beta_{33}\text{CSC} + \beta_{34}\text{FAG} + \beta_{35}\text{FSI} + \varepsilon_5$$

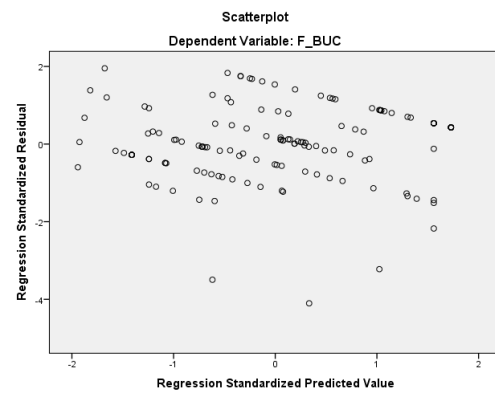
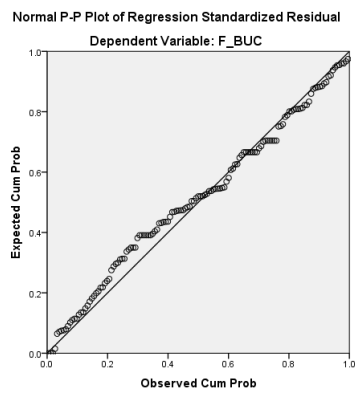


$$\text{Equation 6: } \text{ORP} = \alpha_6 + \beta_{36}\text{ORI} + \beta_{37}\text{FAG} + \beta_{38}\text{FSI} + \varepsilon_6$$

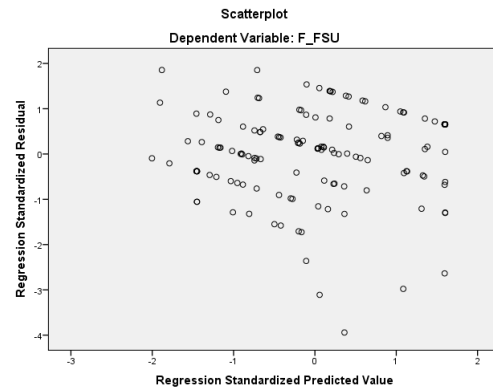
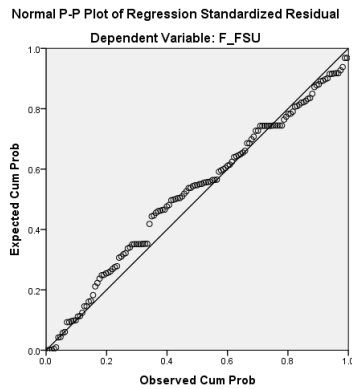




$$\text{Equation 7: } \text{ORE} = \alpha_7 + \beta_{39}\text{ORI} + \beta_{40}\text{FAG} + \beta_{41}\text{FSI} + \varepsilon_7$$

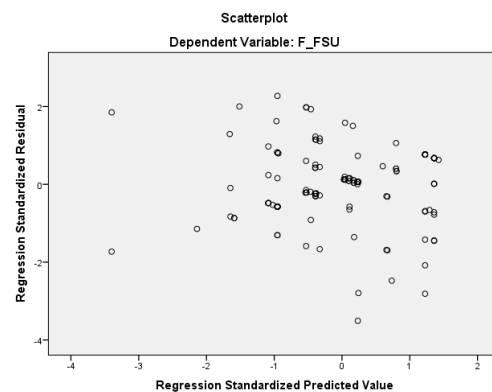
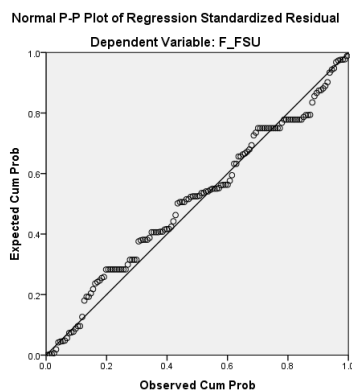


$$\text{Equation 8: } \text{BUC} = \alpha_8 + \beta_{42}\text{ORI} + \beta_{43}\text{ORP} + \beta_{44}\text{ORE} + \beta_{45}\text{FAG} + \beta_{46}\text{FSI} + \varepsilon_8$$

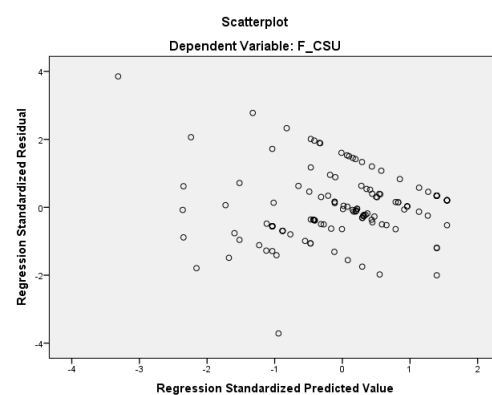
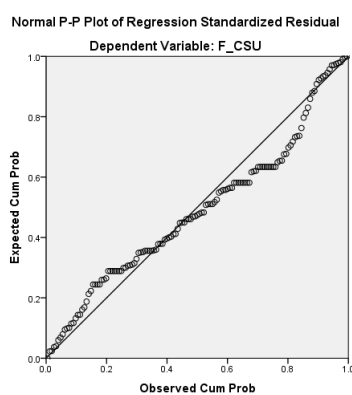


$$\text{Equation 9: } \text{FSU} = \alpha_9 + \beta_{47}\text{ORI} + \beta_{48}\text{ORP} + \beta_{49}\text{ORE} + \beta_{50}\text{FAG} + \beta_{51}\text{FSI} + \varepsilon_9$$

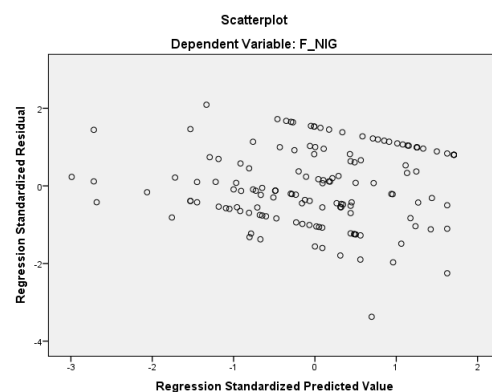
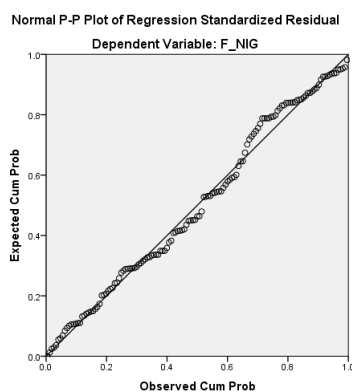




$$\text{Equation 10: } FSU = \alpha_{10} + \beta_{52}BUC + \beta_{53}FAG + \beta_{54}FSI + \varepsilon_{10}$$

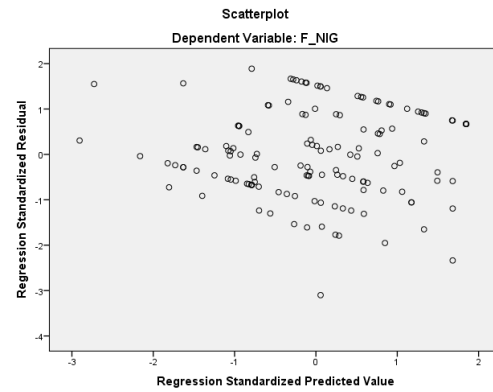
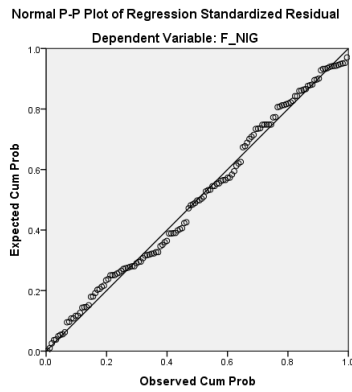


$$\text{Equation 11: } CSU = \alpha_{11} + \beta_{55}BUC + \beta_{56}FSU + \beta_{57}FAG + \beta_{58}FSI + \varepsilon_{11}$$

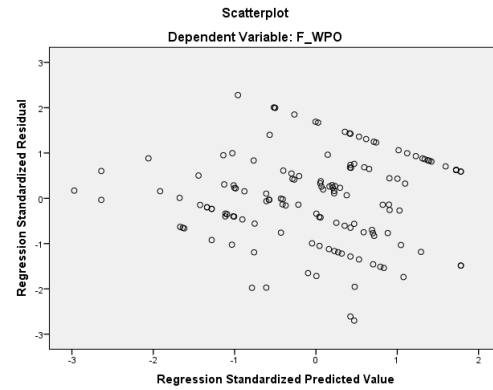
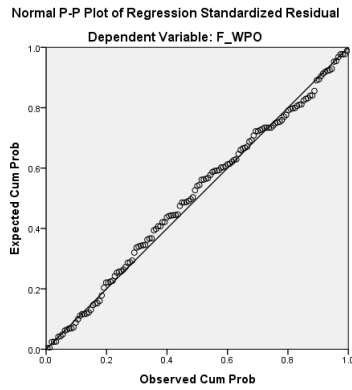


$$\text{Equation 12: } NIG = \alpha_{12} + \beta_{59}VPO + \beta_{60}TMS + \beta_{61}OLC + \beta_{62}CEC + \beta_{63}FAG \\ + \beta_{64}FSI + \varepsilon_{12}$$

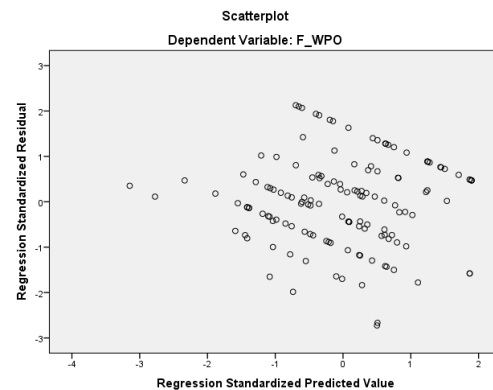
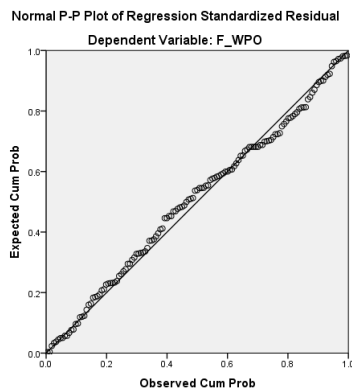




$$\begin{aligned} \text{Equation 13: } \text{NIG} = & \alpha_{13} + \beta_{65}\text{VPO} + \beta_{66}\text{TMS} + \beta_{67}\text{OLC} + \beta_{68}\text{CEC} + \beta_{69}\text{TEG} \\ & + \beta_{70}(\text{VPO} * \text{TEG}) + \beta_{71}(\text{TMS} * \text{TEG}) + \beta_{72}(\text{OLC} * \text{TEG}) \\ & + \beta_{73}(\text{CEC} * \text{TEG}) + \beta_{74}\text{FAG} + \beta_{75}\text{FSI} + \varepsilon_{13} \end{aligned}$$

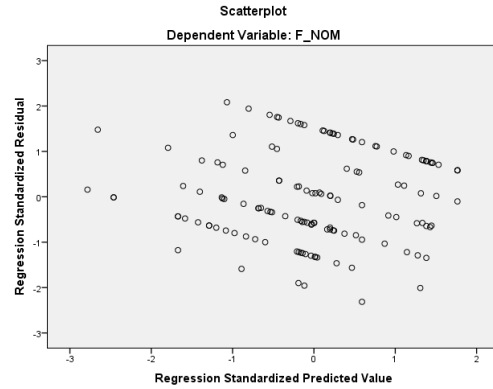
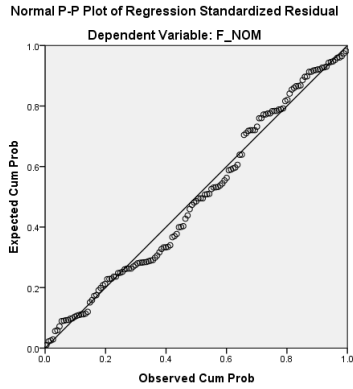


$$\begin{aligned} \text{Equation 14: } \text{WPO} = & \alpha_{14} + \beta_{76}\text{VPO} + \beta_{77}\text{TMS} + \beta_{78}\text{OLC} + \beta_{79}\text{CEC} + \beta_{80}\text{FAG} \\ & + \beta_{81}\text{FSI} + \varepsilon_{14} \end{aligned}$$

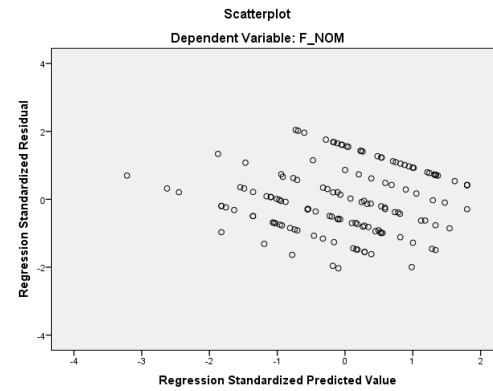
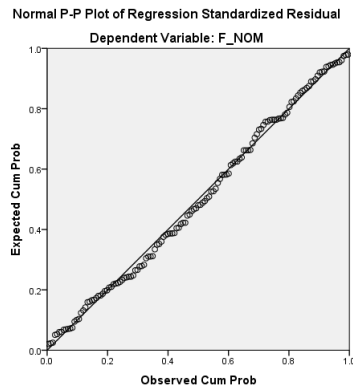


$$\begin{aligned} \text{Equation 15: } \text{WPO} = & \alpha_{15} + \beta_{82}\text{VPO} + \beta_{83}\text{TMS} + \beta_{84}\text{OLC} + \beta_{85}\text{CEC} + \beta_{86}\text{TEG} \\ & + \beta_{87}(\text{VPO} * \text{TEG}) + \beta_{88}(\text{TMS} * \text{TEG}) + \beta_{89}(\text{OLC} * \text{TEG}) \\ & + \beta_{90}(\text{CEC} * \text{TEG}) + \beta_{91}\text{FAG} + \beta_{92}\text{FSI} + \varepsilon_{15} \end{aligned}$$

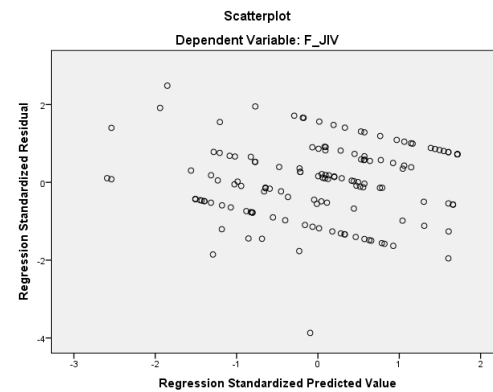
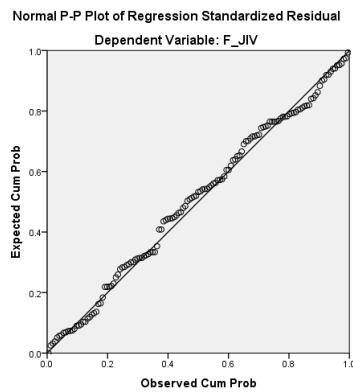




$$\text{Equation 16: } \text{NOM} = \alpha_{16} + \beta_{93}\text{VPO} + \beta_{94}\text{TMS} + \beta_{95}\text{OLC} + \beta_{96}\text{CEC} + \beta_{97}\text{FAG} \\ + \beta_{98}\text{FSI} + \varepsilon_{16}$$

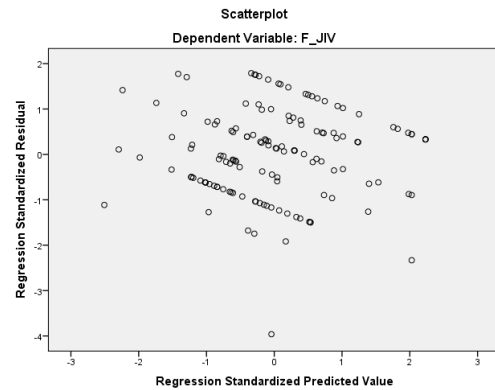
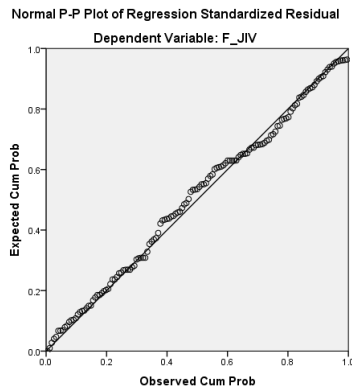


$$\text{Equation 17: } \text{NOM} = \alpha_{17} + \beta_{99}\text{VPO} + \beta_{100}\text{TMS} + \beta_{101}\text{OLC} + \beta_{102}\text{CEC} + \beta_{103}\text{TEG} \\ + \beta_{104}(\text{VPO} * \text{TEG}) + \beta_{105}(\text{TMS} * \text{TEG}) + \beta_{106}(\text{OLC} * \text{TEG}) \\ + \beta_{107}(\text{CEC} * \text{TEG}) + \beta_{108}\text{FAG} + \beta_{109}\text{FSI} + \varepsilon_{17}$$

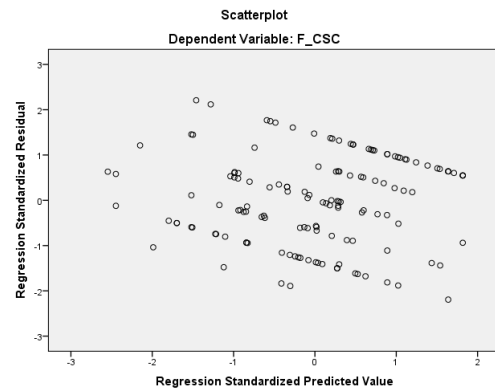
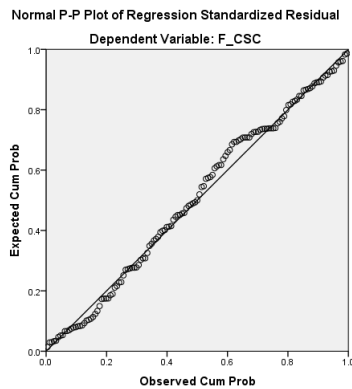


$$\text{Equation 18: } \text{JIV} = \alpha_{18} + \beta_{110}\text{VPO} + \beta_{111}\text{TMS} + \beta_{112}\text{OLC} + \beta_{113}\text{CEC} + \beta_{114}\text{FAG} \\ + \beta_{115}\text{FSI} + \varepsilon_{18}$$

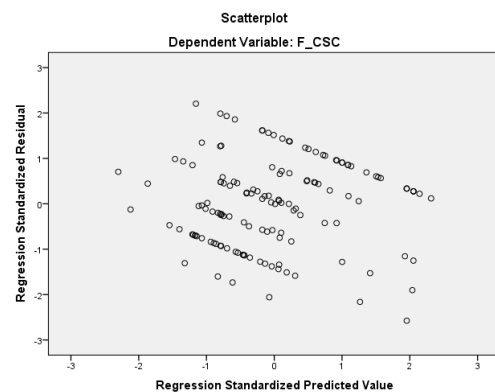
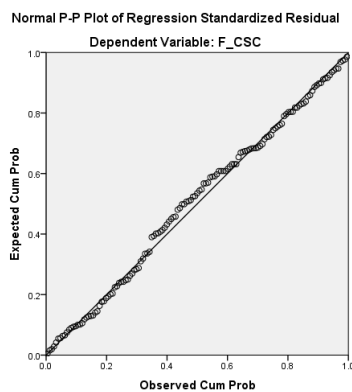




$$\begin{aligned} \text{Equation 19: } JIV = & \alpha_{19} + \beta_{116}VPO + \beta_{117}TMS + \beta_{118}OLC + \beta_{119}CEC + \beta_{120}TEG \\ & + \beta_{121}(VPO * TEG) + \beta_{122}(TMS * TEG) + \beta_{123}(OLC * TEG) \\ & + \beta_{124}(CEC * TEG) + \beta_{125}FAG + \beta_{126}FSI + \varepsilon_{19} \end{aligned}$$



$$\begin{aligned} \text{Equation 20: } CSU = & \alpha_{20} + \beta_{127}VPO + \beta_{128}TMS + \beta_{129}OLC + \beta_{130}CEC + \beta_{131}FAG \\ & + \beta_{132}FSI + \varepsilon_{20} \end{aligned}$$



$$\begin{aligned} \text{Equation 21: } CSU = & \alpha_{21} + \beta_{133}VPO + \beta_{134}TMS + \beta_{135}OLC + \beta_{136}CEC + \beta_{137}TEG \\ & + \beta_{138}(VPO * TEG) + \beta_{139}(TMS * TEG) + \beta_{140}(OLC * TEG) \\ & + \beta_{141}(CEC * TEG) + \beta_{141}FAG + \beta_{143}FSI + \varepsilon_{21} \end{aligned}$$



APPENDIX E

Cover Letter and Questionnaire (Thai Version)





ที่ ศธ 0530.10/ 776

คณะกรรมการบัญชีและการจัดการ
มหาวิทยาลัยมหาสารคาม
อำเภอกันทรวิชัย จังหวัดมหาสารคาม
44150

10 มิถุนายน 2559

เรื่อง ขอความอนุเคราะห์กรอกแบบสอบถาม

เรียน กรรมการผู้จัดการ/หุ้นส่วนผู้จัดการ

ด้วย นางสาวภัทริกา ชินช่วง นิติระดับปริญญาเอก คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานและความยั่งยืนขององค์กร : การตรวจสอบเชิงประจักษ์ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการทำวิทยานิพนธ์ หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) และการศึกษาในครั้งนี้ได้เน้นให้นิสิตศึกษาข้อมูลด้วยตนเอง ดังนั้น เพื่อให้การจัดทำวิทยานิพนธ์เป็นไปด้วยความเรียบร้อยและบรรลุวัตถุประสงค์ คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขออนุญาตให้ นางสาวภัทริกา ชินช่วง ศึกษาและเก็บรวบรวมในรายละเอียดตามแบบสอบถามที่แนบมาพร้อมนี้

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่านในการให้ข้อมูลในครั้งนี้ และขอขอบคุณมา ณ โอกาสนี้

ขอแสดงความนับถือ

(รองศาสตราจารย์ ดร.ปัทมาภรณ์ อุตสาหะวานิชกิจ)

คณบดีคณะกรรมการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม

สำนักบริหารหลักสูตรระดับบัณฑิตศึกษาและวิจัย

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

โทรศัพท์ (043) 754333 ต่อ 3408



แบบสอบถามเพื่อการวิจัย

เรื่อง ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานและความยั่งยืนขององค์กร

: การตรวจสอบเชิงประจักษ์ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

คำชี้แจง :

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาวิจัยเรื่อง “ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานและความยั่งยืนขององค์กร : การตรวจสอบเชิงประจักษ์ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย” เพื่อใช้เป็นข้อมูลในการจัดทำวิทยานิพนธ์ในระดับปริญญาเอกของผู้วิจัย ในหลักสูตรปรัชญาดุษฎีบัณฑิต คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333 ข้อมูลที่ได้รับจากท่านมีความสำคัญอย่างยิ่งต่อการวิเคราะห์ข้อมูลในการวิจัย อีกทั้งยังมีประโยชน์ในเชิงวิชาการเป็นอย่างสูง ดังนั้น เพื่อให้การวิจัยนี้มีความเที่ยงตรง และเกิดประโยชน์อย่างแท้จริง จึงขอความกรุณาจากท่านโปรดตอบคำถามให้ครบทุกข้อ และทุกตอนตามความเป็นจริง และกรุณาพับใส่ซองจดหมายติดแสตมป์ที่แนบมานี้ ส่งคืนตามที่อยู่ระบุไว้ของผู้วิจัยได้โดยตรง การนำเสนอผลการวิจัยในครั้งนี้น่าเสนอในลักษณะของภาพรวม โดยจะไม่มีการเปิดเผยข้อมูลใดๆ ที่ท่านได้ให้มาในแบบสอบถามฉบับนี้ ดังนั้น ข้าพเจ้าใคร่ขอความอนุเคราะห์จากท่านผู้ตอบแบบสอบถาม ได้โปรดตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนคำถาม 7 ตอน ดังนี้

ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 3 ความคิดเห็นเกี่ยวกับความสามารถในการจัดการความคิดสร้างสรรค์ธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่มีผลต่อการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ตอนที่ 7 ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการบริหารจัดการของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

คำตอบของท่านจะถูกรักษาไว้เป็นความลับ และจะไม่มีการเปิดเผยข้อมูลเหล่านี้กับบุคคลภายนอกโดยไม่ได้รับอนุญาตจากท่านอย่างเด็ดขาด

ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

☐ ต้องการ E - mail _____

☐ ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่าน หรือแนบนามบัตรของท่านมาด้วย แบบสอบถามชุดนี้

ผู้วิจัยขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้อย่างถูกต้องครบถ้วน และหวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อ นางสาวภัทริกา ชินช่วง ซึ่งเป็นผู้วิจัยในครั้งนี้นี้ โทรศัพท์เคลื่อนที่ 086-464-0337 หรือ E - mail : Pattarika.ch@gmail.com

(นางสาวภัทริกา ชินช่วง)

นิสิตระดับปริญญาเอก สาขาวิชาการจัดการ

คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม



ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

1. เพศ

☐

ชาย

☐

หญิง

2. อายุ

☐

น้อยกว่า 30 ปี

☐

30 – 40 ปี

☐

41-50 ปี

☐

มากกว่า 50 ปี

3. สถานภาพ

☐

โสด

☐

สมรส

☐

หม้าย/หย่าร้าง

4. ระดับการศึกษา

☐

ปริญญาตรีหรือต่ำกว่า

☐

สูงกว่าปริญญาตรี

5. ประสบการณ์การทำงาน

☐

น้อยกว่า 10 ปี

☐

10 - 15 ปี

☐

16 – 20 ปี

☐

มากกว่า 20 ปี

6. รายได้เฉลี่ยต่อเดือน

☐

ต่ำกว่า 50,000 บาท

☐

50,000 – 70,000 บาท

☐

70,001 – 90,000 บาท

☐

มากกว่า 90,000 บาท

7. ตำแหน่งงานในปัจจุบัน

☐

กรรมการผู้จัดการ

☐

หุ้นส่วนผู้จัดการ

☐

อื่น ๆ (โปรดระบุ).....



ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

1. รูปแบบธุรกิจ

☐ บริษัทจำกัด

☐ ห้างหุ้นส่วน

2. ที่ตั้งธุรกิจ

☐ ภาคเหนือ

☐ ภาคตะวันออกเฉียงเหนือ

☐ ภาคตะวันตก

☐ ภาคกลาง

☐ ภาคตะวันออก

☐ ภาคใต้

3. ทุนในการดำเนินงาน

☐ ต่ำกว่า 10,000,000 บาท

☐ 10,000,000 – 30,000,000 บาท

☐ 30,000,001 – 50,000,000 บาท

☐ มากกว่า 50,000,000 บาท

4. ระยะเวลาในการดำเนินธุรกิจ

☐ น้อยกว่า 5 ปี

☐ 5 - 10 ปี

☐ 11 - 15 ปี

☐ มากกว่า 15 ปี

5. จำนวนพนักงานในปัจจุบัน

☐ น้อยกว่า 50 คน

☐ 51 -100 คน

☐ 101-150 คน

☐ มากกว่า 150 คน

6. รายได้เฉลี่ยของกิจการต่อปี

☐ ต่ำกว่า 25,000,000 บาท

☐ 25,000,001 – 75,000,000 บาท

☐ 75,000,001 – 125,000,000 บาท

☐ มากกว่า 125,000,000 บาท

7. ประสบการณ์ในการส่งสินค้าไปต่างประเทศ

☐ น้อยกว่า 5 ปี

☐ 5 - 10 ปี

☐ 11 - 15 ปี

☐ มากกว่า 15 ปี

8. ตลาดสินค้าหลักในต่างประเทศ

☐ เอเชีย

☐ ยุโรป

☐ อเมริกา

☐ อื่นๆ (โปรดระบุ).....



ตอนที่ 3 ความคิดเห็นเกี่ยวกับความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานของธุรกิจ
ส่งออกเฟอร์นิเจอร์ในประเทศไทย

ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การมุ่งเน้นการสร้างแนวคิดใหม่ (New Ideas Generation Orientation) 1. กิจกรรมเชื่อมั่นว่าการที่บุคลากรมีความคิดใหม่ๆ ในการปฏิบัติงาน จะช่วยทำให้การดำเนินงานมีประสิทธิภาพยิ่งขึ้น 2. กิจกรรมส่งเสริมให้บุคลากรมีการใช้ความคิดริเริ่มสร้างสรรค์ในการปฏิบัติงาน อยู่เสมอ ทำให้การบริหารงานขององค์กรประสบความสำเร็จมากยิ่งขึ้น 3. กิจกรรมผลักดันให้บุคลากรมีการแสดงออกทางความคิดอย่างอิสระและหลากหลาย ซึ่งจะช่วยให้การพัฒนากิจการดำเนินงานขององค์กรประสบความสำเร็จมากยิ่งขึ้น 4. กิจกรรมให้ความสำคัญกับการจัดทำระบบการพัฒนาความคิดสร้างสรรค์ของบุคลากรอย่างเป็นรูปธรรม ซึ่งจะก่อให้เกิดความสามารถในการแข่งขันที่ประสบความสำเร็จ					
การประยุกต์ใช้ความคิดริเริ่มในแนวปฏิบัติในการทำงาน (Working Practice Originality Implementation) 5. กิจกรรมเชื่อมั่นว่าการที่บุคลากรมีวิธีการในการปฏิบัติงานใหม่ๆ จะทำให้การบริหารงานประสบความสำเร็จเป็นอย่างดี 6. กิจกรรมให้ความสำคัญกับการสร้างและคิดค้นวิธีการปฏิบัติรูปแบบใหม่ที่ไม่เหมือนใครอย่างต่อเนื่อง จะทำให้การบริหารงานบรรลุเป้าหมายอย่างมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น 7. กิจกรรมส่งเสริมให้บุคลากรพัฒนาและแสวงหาวิธีการปฏิบัติที่มีความแปลกใหม่อยู่เสมอ จะช่วยให้มีการบริหารงานที่ทันสมัยและสามารถตอบสนองการเปลี่ยนแปลงได้เป็นอย่างดี 8. กิจกรรมสนับสนุนให้บุคลากรออกแบบวิธีการปฏิบัติงานรูปแบบใหม่ๆ อยู่เสมอ เพื่อเพิ่มศักยภาพในการบริหารงานให้บรรลุเป้าหมายมากยิ่งขึ้น					



ตอนที่ 3 ความคิดเห็นเกี่ยวกับความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานของธุรกิจ
ส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การตระหนักถึงวิธีดำเนินงานแนวใหม่ (Novel Operational Method Awareness) 9. กิจกรรมเชื่อมั่นว่าการที่บุคลากรเห็นคุณค่าของกระบวนการจัดการรูปแบบใหม่ ที่มีความทันสมัยอยู่เสมอ ทำให้เกิดศักยภาพในการบริหารงานมากยิ่งขึ้น					
10. กิจกรรมส่งเสริมให้บุคลากรนำเทคโนโลยีมาใช้ในการจัดการการดำเนินงาน เพื่อให้เกิดความทันสมัยอยู่เสมอ จะช่วยให้การบริหารงานสามารถตอบสนองต่อการเปลี่ยนแปลงได้เป็นอย่างดี					
11. กิจกรรมสนับสนุนให้บุคลากรปรับปรุงเทคนิคและวิธีการด้านการจัดการ เพื่อให้การดำเนินงานเป็นไปอย่างมีประสิทธิภาพ					
12. กิจกรรมให้ความสำคัญกับการลงทุนเพื่อให้บุคลากรพัฒนากระบวนการผลิต และกระบวนการดำเนินการรูปแบบใหม่ที่ทันสมัย เพื่อให้เกิดประสิทธิภาพและประสิทธิผลในการบริหารงาน					
การมุ่งเน้นคุณค่าในการปรับปรุงงาน (Job Improvement Value Focus) 13. กิจกรรมเชื่อมั่นว่าการที่บุคลากรมีการปรับปรุงคุณภาพการปฏิบัติงานอยู่เสมอ จะช่วยให้การดำเนินงานขององค์กรประสบความสำเร็จมากยิ่งขึ้น					
14. กิจกรรมส่งเสริมให้บุคลากรมีการวิเคราะห์ถึงสภาพแวดล้อมทางการทำงาน และข้อจำกัดต่างๆ ที่เกิดขึ้น ซึ่งนำมาใช้เป็นข้อมูลในการวางแผนการทำงานที่มีประสิทธิภาพมากยิ่งขึ้น					
15. กิจกรรมมุ่งเน้นในการเปิดโอกาสให้บุคลากรได้วางแผนและตัดสินใจในการปฏิบัติงานอย่างอิสระ ทำให้สามารถตอบสนองความต้องการได้ทันทั่วถึงและมีประสิทธิผล					
16. กิจกรรมให้ความสำคัญกับการเปลี่ยนแปลงให้เกิดความแปลกใหม่และท้าทายในการปฏิบัติงานของพนักงานอยู่เสมอ ซึ่งจะทำให้การดำเนินงานบรรลุเป้าหมายและประสิทธิภาพมากยิ่งขึ้น					



ตอนที่ 3 ความคิดเห็นเกี่ยวกับความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานของธุรกิจ
ส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ความสามารถในการใช้ประโยชน์ในการแก้ปัญหาอย่างสร้างสรรค์ (Creative Solution Usefulness Competency) 17. กิจการเชื่อมั่นว่าการที่บุคลากรมีศักยภาพในการแก้ปัญหาด้วยเหตุและผล จะช่วยให้การดำเนินงานมีประสิทธิภาพมากยิ่งขึ้น					
18. กิจการส่งเสริมให้บุคลากรแสวงหาข้อมูลใหม่ๆ ในการดำเนินงานอยู่เสมอ ซึ่งจะช่วยให้การบริหารงานบรรลุเป้าหมายดียิ่งขึ้น					
19. กิจการส่งเสริมให้บุคลากรวิเคราะห์หาวิธีการดำเนินงานที่หลากหลายอยู่เสมอ จะช่วยให้การดำเนินงานบรรลุวัตถุประสงค์ที่กำหนดไว้เป็นอย่างดี					
20. กิจการสนับสนุนให้บุคลากรประยุกต์ใช้เทคโนโลยีที่ทันสมัยในการแก้ปัญหาอย่างเป็นระบบและรูปธรรม ซึ่งจะช่วยให้เกิดการพัฒนาการดำเนินงานที่มีประสิทธิภาพเพิ่มมากขึ้น					

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
นวัตกรรมองค์กร (organizational innovation) 1. กิจการมีการนำเสนอผลิตภัณฑ์และบริการใหม่ๆ เข้าสู่ตลาดได้อย่างต่อเนื่อง					
2. กิจการมีการประยุกต์ใช้เทคนิคและวิธีการบริหารงานใหม่ๆ ในการดำเนินงานขององค์กรได้เป็นอย่างดี					
3. กิจการมีการประยุกต์ใช้เทคโนโลยีใหม่ ๆ ในการดำเนินงานขององค์กรอยู่เสมอ					
4. กิจการมีการพัฒนากระบวนการดำเนินงานใหม่ๆ และนำมาใช้ได้อย่างดีเยี่ยม					



ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ประสิทธิภาพขององค์กร (Organizational Productivity) 5. กิจกรรมมีการบริหารจัดการต้นทุนและสิ่งที่ไม่ก่อให้เกิดผลประโยชน์ ได้อย่างมีประสิทธิภาพ					
6. กิจกรรมมีการใช้ประโยชน์จากทรัพยากรที่มีอยู่อย่างเต็มประสิทธิภาพ					
7. กิจกรรมมีวิธีการดำเนินงานที่ดีที่สามารถบรรลุตามเป้าหมายและวัตถุประสงค์ขององค์กร					
8. กิจกรรมมีการบริหารจัดการกระบวนการดำเนินงานที่มีความทันสมัย รวดเร็ว และมีประสิทธิภาพ					
ความเป็นเลิศขององค์กร (Organizational Excellence) 9. กิจกรรมมีการดำเนินงานที่มีประสิทธิภาพและประสิทธิผล สามารถบรรลุเป้าหมายขององค์กรได้เป็นอย่างดี					
10. กิจกรรมมีการพัฒนากระบวนการดำเนินงานได้เป็นอย่างดีและเกินกว่าความคาดหวังขององค์กร					
11. กิจกรรมมีการบริหารจัดการกระบวนการดำเนินงานให้มีความทันสมัย สามารถตอบสนองต่อการเปลี่ยนแปลงของสภาพแวดล้อมได้เป็นอย่างดี					
12. กิจกรรมมีบุคลากรที่มีศักยภาพและความสามารถในการปฏิบัติงาน ที่โดดเด่นได้อย่างต่อเนื่อง					
ศักยภาพทางการแข่งขันขององค์กร (Business Competitiveness) 13. กิจกรรมมีสินค้าและบริการที่หลากหลาย มีคุณภาพได้มาตรฐาน และมีรูปแบบที่มีความทันสมัยกว่าคู่แข่ง					
14. กิจกรรมมีเงินทุน และมีทรัพยากรที่มากพอที่จะต่อสู้กับคู่แข่งอย่างต่อเนื่อง					
15. กิจกรรมมีการบริหารจัดการต้นทุนและราคาที่เหนือกว่าคู่แข่ง					
16. กิจกรรมมีช่องทางจำหน่ายและกระจายสินค้าที่มีความหลากหลาย					



ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มาก ที่สุด	มาก	ปาน กลาง	น้อย	น้อย ที่สุด
	5	4	3	2	1
ความสำเร็จขององค์กร (Firm Success)					
17. กิจการมีส่วนแบ่งการตลาดและผลการดำเนินเพิ่มขึ้นอย่างต่อเนื่อง					
18. กิจการมีผลการดำเนินงานทั้งด้านที่เป็นตัวเงินและไม่เป็นตัวเงิน เป็นไปตามเป้าหมายที่องค์กรกำหนดไว้					
19. กิจการได้รับการยอมรับจากผู้บริหารว่ามีการบริหารงานที่ดีและมีคุณภาพอย่างต่อเนื่อง					
20. กิจการได้รับการยอมรับจากลูกค้าและผู้มีส่วนเกี่ยวข้องว่าเป็นกิจการที่มีการบริหารงานภายใต้การดำเนินงานที่ดี มีประสิทธิภาพ และคุณภาพที่ดี					
ความยั่งยืนขององค์กร (Corporate Sustainability)					
21. กิจการมั่นใจว่ากิจการสามารถอยู่รอด ภายใต้สถานการณ์การแข่งขันที่เกิดขึ้น					
22. กิจการมีชื่อเสียงเป็นที่ยอมรับของลูกค้าและองค์กรภายนอกอื่นๆ					
23. ในภาพรวมผลการดำเนินงาน กิจการมีการเจริญเติบโตเพิ่มขึ้นอย่างต่อเนื่อง					
24. กิจการมีความสัมพันธ์กับลูกค้าและผู้มีส่วนเกี่ยวข้องที่ดีเสมอมา					

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งต่อความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงาน
ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ปัจจัยภายในที่ส่งต่อความสามารถในการจัดการความคิดสร้างสรรค์ ของพนักงาน	ระดับความคิดเห็น				
	มาก ที่สุด	มาก	ปาน กลาง	น้อย	น้อย ที่สุด
	5	4	3	2	1
วิสัยทัศน์สำหรับการดำเนินงานเชิงรุก (Vision for Proactive Operation)					
1. กิจการเชื่อมั่นว่าการกำหนดแนวทางและนโยบายในการดำเนินงานในอนาคต จะช่วยให้เกิดการดำเนินงานมีประสิทธิภาพมากยิ่งขึ้น					



ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งต่อความสามารถในการจัดการความคิดสร้างสรรค์ของ
พนักงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งต่อความสามารถในการจัดการความคิดสร้างสรรค์ ของพนักงาน	ระดับความคิดเห็น				
	มาก ที่สุด	มาก	ปาน กลาง	น้อย	น้อย ที่สุด
	5	4	3	2	1
วิสัยทัศน์สำหรับการดำเนินงานเชิงรุก (Vision for Proactive Operation) 2. กิจกรรมให้ความสำคัญกับการวิเคราะห์ และคาดการณ์สถานการณ์ การ แข่งขันในอนาคตอย่างเป็นระบบและเป็นรูปธรรม ซึ่งจะช่วยในการวางแผนการ ดำเนินงานมีประสิทธิภาพมากยิ่งขึ้น					
3. กิจกรรมให้ความสำคัญกับการพัฒนาทรัพยากรอย่างเป็นระบบและเป็น รูปธรรมทั้งในปัจจุบันและอนาคต ช่วยให้ผู้สามารถบรรลุเป้าหมายได้อย่างมี ประสิทธิภาพ และประสิทธิผลสูงสุด					
4. กิจกรรมส่งเสริมให้มีการจัดระบบการบริหารงานในอนาคตที่แสดงให้เห็น วิธีการที่มุ่งสู่จุดมุ่งหมายอย่างชัดเจน ช่วยให้มีแนวทางที่ดีเพื่อนำไปสู่ ความสำเร็จขององค์กร					
การสนับสนุนของผู้บริหาร (Top Management Support) 5. ผู้บริหารระดับสูงเชื่อมั่นว่าการมีการบริหารงานที่ดีและเป็นระบบ จะช่วยทำให้เกิด ประสิทธิภาพในการดำเนินงานมากยิ่งขึ้น					
6. ผู้บริหารระดับสูงส่งเสริมให้บุคลากรเข้ามามีส่วนร่วมในการฝึกอบรม เพิ่มพูนความรู้ และทักษะอย่างต่อเนื่อง ซึ่งจะช่วยให้เกิดศักยภาพในการดำเนินงานมากยิ่งขึ้น					
7. ผู้บริหารระดับสูงสนับสนุนให้มีการจัดสรรทรัพยากรในการดำเนินงานอย่างเพียงพอ ช่วยให้เกิดประสิทธิภาพและประสิทธิผลในการดำเนินงานที่ดีมากยิ่งขึ้น					
8. ผู้บริหารระดับสูงให้ความสำคัญกับการเปิดโอกาสให้บุคลากรนำเสนอแนวคิดใหม่ๆ ที่ ไม่เคยมีมาก่อน ซึ่งจะช่วยให้เพิ่มทางเลือกในการดำเนินงานให้มีประสิทธิภาพและ ประสิทธิผล					
วัฒนธรรมการเรียนรู้ขององค์กร (Organizational Learning Culture) 9. กิจกรรมเชื่อมั่นว่าการปลูกฝังการเรียนรู้ร่วมกันของบุคลากร จะช่วยให้เกิด ประสิทธิภาพในการดำเนินงานมากยิ่งขึ้น					
10. กิจกรรมสนับสนุนให้บุคลากรได้เรียนรู้และพัฒนาความรู้ใหม่ๆ ซึ่งจะช่วยให้การ ดำเนินงานบรรลุเป้าหมายตามที่กำหนดไว้ได้เป็นอย่างดี					



ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อความสามารถในการจัดการความคิดสร้างสรรค์ของ
พนักงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อความสามารถในการจัดการความคิดสร้างสรรค์ ของพนักงาน	ระดับความคิดเห็น				
	มาก ที่สุด	มาก	ปาน กลาง	น้อย	น้อย ที่สุด
	5	4	3	2	1
วัฒนธรรมการเรียนรู้ขององค์กร (Organizational Learning Culture) 11. กิจกรรมส่งเสริมให้มีการนำประสบการณ์ในอดีตมาใช้เป็นแนวทางในการ แก้ปัญหในการทำงาน ช่วยให้กิจการดำเนินงานได้อย่างมีประสิทธิภาพและ บรรลุเป้าหมายได้เป็นอย่างดี					
12. กิจการสนับสนุนให้เกิดการแบ่งปันความรู้และประสบการณ์ร่วมกันอย่าง สม่ำเสมอและต่อเนื่อง จะช่วยให้การดำเนินงานบรรลุวัตถุประสงค์ได้เป็นอย่างดี					

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อความสามารถในการจัดการความคิดสร้างสรรค์
ของพนักงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

ปัจจัยภายนอกที่ส่งผลต่อความสามารถในการจัดการความคิดสร้างสรรค์ ของพนักงาน	ระดับความคิดเห็น				
	มาก ที่สุด	มาก	ปาน กลาง	น้อย	น้อย ที่สุด
	5	4	3	2	1
การเปลี่ยนแปลงสภาพแวดล้อมที่มีความต่อเนื่อง (Continuous Environment Change) 1. สภาพแวดล้อมในการดำเนินงานมีการเปลี่ยนแปลงอย่างต่อเนื่อง ทำให้กิจการต่างๆ ต้องมุ่งเน้นการเรียนรู้และทำความเข้าใจเพื่อให้สามารถดำเนินงานได้อย่างมี ประสิทธิภาพ					
2. ความต้องการของลูกค้าที่มีการเปลี่ยนแปลงตลอดเวลา ยากต่อการคาดการณ์ ทำให้ กิจการต่าง ๆ ต้องมีการติดตามความเคลื่อนไหวของลูกค้าดังกล่าว เพื่อให้สามารถ ตอบสนองความต้องการของลูกค้าได้ดียิ่งขึ้น					
3. สถานการณ์การแข่งขันทางธุรกิจที่มีความซับซ้อนและรุนแรงมากขึ้น ทำให้กิจการ ต่างๆ ต้องแสวงหากลยุทธ์ในการดำเนินงานอยู่เสมอ เพื่อให้สามารถสร้างประสิทธิภาพ ทางการแข่งขันได้ดียิ่งขึ้น					
4. กฎระเบียบและมาตรฐานในการดำเนินงานในปัจจุบันมีการเปลี่ยนแปลงอย่างมาก ทำ ให้กิจการต่างๆ ต้องดำเนินงานให้มีประสิทธิภาพและมีประสิทธิผลมากยิ่งขึ้น ภายใต้ สถานการณ์ดังกล่าว					



ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อความสามารถในการจัดการความคิดสร้างสรรค์
ของพนักงานของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย (ต่อ)

ปัจจัยภายนอกที่ส่งผลต่อความสามารถในการจัดการความคิด สร้างสรรค์ ของพนักงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปาน กลาง 3	น้อย 2	น้อยที่สุด 1
<p>การเติบโตทางด้านเทคโนโลยี (Technology Growth)</p> <p>5. เทคโนโลยีมีการเจริญเติบโตและก้าวหน้าอย่างต่อเนื่อง ทำให้กิจการ ต่างๆ ต้องศึกษา ทำความเข้าใจ และใช้ประโยชน์จากเทคโนโลยีดังกล่าว ให้เกิดประโยชน์สูงสุด</p>					
<p>6. ปัจจุบันเทคโนโลยีเข้ามามีบทบาทในการดำเนินงานมากยิ่งขึ้น ทำให้ กิจการต่างๆ ต้องมุ่งมั่นพัฒนาและปรับปรุงความสามารถในการประยุกต์ เทคโนโลยีให้เกิดประโยชน์สูงสุด</p>					
<p>7. เทคโนโลยีมีการพัฒนาอย่างรวดเร็ว ทำให้กิจการต่างๆ ต้องบูรณาการ การใช้เทคโนโลยีในการเสริมสร้างการดำเนินงานให้มีประสิทธิภาพและ ตอบสนองต่อการเปลี่ยนแปลงที่เกิดขึ้นได้อย่างทันท่วงที</p>					
<p>8. ความหลากหลายของเทคโนโลยีที่เพิ่มขึ้น ทำให้กิจการต่างๆ ต้องเลือก และประยุกต์ใช้เทคโนโลยีให้เหมาะสมกับการดำเนินงานขององค์กร ให้เกิดประโยชน์สูงสุด</p>					



ตอนที่ 7 ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการบริหารจัดการของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย

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ขอขอบพระคุณที่ท่านสละเวลาตอบแบบสอบถามทุกข้อ



APPENDIX F

Cover Letter and Questionnaire (English Version)



Questionnaire to the Ph. D. Dissertation Research
**“Employee Creativity Management Capability and Corporate Sustainability:
empirical Evidence from furniture Exporting businesses in Thailand”**

Dear Sir,

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

Part 1: Personal information about managing director or managing partner of furniture exporting businesses in Thailand,

Part 2: General information about furniture exporting businesses in Thailand ,

Part 3: Opinion on strategic learning management orientation of furniture exporting businesses in Thailand,

Part 4: Opinion on business outcomes of furniture exporting businesses in Thailand,

Part 5: Opinion on internal environmental operation of furniture exporting businesses in Thailand,

Part 6: Opinion on external environmental operation of furniture exporting businesses in Thailand, and

Part 7: Recommendations and suggestions in the operation of furniture exporting businesses in Thailand.

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

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 the 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,

(Pattarika Chinchang)
Ph. D. Student
Mahasarakham Business School
Mahasarakham University, Thailand

Contact Info:

Office No: 043 – 754333 ext. 3431

Fax No: 043 – 754422

Cell phone: 086 – 464 – 0337

E-mail: pattarika.ch@gmail.com



Part 1 Personal information about accounting manager/director of furniture exporting 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. Educational level

☐ Undergraduate or lower degree or lower

☐ Higher than undergraduate

5. Working experience

☐ Less than 10 years

☐ 10- 15 years

☐ 16 – 20 years

☐ More than 20 years

6. Monthly salary

☐ Less than 50,000 Baht

☐ 50,000 – 70,000 Baht

☐ 70,001-90,000 Baht

☐ More than 90,000 Baht

7. Working position

☐ Managing director

☐ Managing partner

☐ Other (Please Specify).....



Part 2 General information of furniture exporting businesses in Thailand

1. Business owner type

<input type="checkbox"/> Company limited	<input type="checkbox"/> Partnership
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2. Location of business

<input type="checkbox"/> Northern	<input type="checkbox"/> Central
<input type="checkbox"/> Eastern	<input type="checkbox"/> Southern
<input type="checkbox"/> Northeastern	<input type="checkbox"/> Bangkok

3. Operating capital

<input type="checkbox"/> Less than 50,000,000 Baht	<input type="checkbox"/> 50,000,000 - 100,000,000 Baht
<input type="checkbox"/> 100,000,001 - 150,000,000 Baht	<input type="checkbox"/> More than 150,000,000 Baht

4. Number of full time employees

<input type="checkbox"/> Less than 50 persons	<input type="checkbox"/> 50 – 100 persons
<input type="checkbox"/> 101 – 150 persons	<input type="checkbox"/> More than 150 persons

5. Period of time in business operation

<input type="checkbox"/> Less than 5 years	<input type="checkbox"/> 5 - 10 years
<input type="checkbox"/> 11 – 15 years	<input type="checkbox"/> More than 15 years

6. Average annual revenues

<input type="checkbox"/> Less than 25,000,000 Baht	<input type="checkbox"/> 25,000,001 – 75,000,000 Baht
<input type="checkbox"/> 75,000,001 – 125,000,000 Baht	<input type="checkbox"/> More than 125,000,000 Baht

7. Experience in exporting

<input type="checkbox"/> Fewer than 5 years	<input type="checkbox"/> 5-10 years
<input type="checkbox"/> 11-15 years	<input type="checkbox"/> More than 15 years

8. Major markets abroad

<input type="checkbox"/> Asia	<input type="checkbox"/> Europe
<input type="checkbox"/> America	<input type="checkbox"/> Others



**Section 3 Opinion on employee creativity management capability
of furniture exporting businesses in Thailand**

Employee Creativity Management Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
New Ideas Generation Orientation					
1. Firm believes that the personnel who has new ideas to perform a work can help firm operate more efficiently.					
2. Firm that encourage their employee to take initiative at work can make the administration of the firm even more successful.					
3. Firm pushed the idea of freedom and diversity of thought expression was presented by employee that can help the development of the organization's success even more.					
4. Firm focus on the preparation of the creative development system for employee which is a concrete that will result in an increased ability to compete successfully.					
Working Practice Originality Implementation					
5. Firm believes that employee has the new method to perform at work that can make the successful administration.					
6. Firm focus on the ways to create and invent a new style practices, which can make the administration achieve more efficient and effective.					
7. Firm encourages employee to develop and seeks a novel practice, which can help the modern administration and can respond to change.					
8. Firm encourage employees to design new work practices to enhance the potentiality of administration for achieving goals.					



**Section 3 Opinion on employee creativity management capability
of furniture exporting businesses in Thailand (continued)**

Employee Creativity Management Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Novel Operational Method Awareness					
9. Firm believes that employees which are realizing the value of the novel management process that can make the potential of the administration even more.					
10. Firm believes that employees which are realizing the value of the novel management process that can make the potential of the administration even more.					
11. Firm promote employees that have the usage of technology in operations management, can apply to the administration of firm to respond to the changes as well.					
12. Firm support employees to improve techniques and methods of management for increased operational efficiency.					
13. Firm focus on investments to improve a novel manufacturing process and a novel operational processes to achieve efficiency and effectiveness in the administration.					
Job Improvement Value Focus					
14. Firm believes that the personnel has improved the quality of performance can help an organization more successful.					
15. Firm encourage employees to analyze the working environment and various constraints arise, which are used to plan a working more efficiently.					
16. Firm focused on opening opportunities for employee to plan and make decisions in independence operations, can respond to the needs of customer in a timely and effective manner.					
17. Firm focus on changing that requires novelty and challenges in the performance of employees to achieve the goals and to make the operation more efficient.					



**Section 3 Opinion on employee creativity management capability
of furniture exporting businesses in Thailand (Continued)**

Employee Creativity Management Capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Creative Solution Usefulness Competency					
18. The firm believes that the employee has the potential to solve the problems with reasoning will help make operations more efficient.					
19. Firm encourage employees to seek new information in operation, which will help the administration to achieve the better results.					
20. Firm encourage employees to analyze a variety of operation method that can help to achieve the set objectives.					
20. Firm encouraged employees to apply the advanced technology in a systematic problem solving and is the concrete which can help develop operational effectiveness.					

**Section 4 Opinion on business outcomes of furniture exporting businesses
in Thailand**

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Organizational Innovation					
1. Firm introduce new products and services and is constantly trying to launch into the market.					
2. Firm has applied new techniques and new methods of administration in effective organizational operation.					
3. Firm has applied new technologies in an organizational operations.					
4. Firm has developed a new operation process and can be used to operate the well.					



**Section 4 Opinion on business outcomes of furniture exporting businesses
in Thailand (continued)**

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Organizational Productivity					
5. Firm has the good operational method that can achieve organization's goals and objectives.					
6. Firm has operational process management which is modernity, quickness and efficiency.					
7. Firm has the good operational method that can achieve organization's goals and objectives.					
8. Firm has operational process management which is modernity, quickness and efficiency.					
Organizational Excellence					
9. Firm has efficiency and effectiveness operational which can achieve their goals.					
10. Firm has developed a good process and beyond the expectations of the organization.					
11. Firm has operation process management that can respond to changes in the environment as well.					
12. Firm has the potential personnel and ability to continually perform the outstanding operation system.					
Business Competitiveness					
13. Firm have product and service with variety, quality and modern beyond its competitors.					
14. Firm has capital and resource which are substantial enough to continually deal with competition.					
15. Firm has the management of costs and prices than its competitors.					
16. Firm has the diversification of sales and distribution channels.					



**Section 4 Opinion on business outcomes of furniture exporting
Businesses in Thailand (continued)**

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Firm Success					
17. Firm has market share and performance that increased continuously.					
18. Firm has performance both monetary and non-monetary which is consistent with organization's goals.					
19. Firm has been recognized by executives that there is a good management and continuous quality.					
20. Firm has been recognized by customers and stakeholders that the business is managed under a good operation which has effectiveness and quality.					
Corporate Sustainability					
21. Firm believe the firm that can survival under the competitive situation.					
22. Firm has a reputation as recognition of customers and other organizations.					
23. The overall results of performance, firm are growing steadily.					
24. Firm has made relationship with customers and stakeholders are always good.					

**Section 5 Opinion on the effect of internal factor affecting employee
creativity management capability of furniture exporting
businesses in Thailand**

Internal factor affecting employee creativity management capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Vision for Proactive Operation					
1. Firm is confident that future goals orientation that will allow for efficient operation and greater potential.					
2. Firm focuses on analyzing and forecasting the future changes situations to generate information in strategic plan, which be consistently plans with the occurred changes, which lead to the most effectiveness.					



Section 5 Opinion on the effect of internal factor affecting employee creativity management capability of furniture exporting businesses in Thailand (continued)

Internal factor affecting employee creativity management capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Vision for Proactive Operation 3. Firm focus on the development of resources which is a systematic and concrete, both now and in the future can help to achieve their goals more effectively and efficiently. 4. Firm promote the management system in the future, which shows a way that lead to a clearly intended goal and can be used to a good way that lead to a firm success.					
Top Management Support 5. Executives are confident that good management and systematic that will make administrative operations more efficient. 6. Executive encourages employee to attend the training to increase continuously knowledge and skills that will help ensure the viability of the operation.					
7. Executives encouraged to allocate adequate resources to operate in order to become more efficient and effective in organizational operation.					
8. Executives focus on openness for employees to present new ideas that have never been seen before which enhances the choices on implementation and increased efficiency.					
Organizational Learning Culture 9. Firm believes that supporting the learning together of employee that help increase operational efficiency.					
10. Firm encourage employees to learn and develop new knowledge helps achieve the goals.					
11. Firm encourages bringing past experience to be used as guidelines in solving problems in the workplace which contribute to quickly and accurately achieving goals.					
12. Firm encourages knowledge and experience sharing with regularly and continuously will help to achieve firm goals.					



Section 6 Opinion on the effect of external factor affecting employee creativity management capability of furniture exporting businesses in Thailand

External factor affecting employee creativity management capability	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Continuous Environment Change					
1. The operating environment is changing constantly, a firm must focus on learning and understanding to be able to operate effectively.					
2. Customers' needs are changing all the time, it is difficult to predict, which firms need to monitor the movements of their customers to better understand customer needs.					
3. The competitive situation is more complex, and more violent, firm must seek operational strategy in order to create a competitive performance even better.					
4. Regulations and standards in operation have changed significantly, firm must adapt to operate					
Technology Growth					
1. Technology is constantly advancing and growing, firms must to study, understand, and utilize technologies to create maximum benefit.					
2. Currently, technologies have the important roles of operations management, firm must be committed to developing and improving the ability to apply technology to achieve maximum benefit.					
3. The technology is developing rapidly, firm must be integrate into the use of technology to enhance operational efficiency and respond to the changes in a timely manner.					
4. A variety of technologies are increasing, firm must be choose and apply the technology are appropriate for the organization's operations to achieve maximum benefit.					



Section 7 Recommendations and suggestions regarding business administration of furniture exporting 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 give your business card attached with this questionnaire. The summary will be mailed to you upon the completion of data analysis.



APPENDIX G

Letters to Experts





บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333 ต่อ 3431

ที่ ศธ.0530.10/

วันที่ 5 มิถุนายน 2559

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน รองศาสตราจารย์ ดร.ปัทมาภรณ์ อุตสาหะวานิชกิจ

ด้วย นางสาวกัทริกา ชินช่วง นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการจัดการ (ปร.ด.) คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานและความยั่งยืนขององค์กร : การตรวจสอบเชิงประจักษ์ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้นเพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไปตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.การุณย์ ประทุม)

รองคณบดีฝ่ายบัณฑิตศึกษาและวิจัย

(รองศาสตราจารย์ ดร.ปัทมาภรณ์ อุตสาหะวานิชกิจ)

คณบดีคณะการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม





ที่ ศธ 0530.10/ ๗๗๖

คณะกรรมการบัญชีและการจัดการ
มหาวิทยาลัยมหาสารคาม
อำเภอกันทรวิชัย จังหวัดมหาสารคาม
44150

10 มิถุนายน 2559

เรื่อง ขอความอนุเคราะห์กรอกแบบสอบถาม

เรียน กรรมการผู้จัดการ/หุ้นส่วนผู้จัดการ

ด้วย นางสาวภัทริกา ชินช้าง นิติระดับปริญญาเอก คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง “ความสามารถในการจัดการความคิดสร้างสรรค์ของพนักงานและความยั่งยืนขององค์กร : การตรวจสอบเชิงประจักษ์ของธุรกิจส่งออกเฟอร์นิเจอร์ในประเทศไทย” ซึ่งเป็นส่วนหนึ่งของการทำวิทยานิพนธ์ หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) และการศึกษาในครั้งนี้ได้นับให้นิติศึกษาข้อมูลด้วยตนเอง ดังนั้น เพื่อให้การจัดทำวิทยานิพนธ์เป็นไปด้วยความเรียบร้อยและบรรลุวัตถุประสงค์ คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขออนุญาตให้ นางสาวภัทริกา ชินช้าง ศึกษาและเก็บรวบรวมในรายละเอียดตามแบบสอบถามที่แนบมาพร้อมนี้

คณะกรรมการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม หวังเป็นอย่างยิ่งว่าจะได้รับความอนุเคราะห์จากท่านในการให้ข้อมูลในครั้งนี้ และขอขอบคุณมา ณ โอกาสนี้

ขอแสดงความนับถือ

(รองศาสตราจารย์ ดร.ปัทมาภรณ์ อุตสาหะวานิชกิจ)

คณบดีคณะกรรมการบัญชีและการจัดการ

มหาวิทยาลัยมหาสารคาม

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