STRATEGIC ORGANIZATIONAL KNOWLEDGE ORIENTATION AND FIRM PERFORMANCE: AN EMPIRICAL RESEARCH OF BEVERAGE BUSINESSES IN THAILAND

CHUTIKORN PRUNGKIAT

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

May 2016

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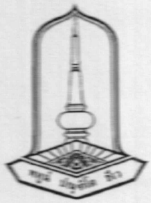

The examining committee has unanimously approved this dissertation, submitted by Miss Chutikorn Prungkiat as a partial fulfillment of the requirements for the degree of doctor of philosophy in Management at Mahasarakham University.

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This dissertation was funded by Mahasarakham Business School,
Mahasarakham University Scholarship,
Academic Year 2015

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to my thesis advisor, Associate Professor Dr.Karun Pratoom for his invaluable help and constant encouragement throughout the course of this research. I am most thankful for his guidance and teaching, not only the research methodologies, but also many other ways of life. I would not have succeeded this far and this thesis would not have been completed without all the support that I have always received from him. In addition, I am grateful for co-advisor, Dr.Saranya Raksong, all examining committee members, all instructors, and other person for suggestions and all their help. Furthermore, I would to take this opportunity to give my special thanks to Associate Professor Dr.Phaprukbaramee Ussahawanitchakit, Assistant Professor Dr.Wannee Trongpanich, and Dr.Jindarat Peemanee for their patience and perseverance with my inquisitive mind.

Most importantly, I would like to thanks to Mahasarakham Business School, Mahasarakham University for funding my dissertation. Moreover, I am deeply grateful to Rajamangala University of Technology Isan, for funding my doctoral studies. Appreciation is also extended to all respondents of beverage businesses, who freely gave their valuable time to answer the questionnaires in this research.

Finally, I most appreciatively acknowledge my parents, my husband and my friends for all their support throughout the period of this research.

Chutikorn Prungkiat

TITLE Strategic Organizational Knowledge Orientation and Firm Performance: An Empirical Research of Beverage Businesses in Thailand
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DEGREE Ph.D. **MAJOR** Management
UNIVERSITY Mahasarakham University **DATE** 2016

ABSTRACT

The purpose of this research was to investigate relationships among strategic organizational knowledge orientation (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism) and firm performance via organizational creativity, new idea generation, organizational innovation, and business competitiveness as mediating variables, and technology support and learning culture as moderators. Top management leadership, entrepreneurial mindset, and human resource practices effectiveness, as well as organizational development continuity, and intra-organizational collaboration focus are the antecedents of strategic organizational knowledge orientation (SOKO). The research was conducted by using questionnaires for collecting data from 117 beverage businesses in Thailand, which were chosen from Thailand's industrial directory of the Department of Industrial Works database, Ministry of Industry of the Thai government, March 2015. The statistics used for data analysis were correlation analysis and the ordinary least squares (OLS) regression analysis.

The results indicated that decision-making skills emphasis had a positively significant effect on all its consequent variables. However, business operation understanding focus, managerial information awareness, decision-making skills emphasis, and organizational experience usefulness had a partially significant impact on organizational creativity. Environmental education dynamism had a partially significant impact on new idea generation and firm performance. In addition, the findings showed that organizational creativity had a positively significant influence on new idea generation and organizational innovation. However, it did not have a significant effect on business

competitiveness. Likewise, new idea generation and organizational innovation had a positively significant influence on business competitiveness and firm performance. Further, business competitiveness had a positively significant influence on firm performance.

Moreover, all antecedent variables had a partially significant impact on SOKO. Top management leadership had a positively significant impact on business operation understanding focus, decision-making skills emphasis, and environmental education dynamism. In addition, entrepreneurial mindset was positively related to decision-making skills emphasis. Besides, human resource practices effectiveness was positively related to organizational experience usefulness and environmental education dynamism. Likewise, organizational development continuity had a positively significant impact on business operation understanding focus and managerial information awareness. Particularly, intra-organizational collaboration was the most important factor that impacted SOKO in developing managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism. In addition, there was a moderating effect of technology support on the relationship between decision-making skills emphasis and organizational creativity. Furthermore, there was a moderating effect of learning culture on the relationship between intra-organizational collaboration focus and environmental education dynamism.

The findings of this research provided a theoretical contribution for acquiring expanded knowledge of traditional management for SOKO integration between the organizational knowledge concept and strategic management disciplines. These findings can be used as guidelines for executives of beverage business in Thailand by encouraging employees to improve their decision-making skills for resolving complex business issues.

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CHAPTER I

INTRODUCTION

Overview

In a severely competitive global economy, firms must confront an uncertain environment. The rapid transfer of technology and the internet lead to a dramatic shift in the selection of behavior for an appropriate strategy that adapts to the competitive situation in order to gain a competitive advantage and guarantee long-term survival (Santos-Vijande and Alvarez-Gonzalez, 2007). Most organizations set a strategy focused on resource dependence for the organization through knowledge-driven and innovation-driven operation to help the organization succeed (David and Foray, 2003). Knowledge of an organization is an important factor for creating competitiveness. It is also a main factor for satisfying and fulfilling the needs of customers in a knowledge-based society (Wiklund and Shepherd, 2005; Pargaru, Gherghina and Duca, 2009).

Organizational knowledge is evolving employee learning capabilities by learning and knowledge acquisition through their routines, information, and experiences. This includes organizational culture, identity, and policies, as well as practices, documentation, systems, and involvement in work, which is embedded in specific organizational histories (Nickerson and Zenger, 2004). It is the collection of knowledge acquired and created by past and present members of the organization, which encourages creative new ideas, leading to productivity and innovation (Adams and Lamont, 2003). Specifically, strategic knowledge is defined as the use of knowledge for benefit in implementation according the objectives of the organization (Ishino, Hori and Nakasuka, 2000). It includes the skills and ability used in business operation and solving problems that may arise from the changes in the environment effectively. Under strategy knowledge, the formulation of each organization will have variance according to different knowledge assets in each organization and the direction in which a business is operating to achieve corporate goals (Lau et al., 2008).

Although organizational and strategy knowledge are considered the most valuable strategic assets for an organization to establish and maintain sustainable competitive advantage and firm performance (Phipps and Prieto, 2012; Maruta, 2014), researchers in the past had an interest in the study of organizational knowledge focusing only on the meaning in terms of the knowledge management process within the organization (Teece, 1998). More than likely, it applied to corporate strategy, which is the gap in this field of research. Researchers believe that firms must necessarily have organizational knowledge and comply with the strategy of the organization. That way, the organization can use it to bring knowledge to fully conduct business, which will contribute to achieving the goals and success of the organization. Thus, this researcher is interested in doing research on organizational knowledge that can contribute to effectively achieving the objectives of the organization, also called "strategic organizational knowledge orientation" (SOKO). The researcher expects that it will result in a positive outcome and the success of business operation. Business has a high level of competitiveness, so innovation in needed to meet the continuing demands of customers.

Beverage businesses in Thailand were used as population and sample of this research, because of three reasons: Firstly, the beverage business is an especially important element to stimulate economic development in the country, which is demonstrated by the amount of excise tax that exists in this particular business. It is one of the five major goods sold in Thailand (The Excise Department, 2015). These businesses contribute to employment for many people, both in the beverage industry directly and in industries related to the manufacture of beverages, such as the manufacture of glass, cans, and bottles. It also includes the agricultural industry, which contributes the raw materials for the manufacture of beverages and beverage containers. Secondly, the current conditions of the beverage business are rife with intense competition. Further, the effect of major beverage multinational businesses is likely to expand investment in Thailand due to preferential taxes under the ASEAN Free Trade Area (AFTA). Likewise, major operators in the alcoholic beverage industry in Thailand will begin their penetration into the non-alcoholic beverages business, according to consumer behaviors that place importance on health factors. Lastly, in terms of management strategies, beverage businesses must adapt by focusing on strategic knowledge of the firm to enhance their ability to use that knowledge for creating innovation for drinks

with exotic flavors and ingredients as well as having a positive impact on health, which could result in being able to compete more effectively in the beverage market (Deichert et al., 2006).

The main purpose of this research is to investigate the impact of strategic organizational knowledge orientation (SOKO) on firm performance. Furthermore, this research makes four contributions to the literature on SOKO. Firstly, this research expands on the theoretical knowledge-based view of firm contributions on SOKO. This research attempts to investigate the antecedents, consequences, and moderators of SOKO by utilizing a knowledge-based view of the firm to explain the conceptual model. The knowledge-based view of the firm will explain the organizational knowledge that is able to develop and take advantage of knowledge resources in accordance with the goals of the organization by the firm that recognizes the value of knowledge (Edvardsson, 2009). This will lead to creativity in the organization, with new ideas, innovation (Hjalager, 2010), and increased competitiveness (Nahapiet and Ghoshal, 1998), as well as success in firm performance (Galende, 2006). Secondly, this research proposes new dimensions of SOKO that are different from previous research. This research provides clarification of the new dimensions, measurements and a conceptual model for SOKO, including linkage to the theoretical view to explain the phenomenon. SOKO consists of five dimensions, including business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism, which have rarely been included in previous research. Thirdly, this research proposes that the samples are beverage businesses in Thailand, for which empirical research in this context is somewhat lacking. Finally, this research illustrates the importance of SOKO, which can increase firm value and provide the means for leaders to adapt it for use in their organizations. Ultimately, relationships among all variables are observed by the purposes of the research and the research questions are shown.

Purpose of the Research

The key purpose of this research is to investigate the relationship between strategic organizational knowledge orientation and firm performance. Thus, the specific research purposes are as follows:

1. To examine the effects of each dimension of strategic organizational knowledge orientation (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organization experience usefulness, and environmental education dynamism) on organizational creativity, new idea generation, organizational innovation, and firm performance.

2. To investigate relationships among organizational creativity, new idea generation, organizational innovation, and business competitiveness.

3. To inquire relationships among new idea generation, business competitiveness, and firm performance.

4. To analyze relationships among organizational innovation, business competitiveness, and firm performance.

5. To explore the effects of business competitiveness on firm performance.

6. To prove the effects of each antecedent variable (top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus) on each dimension of strategic organizational knowledge orientation.

7. To test the moderating role of technology support on relationships among each of five dimensions of strategic organizational knowledge orientation, organizational creativity, new idea generation, organizational innovation, and firm performance.

8. To attempt the moderating role of learning culture on relationships among top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, intra-organizational collaboration focus, and five dimensions of strategic organizational knowledge orientation.

Research Questions

The key research question for this research is, "How does each of the five dimensions of strategic organizational knowledge orientation relate to firm performance?" Also, the specific research questions are as follows:

1. How does each dimension of SOKO have an influence on organizational creativity, new idea generation, organizational innovation, and firm performance?

2. How does organizational creativity relate to new idea generation, organizational innovation, and business competitiveness?

3. How does new idea generation relate to business competitiveness and firm performance?

4. How does organizational innovation relate to business competitiveness and firm performance?

5. How does business competitiveness have an influence on firm performance?

6. How does top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus influence each dimension of SOKO?

7. How does technology support moderate relationships among each of the five dimensions of SOKO, new idea generation, organizational innovation, organizational creativity, and firm performance? And

8. How does learning culture moderate relationship among top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, intra-organizational collaboration focus, and the five dimensions of SOKO?

Scope of the Research

The main purpose of this research is to investigate the relationship between SOKO and firm performance in the beverage businesses of Thailand. From a conceptual framework, several variables are included. Strategic organizational knowledge orientation is defined as the potentiality of the organization in awareness, focusing on the utilization of learning from data and the events that have already occurred as well as those that are emerging in order to effectively achieve the objectives and goals of the firm (Moorman and Miner, 1997; Marakas, 1999; Wang et al., 2009; Maruta, 2014). It comprises five dimensions: business operation understanding focus, managerial information awareness, decision-making skills emphasis, organization experience usefulness, and environmental education dynamism. Moreover, the consequences of the influence of SOKO are investigated, namely, new idea generation, organizational innovation, organizational creativity, business competitiveness, and firm performance. Likewise, the internal factors determining SOKO are examined. These factors are comprised of top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus. Two moderators, technology support and learning culture, are investigated to better conceive the phenomenon of this research.

A knowledge-based view (KBV) of the firm is used to draw a conceptual framework and develop a set of hypotheses. Firstly, a knowledge-based view of the firm will be applied to explain relationships among SOKO and organizational creativity, new idea generation, organizational innovation, business competitiveness, and firm performance. Based on the KBV of the firm, its assumption argues that KBV is used to explain the relationship between the ability to develop and take advantage of the knowledge resources in accordance with the goals of the organization. The KBV of the firm is a framework that identifies the utilization benefits for the knowledge assets of the firm, leading to a sustainable competitive advantage (Barney, 2001). This is because knowledge is complex, tacit, and heterogeneous, which is harder for a competitor to imitate (Boxall, 1996). In this context, organizational knowledge will generate a firm's capability to think creatively, which is beneficial. KBV is the conceptual framework

of that phenomenon, which describes the knowledge of the organization, and can help companies seek new opportunities (Wiklund and Shepherd, 2005). When a firm can use organizational knowledge resources in accordance with organizational goals, creativity for building innovation in organizations can result (Hjalager, 2010). Secondly, KBV will be applied to explain relationships among top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus and SOKO. The KBV of the firm can be used to describe variables related to human capital, which is a causal factor that brings success in focusing on strategic organization knowledge (Sullivan, 2000). This is because knowledge assets have specific characteristics, social complexity and causal ambiguity in the emergence of new knowledge (Coff, 1997). Finally, KBV will be applied to explain the facts of the moderating effects of technology support and relationships among each dimension of SOKO as well as the consequences. The moderating role of learning culture on relationships among antecedents and the five dimensions of SOKO are also explained. The organization encourages continuous learning technology as the unique ability to use the strengths of each organization to stimulate knowledge. Creative thinking leads to innovation, enterprise and the survival of the organization in highly competitive situations (Gumusluoglu and Ilsev, 2009).

The research data has been chosen from Thailand's industrial directory of the Department of Industrial Works database, Ministry of Industry of the Thai government, March 2015. There were 634 beverage businesses the sample group for this research. Executive of each beverage business has been chosen as the key informant. The unit of analysis in this research is firm-level. A questionnaire is the instrument employed for data collection. The questionnaire is mailed directly to each of the executives of beverage business in Thailand. This research has employed both descriptive and inferential statistical techniques, including factor analysis, correlation analysis, and multiple regression analysis. Moreover, a test of non-response bias is used to prevent possible response bias problems between early and late-responding firms. To ensure the integrity of the questionnaire, tests of validity and reliability, factor analysis, and Cronbach's alpha are used to improve the questionnaire's credibility.

Organization of the Dissertation

This research is organized into five chapters. Chapter one presents an overview of the research, the purposes of the research, research questions, the scope of the research, and the organization of the dissertation. Chapter two reviews the relevant literature on SOKO, explains the theoretical framework to describe the conceptual model and relationships among the various variables, and develops related hypotheses for testing. Chapter three explains the empirical examination of the research methods, including the sample selection and data collection procedure, the variable measurements of each variable, and the development and verification of the survey instrument, as well as the statistics and equations to test the hypothesis, and the table summarizing the variable definitions and operational definitions. Chapter four offers the empirical results and discussion. It also compares previous research to the empirical results of this research with explanations. Finally, Chapter five proposes the conclusion, theoretical and practical contributions, limitations, and future research directions.

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The previous chapter described the overview situation with strategic organizational knowledge orientation (SOKO), which entails the research objectives, research questions and scope of the research. This chapter offers details to comprehensively understand SOKO, including the theoretical foundation, relevant literature reviews, and conceptual framework, as well as hypotheses development of this research. Accordingly, these hypotheses are positive to be observed to answer the research objectives and questions. SOKO is the key variable in this research. This research conducts empirical investigation to understand how SOKO is built and how it influences firm performance. Although previous literature on organizations concerns many studies on the topic, there is little empirical research based on firm strategy that creates new idea competence, innovation success, competitiveness and performance. In fact, there is only minimal prior research on the new dimension of SOKO to enhance new idea generation, organizational innovation, organizational creativity, and business competitiveness on firm performance.

This research creates the characteristics of SOKO through five distinct dimensions, leading to new strategic organizational knowledge orientation. Furthermore, this research endeavours to integrate a knowledge-based view of firm perspectives that support relationships among the antecedents of SOKO, the consequences of SOKO, learning culture, and technology support. An earlier overview of the literature on the role of antecedents and consequence factors of SOKO was drawn. This chapter is comprised of two sections: the first section introduces the theories that back up the conceptual model in this research. The second section provides definitions of all variables and details for the development of the hypotheses on the subject of strategic organizational knowledge orientation in the context of beverage businesses in Thailand. It also presents the conceptual model.

Theoretical Foundations

In the field of SOKO, researchers have introduced several different theoretical models to explain organizational knowledge and phenomena to guide relationships among antecedents of SOKO, with each dimension of SOKO and its consequence as mediating variables. Technology support and learning culture, as a moderator of SOKO, are explained by the knowledge-based view of the firm.

Knowledge-Based View of the Firm

The knowledge-based view (KBV) is an extension of the resource-based view (RBV), as the RBV suggests only that knowledge is valuable, rare, inimitable, and non-substitutable (VRIN). This results in a resource that is a source of sustainable competitive advantage, which is consistent with the concept of KBV (Barney, 1991). However, the RBV points out that knowledge is the basis for competition, while the KBV focuses on the knowledge of the firm as the most strategically significant resource of a firm and it is the most important resource in the planning of the organization's strategy (De Carolis, 2002; Felin and Hesterly, 2007). An organization is considered a social agency that uses and stores knowledge within its capabilities and as the firm’s ability to survive (Hakanson, 2010). In previous studies that used the KBV framework, results showed that a firm that has the ability to develop and take advantage of the knowledge resources will gain competitive advantages over competitors under the circumstances of fierce competition and the changing needs of customers and technology (Cavusgil, Calantone and Zhao, 2003). KBV describes the specific phenomenon as knowledge, because the KBV is socially complex, and leads to difficult to imitate innovation. Also, the knowledge in the firm potentially has great performance implications because it increases the ability to identify and exploit new opportunities (Wiklund and Shepherd, 2005).

In this research, the KBV theory was applied to describe relationships among the antecedents of SOKO, each dimension of SOKO and its consequences. In addition, the KBV of the firm is applied to clarify the fact that the moderating effects of learning culture in relationships among the antecedents of SOKO and each dimension of SOKO, and it is applied to explain the moderating effects of the technological support in relationships among each dimension of SOKO and the consequences of SOKO as

follows. Firstly, based on the KBV of the firm, it is assumed that KBV can be used to explain the relationship between the ability to develop and take advantage of the knowledge resources in accordance with the goals of the organization. The KBV of the firm will leverage intangible assets such as knowledge, capabilities, know-how and learning as parts of a key strategy in creating a competitive advantage (Barney, 1991; Teece, 1998). In this context, organizational knowledge will create a firm's new capabilities in thinking creatively, which is beneficial to it. Knowledge in this research refers to potential changes in factors in production, that lead to valuable outcomes (Nickerson and Zenger, 2004), and it enhances the ability to meet the requirements of customers more effectively than its rivals (Agarwal and Selen, 2009). Most importantly, firms need to be able to recognize the value of knowledge (Edvarsson, 2009), which is that it can enhance learning that leads to new ideas, creativity, and continued innovation in organizations (Johannessen, 2008; Hjalager, 2010). This is based on the view that knowledge is complex, tacit, and heterogeneous, and is harder to imitate than raw materials, and provides the driving force for the competitiveness and performance of firms (Peteraf and Barney, 2003). Thus, organizations need to integrate the specialized knowledge in order to create an advantage and developing their relevant organizational abilities. This will lead firms to gain a competitive advantage and success in their performance, both financially, and non-financially (Cheng and Kruwiede, 2012).
As discussed above, the KBV of the firm explains relationships among each dimension of SOKO and its consequences.

Secondly, SOKO occurring within an organization requires a causal factor in many respects. This research focuses specifically on two factors internal of organizations, including the personnel and the behavior, which are interdependent (Bandura, 1999). However, the operation of the firm to achieve its objectives and goals requires specific knowledge that is human capital, which has value and uniqueness (Lepak and Snell, 2002). Human capital consists of three features, including: (1) the knowledge assets that have specific characteristics due to the ability of the individual and the relationship between people in the organization, (2) social complexity, such as organizational culture, and (3) causal ambiguity in the emergence of new knowledge (Coff, 1997). This characteristics listed above suggest that the KBV of the firm can be used to describe variables related to human capital, which is a causal factor that brought success

in focusing on strategic organization knowledge (O'Sullivan, 2000). Human capital in this research focuses on the personnel within the organization, such as executives, the behavior of personnel to focus on the concept of entrepreneurship, the interdependence within the organization, and organizational culture.

Nickerson and Zenger (2004) state that an executive with leadership and a high level of ability to manage a business will result in bringing about the transfer of knowledge that has an effective result and the development of the new knowledge adds value to the organization as well. This shows that the different knowledge and ability of administrators will have an impact on the performance of each organization that is different. Thus, the ability of management and leadership when combined with other resources of the organization will become a strong knowledge asset, which can lead to the success and sustainability of the firm (Kaplan et al., 2001). Moreover, the KBV of the firm is used to explain the ability to adapt and accept the risks of the organization that may arise from environmental factors. It describes the relationship of the changes in the behavior of personnel and the ability to choose the appropriate strategy for an organization that leads to new opportunities and success and is the implementation base of a proactive strategy (Gurel, Altinay and Daniele, 2010). Especially, the adaptive behavior of personnel in the organization to have entrepreneurial characteristics, which is the manner it contributes to the development of operating knowledge within the organizations that contribute to the success of the firm in the long term (Ucbasaran, Westhead and Wright, 2008). In addition, new knowledge requires behavior resource exchange and interdependence of personnel within the organization. As already mentioned, these behaviors lead to new knowledge, and are different in each organization, and cause causal ambiguity in the emergence of new knowledge (Coff, 1997). This is explained by the KBV of the firm. This resource exchange and interdependence will lead to the learning together of personnel for achieving the objectives of the organization together (Hitt, Ireland and Hoskisson, 1999).

Likewise, the organization requires shared attitudes or beliefs of the personnel in the organization which will help build a culture of learning together that leads to creating new knowledge (Oliver and Kandadi, 2006). And most importantly, learning culture is fundamental in the changing of the ability of personnel within the organization to contribute to a positive understanding of how the operations of the

organization in collaboration will lead to the success of the organization in the long term (Haraguchi, Ozaki and Iba, 2009). The foregoing shows that the KBV of the firm will be applied to explain relationships among the antecedents of SOKO (top management leadership, entrepreneurial mindset, and intra-organizational collaboration focus) and each dimension of SOKO. In addition, the KBV of the firm is applied to clarify the fact that the moderating effects of learning culture are found in relationships among the antecedents of SOKO and each dimension of SOKO.

Finally, as an addition to the ability of individuals in the organization, organizations require a good learning process and get adequate support from the organization on all sides in order to be able to adapt to the situation, both internal and external organizations, which leads to the achievement of the targets (Haraguchi, Ozaki and Iba, 2009). Human resource practices are a system for how the organization affects the formulation and application of organizational strategy (Cappelli and Singh, 1992). Moreover, human resource practice is a tool to manage human capital to use the KBV of the firm as an application in terms of assorted strategies to fit each organization, which results in human resource practices of each organization being unique and hard to imitate (Lado and Wilson, 1994).

For example, Collins and Clark (2003) stated that the organization having to pay compensation based on the results of the evaluation will lead to positive behavior of its staff to meet the needs of the organization. However, the firm needs to make an effort in continuous planning and strategic reinforcement of the organization in order to respond to the changing situations, both inside and outside the organization. The ability to develop a dynamic organization is the key factor leading to the ability to leverage the knowledge assets within the organization as well. The KBV of a firm helps explain the phenomena of organizations, which can predict the changes occurring in the business and lead to improved behavior and an increase in the capacity of strategic organizations (Cohen and Levinthal, 1990). Specifically, organizations need to develop strategies that when continue will drive performance to lead to their success (Beer, 2001). The modernization of the equipment and how to operate the business as a key strategic asset of firm contributes to the superior performance over competitors (Hitt, Ireland and Hoskisson, 1999). Similarly, the organization encourages continuous learning technology as the unique ability to use the strengths of each organization to stimulate

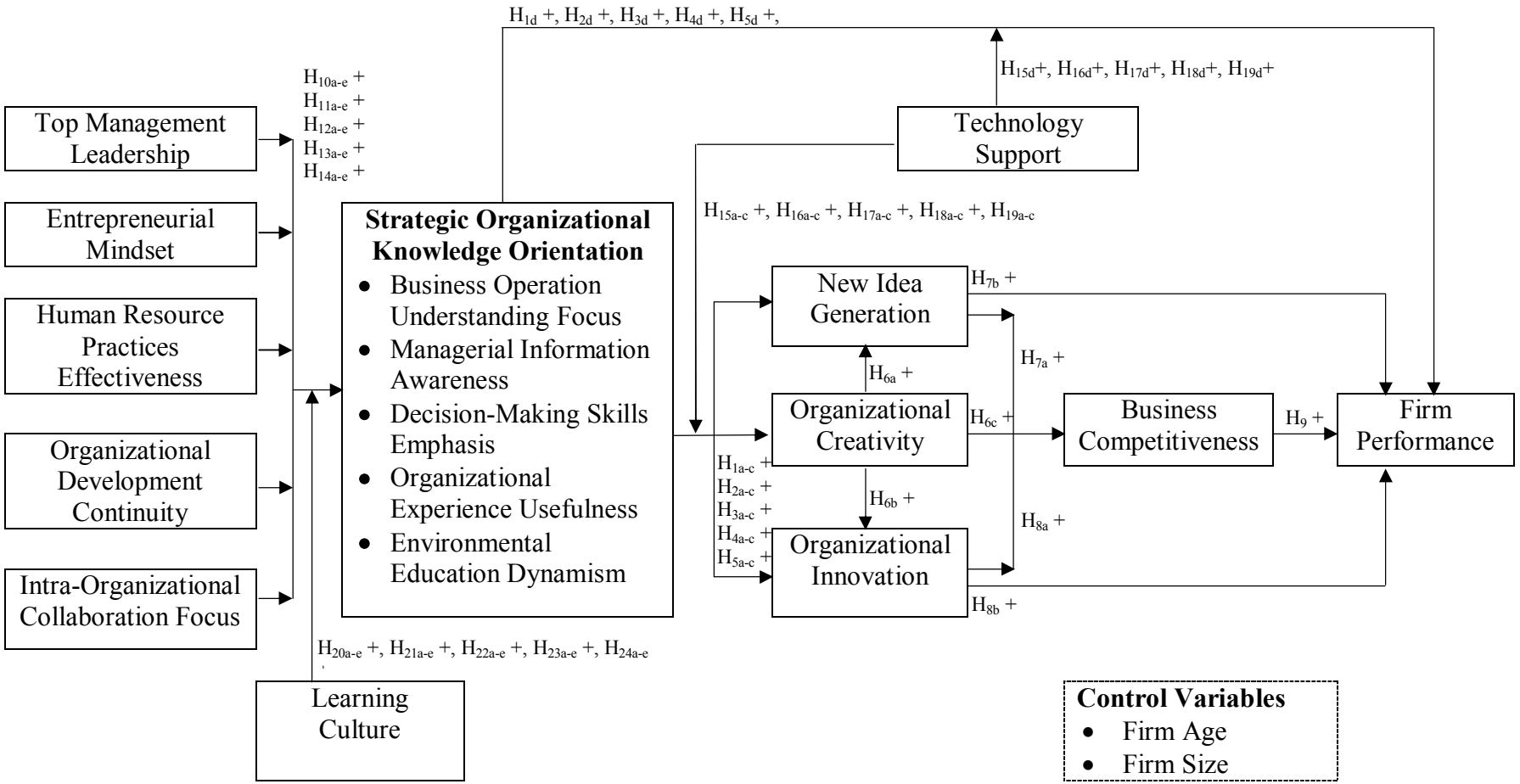
knowledge. Creative thinking leads to innovation, enterprise and survival of organization in the highly competitive situations (Gumusluoglu and Ilsev, 2009).

The foregoing shows that the KBV of the firm will be applied to clarify relationships among the antecedents of SOKO (human resource practices, and organizational development continuity) and each dimension of SOKO. In addition, the KBV of the firm is applied to clarify the fact that the moderating effects of technology provide support in relationships among each dimension of SOKO and its consequences. Consequently, the next section details the literature review for developing the hypotheses of SOKO to be discussed and proposed and to show the full conceptual framework.

Relevant Literature Reviews and Research Hypotheses

According to the literature, this research attempts to conceptually link relationships among the antecedents and consequences of SOKO through a knowledge-based view of the firm. The relationship model is separated into three parts as follows. Firstly, this research focuses on the main effect of SOKO, comprising business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness and environmental education dynamism with awareness of the positive effect on new idea generation, organizational innovation, organizational creativity, business competitiveness, and firm performance. Secondly, this research examines the antecedent variables of SOKO that cause effects on SOKO, namely, top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus, which are examined and expected to have a positive relationship on the five dimensions of SOKO. Finally, this research assumes two moderating effects, namely, learning culture and technology support. Learning culture enhances relationships among the antecedents of SOKO and each dimension of SOKO; whereas technology support moderates relationships among the five dimensions of SOKO and their consequences. Accordingly, the developed full conceptual model is illustrated in Figure 1.

Figure 1: Conceptual Model of Strategic Organizational Knowledge Orientation and Firm Performance: An Empirical Research of Beverage Businesses in Thailand



Strategic Organizational Knowledge Orientation (SOKO)

An intense competitive environment impacts each organization trying to adapt in order to survive. Each firm is required to use all company resources to innovate, meet customer needs, and achieve goals (Popovski and Nikolic, 2014). A review of past literature found that knowledge is significant for various kinds of firm work operations and enables success as targeted. It is the resource that adds competency to attain a competitive advantage, which makes firms grow, survive, and stabilise (Debowski, 2006; Zehrer, 2011). In this research, knowledge refers to the information, understanding, and skill that one gets from experience or education, which minimises complexities and maximises the firm's capability in the innovation process and valuable outputs (Nickerson and Zenger, 2004; Plessis, 2007), which is the basis of wealth creation and prosperity. It is also one of the driving forces most important to business success (Riege, 2007). In addition, knowledge and capabilities are important factors for creating a competitive, sustainable advantage and contributing to the increase of performance (Martin and Salomon, 2003; Wiklund and Shepherd, 2005).

However, organizational knowledge arises from learning how to practice and experience embedded in the organization's history. An organization will create new knowledge and use it to carry out the management of the company to achieve the goals or objectives of the organization (Nelson and Winter, 1982; Zack, 1999). In this research, organizational knowledge is defined as a pattern of practice caused by the accumulation of past experience, including individual knowledge paired with that of other individuals in an organization to guide organizational behaviour in the future or a collection of knowledge acquired and created by past and present members of the organization (Levitt and March, 1996; Maruta, 2014). It is knowledge that is embedded in organizational processes, procedures, practices, and structures (Teece, 2000).

A review of previous literature found that organizational knowledge impacts the firm practice guidelines for responding to dynamic environmental changes. It is the most valuable strategic asset for an organization to establish and maintain a sustainable competitive advantage (Barney, 1991; Grant, 1997). Moreover, explicit and tacit knowledge in an organization is important because it impacts on a building of creativity to develop ideas (Hall and Andriani, 2003; Muneer et al., 2014). Likewise, Rasulzada and Dackert (2009) suggest that organizational knowledge enhances firms' abilities to

create or develop new methods of knowledge management strategies and service innovation superior to their competitors and firm performance (Galende, 2006). More important, organizational knowledge encourages creative new ideas (Phipps and Prieto, 2012) leading to productivity, innovation, and performance (Adams and Lamont, 2003). From the foregoing, it is apparent that organizational knowledge is important and a topic receiving interest from researchers. However, most researchers focus on organizational knowledge in terms of knowledge management processes, unlike this research, which focuses on organizational knowledge in terms of being an asset that can serve as a strategy to achieve organizational goals.

Strategic orientation in this research refers to the direction in operating business to achieve corporate goals (Lau et al., 2008). The strategy formulation of each organization will vary according to the circumstances, with knowledge and assets being different in each organization. This is the ability of an organization that is unique, hard-to-imitate affect the competitive advantage (Luo, Zhou and Liu, 2005), which strategic ability is the trying in the combine appropriate ability of internal organization, to achieve the target of the organization and establish a competitive advantage. This research focuses on strategic knowledge, which is defined as using knowledge to benefit implementation according the objectives of the organization (Ishino, Hori and Nakasuka, 2000). From a literature review of the past, knowledge is not enough for organizations to build creative processes. It also requires strategic knowledge, which is knowledge that meets the needs and circumstances of true enterprise (Kvan and Candy, 2000). In particular, the focus on strategic knowledge within the organization includes the skills and ability in operation business to effectively solve problems that may arise from changes in the environment. Focusing on strategic knowledge within this organization can avoid many costs, which result from efforts to achieve the goals of the organization that lead to added performance for the firm.

According to Yoshikuni and Albertin (2014), strategic organizational knowledge is the understanding of the purpose of the organization through participation, communication and learning by the employees in an organization. Understanding of the strategy of the organization is critical to the practice of their employees in accordance with organization needs. Moreover, the dissemination of corporate strategy requires communication and mutual understanding among employees. Thus, communication is

the key that can lead to performance (Porter, 2010). The implementation of strategies based on knowledge must involve continuous learning to increase the performance of the firm (Nonaka, Toyama and Konno, 2000). Thus, it is necessary for firms to have organizational knowledge and comply with the strategy of the organization so that it can use that knowledge to fully conduct business, which will contribute to achieving the goals and success of the organization.

However, Townley (2001) defined strategic organizational knowledge as a set of processes for creating and sharing knowledge across the organization to support the creation and use of knowledge, leading to increased efficiency and productivity in the workplace as well as achieving the mission for the goals of the organization. It enables the system or process of organizational knowledge to develop innovation and acquire more sustainable competitive advantages. Consequently, firms ought to learn and understand information and new knowledge on a continuous basis. It enables firms to develop their own thinking and creativity, which increases new ideas that are beneficial to the firm. Moreover, a firm's creativity, which is unique and competitively advantageous, is one of a firm's strong capabilities, especially creativity in innovating and developing new methods of knowledge management in order to acquire new knowledge by using dynamic strategy. It is SOKO which creates new ideas and abilities useful for creating more competitive advantage and performance.

The previous literature has not given a direct meaning for SOKO. Thus, it will be defined from the literature reviews. Strategic organizational knowledge orientation is defined as the potentiality of the organization in awareness, focusing on the utilization of learning from data and the events that have already occurred as well as those that are emerging in order to effectively achieve the objectives and goals of the firm (Moorman and Miner, 1997; Marakas, 1999; Wang et al., 2009; Maruta, 2014). The key literature review shows that strategic organizational knowledge orientation tends to lead to firm performance. A summary of key conceptual and empirical researches for SOKO is presented in Tables 1 and 2 below.

Table 1: Summary of Key Conceptual Papers on Strategic Organizational Knowledge Orientation

Authors	Key Content
Nonaka and Takeuchi (1995)	Organizational knowledge creation, therefore, should be understood as a process that 'organizationally' amplifies the knowledge created by individuals and crystallizes it as a part of the knowledge network of the organization.
Davenport and Marchard (1999)	Organization knowledge is a set of processes for understanding and applying knowledge strategic resources in an organization. It is a structured approach which proposes methods for recognition, assessment, organizing storing and applying knowledge in order to meet the needs and aims of the organization.
Gupta, Iyer and Aronson (2000)	Organizational knowledge is a process by which organizations are able to detect, select, organize, distribute and transmit vital information and experiences which would be used in activities like problem resolution, dynamic learning, strategic programming and decision-making.
Townley (2001)	Strategic organizational knowledge is a set of processes for creating and sharing knowledge across the organization to support the creation and use of knowledge lead to increase efficiency and productivity in the workplace and achieving the mission for goals of the organization.
Hall and Andriani (2003)	Organizational knowledge accepted that both the explicit and tacit components of organizational knowledge play an important role in innovation
He, Qiao and Wei (2009)	Knowledge management is considered a strategy and effort in value-added in asset to use improving an organization's effectiveness.
Muneer et al. (2014)	Organizational knowledge influences on the creating of creativity to develop ideas and application of innovation.

Table 2: Summary of Key Empirical Researches on Strategic Organizational Knowledge Orientation

Authors	Title	Independent Variables	Dependent Variables	Findings
Lopez-Nicolas and Meronno-Cerdan (2011)	Strategic Knowledge Management, Innovation and Performance	Knowledge Management Strategies	Organization Performance	Both knowledge management strategies (codification and personalization) impact on innovation and organizational performance directly and indirectly (through an increase on innovation capability).
Honarpour, Jusoh and Nor (2012)	Knowledge Management, Total Quality Management and Innovation: A New Look	Total Quality Management and Knowledge Management	Innovation	Total quality management and knowledge management are reciprocally related to each other and they can impact innovation.
Birasnav, Albufalasa and Bader (2013)	The Role of Transformational Leadership and Knowledge Management Processes on Predicting Product and Process Innovation: An Empirical Study Developed in Kingdom of Bahrain	Transformational Leadership, Knowledge Management Process,	Organizational Innovation	Findings also revealed that knowledge transfer and application partially mediated the relationship between transformational leadership and product innovation; knowledge acquisition and application completely mediated the relationship between transformational leadership and process innovation.

Table 2: Summary of Key Empirical Researches on Strategic Organizational Knowledge Orientation (Continued)

Authors	Title	Independent Variables	Dependent Variables	Findings
Chuang, Chen and Chuang (2013)	Human Resource Management Practices and Organizational Social Capital: The Role of Industrial Characteristics	HRM Practices	Social Relationships Among Employees	Results suggest that HRM practices that focus on facilitating relationships among employees are positively related to OSC, and the relationship is stronger for firms operating in less regulated industries.
Jiang et al. (2014)	Entrepreneurial Orientation, Strategic Alliances, and Firm Performance: Inside the Black Box	Entrepreneurial Orientation	Knowledge Acquisition	The amount of knowledge the focal firm acquires from partners will mediate the relationship between its entrepreneurial orientation, innovative and financial performance.
Camison and Villar-Lopez (2014)	Organizational Innovation as an Enabler of Technological Innovation Capabilities and Firm Performance	Product Innovation Capabilities, Process Innovation Capabilities	Firm Performance	The results confirm that organizational innovation and technological capabilities for products and processes can lead to superior firm performance.

Table 2: Summary of Key Empirical Researches on Strategic Organizational Knowledge Orientation (Continued)

Authors	Title	Independent Variables	Dependent Variables	Findings
Birasnav (2014)	Knowledge Management and Organizational Performance in the Service Industry: The Role of Transformational Leadership Beyond the Effects of Transactional Leadership	Transformational Leadership	KM Process, Organizational Performance	The results indicate that transformational leadership has strong and positive effects on KM process and organizational performance after controlling for the effects of transactional leadership. Further, KM process partially mediates the relationship between transformational leadership and organizational performance after controlling for the effects of transactional leadership.
Kalkan, Bozkurt and Arman (2014)	The Impacts of Intellectual Capital, Innovation and Organizational Strategy on Firm Performance	Innovation, Organizational Strategy	Firm Performance	The findings show that both variables-innovation, Organizational strategy contribute positively to firm performance.

Table 2: Summary of Key Empirical Researches on Strategic Organizational Knowledge Orientation (Continued)

Authors	Title	Independent Variables	Dependent Variables	Findings
Yoshikuni and Albertin (2014)	Model Analysis of the Relationship between Strategic Organization Knowledge and the Use of Information Systems in Firm Performance in Brazil	Strategic Organization Knowledge	Firm Performance	The findings show that greater readiness to strategic organization knowledge is positively associated with firm performance.
Donate and Pablo1 (2015)	The Role of Knowledge-Oriented Leadership in Knowledge Management Practices and Innovation	Knowledge-Oriented Leadership	KM Practices, Innovation Performance	Results suggest that presents empirical evidence of the mediating effect of KM practices in the relationship between knowledge-oriented leadership and innovation performance.

The variables and dimensions of SOKO are developed from a conceptual framework with three perspectives. First, organizational knowledge is a pattern of practice caused by the accumulation of past experience, including individual knowledge paired with that of other individuals in an organization to guide organizational behavior in the future; or, it is knowledge that is embedded in organizational processes, procedures, practices and structures (Teece, 2000). It will enable the system or process of organizational knowledge to develop innovation and acquire more sustainable competitive advantages. Moreover, organizational knowledge influences the generation of creativity to develop ideas and applications of innovation, and firm performance (Galende, 2006; Muneer et al., 2014). Second, strategic knowledge is an effort towards achieving the goals of firms and take advantage from existing knowledge assets thus improving an organization's effectiveness (He, Qiao and Wei, 2009). In addition, it is an important asset in organizations to support learning and organizational improvement in the processes and functions (Farzin et al., 2014). Lastly, strategic organizational knowledge is the understanding of the strategy of the organization through participation, communication and continuous learning that leads to the rise of performance within the organization (Nonaka, Toyama and Konno, 2000). For example, to participate in the strategic staff planning, results in the plan being accepted by everyone in the organization that becomes a strategy applicable to real situations (Ouakouak and Ouedraogo, 2013). Thus, in this research, the dimension of SOKO has been developed with its components as follows:

Business Operation Understanding Focus

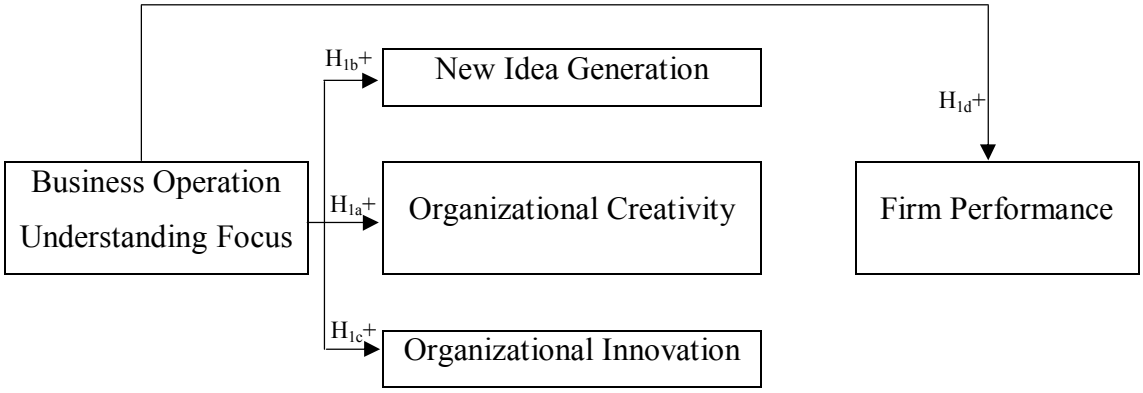
"Organizational knowledge" is the knowledge embedded in organizational processes, methods, technologies, practices and organizational structures (Teece, 2000). This definition covers both tacit and articulated dimensions such as employee know-how to work as a tacit dimension; but when the steps are written, they become articulated dimensions (Polanyi, 1967; Griffith, Sawyer and Neale, 2003). Organizational knowledge, at most, is embedded in systems, processes, policies, procedures, and basic activities of the business e.g. personnel learn how to operate the manual and learn to participate as a member of the organization in process' of transferring systemic practical and stored knowledge in response to competitive pressures (Child and Rodrigues,

1996). Similarly, organizational or systemic knowledge approaches operations or methods with new techniques (Nonaka and Takeuchi, 1995; Edmondson and Moingeon, 1996). Organizational knowledge is considered a core competency that organizations are able to deliver as a unique value to customers, shareholders and other stakeholders; it contributes to the competitiveness of organizations (Edmondson and Moingeon, 1996). However, organizations need quick responses to meet the basic management and awareness of organizational work processes to increase the value of business assets (Byington and Chrisensen, 2005). The business operations are the daily activities within the organization (e.g. processing, monitoring, and data storage) to change resources or information into products or services in order to deliver value to customers. Thus, the employees need to understand the basic activities of business processes and contribute to its application to benefit the organization. From the above, understanding business operation focus refers to the concentration on recognition of the fundamental activities of a business thereby orienting the value-added assets of the organization, leading to achieving the organization's goal (Byington and Chrisensen, 2005; Srichanapun, Ussahawanitchakit and Boonlua, 2013).

The review of past literature found that a significant trend in the relationship of business operation focus understanding, generation of new ideas, organizational creativity, innovation and firm performance may result. Recognition of peoples organizational roles and responsibilities in manufacturing goods or services, has led to the development of a sustainable environment for competition (Schroeder, Bates and Juntillha, 2002); also the understanding of strategies and knowledge of business operation may be the cause of creativity, innovation and competitive advantage (Gurteen, 1999; Arend, 2003; Porter and Kramer, 2006). Moreover, an organization that encourages an understanding of the production process, packaging, and design of goods results in the ability to produce high-quality goods having a positive impact performance (Morgan, Kaleka and Katsikeas, 2004). On the other hand, in some previous studies found that knowledge concepts had no influence on innovation (Ngowsiri, Ussahawanitchakit and Pratoom, 2013). McGill and Brockbank (2004) stated that firms must increase the organization's ability fitness for understanding new knowledge as this will affect the performance of organizations. Based on the above, it seems that business operational understanding on focus will possibly influence new idea generation, organizational

innovation, organizational creativity, and firm performance as presented above in Figure 2.

Figure 2: Relationships among Business Operation Understanding Focus, New Idea Generation, Organizational Innovation, Organizational Creativity, and Firm Performance



Hypothesis 1a: The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational creativity.

Hypothesis 1b: The higher the business operation understanding focus is, the more likely that firms will obtain greater new idea generation.

Hypothesis 1c: The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational innovation.

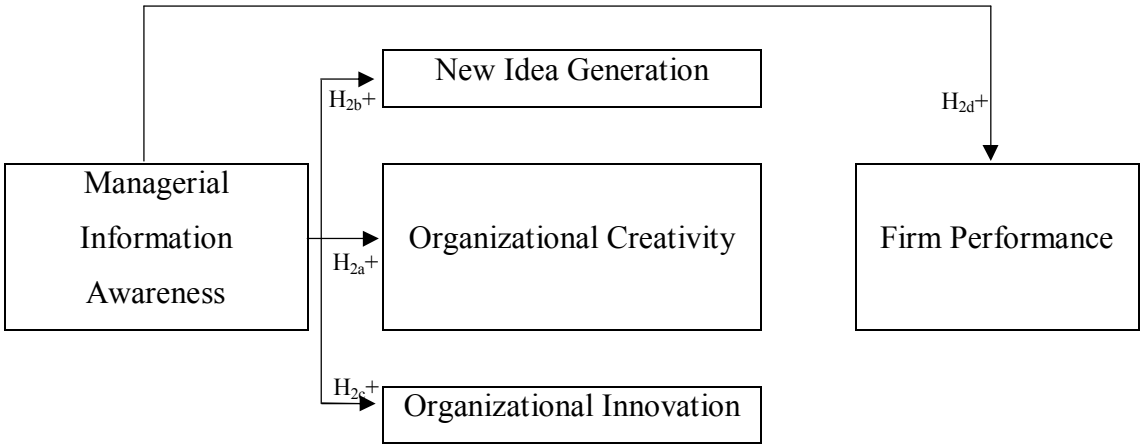
Hypothesis 1d: The higher the business operation understanding focus is, the more likely that firms will obtain greater firm performance.

Managerial Information Awareness

Post-industrial society has become information or knowledge society, knowledge is the key role of information systems in increasing competitiveness of firms. The information is of utmost importance for executive use in business operation contributed to achieving the organization's goals. Moreover, managerial information collects, manages, distributes and utilizes business-related information, leads to the application of creating innovation and efficiency (Rad, Shams and Naderi, 2009). Similarly, Nonaka and Takeuchi (1995) argue that information is the flow of data, but knowledge is made up of the flow of information in the commitment that knowledge is connected to beliefs and contributes to action. In this research, managerial information awareness is defined as the realization as to the importance of business data, by advocating its accumulation and utilization, leads to innovation in order to respond to customer demands above that of competitors (Rad, Shams and Naderi, 2009; Chitmun, Ussahawanitchakit and Boonlua, 2012; Chaikambang, Ussahawanitchakit and Boonlua, 2012).

Review previous literature found a significant trend in the relationship of managerial information awareness, new ideas generation, organizational creativity, organizational innovation and firm performance may occur. Information in corporate management is the integration of information relating to the business sharing a framework among people in the organization (Nonaka, 1994; Dixon, 1994; Crossan, Lane and White, 1999). The information is to describe the situations under faith, truth, views and expectations used in business operations (Wiig, 1997). The organization has the ability to recognize and use information that is important for innovation to achieve a competitive advantage (Cohen and Levinthal, 1990; Kristandl and Bontis, 2007). Moreover, Allen, Lee and Tushman (1980) found that the application of information within the organization will lead to new ideas and creativity beneficial to the organization, where it is a source of profitability and has prospects for long term stability of the organization. Petrevska, Poels and Manceski (2015) found that the ability of information systems of firms with adaptable management lead to the new ideas about organizational processes. Based on the above, it seems that managerial information awareness will possibly influence new idea generation, organizational innovation, organizational creativity, and firm performance as presented in Figure 3.

Figure 3: Relationships among Managerial Information Awareness, New Idea Generation, Organizational Innovation, Organizational Creativity, and Firm Performance



Hypothesis 2a: The higher the managerial information awareness is, the more likely that firms will obtain greater organizational creativity.

Hypothesis 2b: The higher the managerial information awareness is, the more likely that firms will obtain greater new idea generation.

Hypothesis 2c: The higher the managerial information awareness is, the more likely that firms will obtain greater organizational innovation.

Hypothesis 2d: The higher the managerial information awareness is, the more likely that firms will obtain greater firm performance.

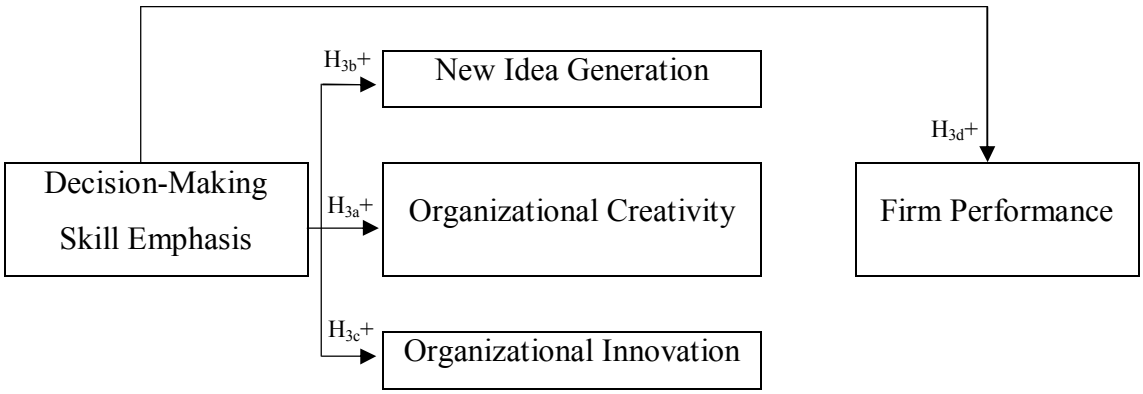
Decision-Making Skill Emphasis

Decision-making in business is selecting choices or compromises in order to meet business objectives. However, decision-making is not just about selecting the right choices or compromises. Effective decision-making is defined here as the process through which alternatives are chosen and then managed through implementation to achieve business objectives, this is the result of a systematic process, with clearly defined elements handled in a distinct sequence of steps (Drucker, 1967). Decision-

making is becoming the basis of competitive advantage and core value creation for organizations (Brock and Russell, 2009). In addition, improving decision-making could solve business problems more efficiently and be the key to superior business performance (Walker, 2001). In this research, decision-making skill emphasis is defined as the realization of the ability to build expertise by deliberately identifying and choosing alternatives to solve business problems efficiently and effectively (Walker, 2001; Brock and Russell, 2009; Towler, 2010; Schoenfeld, 2011). This research focused on three key elements of the decision process including alternatives, selection processes and desired results (Lunenburg, 2010). Decision-making refers to the identifying choices involves selection from a number of options by a process that involves more than a simple final choice from among alternatives in order to achieve target. Moreover, this is one of the central activities of management and plays a huge part in implementation of any process.

Previous literature review found a significant trend in the relationship of decision-making skill emphasis, new ideas generation, creativity, innovation and a firms performance may result,. Highly competitive environments result in organization staff having to make decisions quicker in resolving issues, by compensating for the implementing of rules and regulations as a hierarchy (Drucker, 2008). This results in enabling employees to make many decisions to solve business problems efficiently. Therefore, the decision is a result of knowledge of skills to choose alternatives by personnel in the organization; or, knowledge learnt through practices embedded in the organization used in order to meet the needs of customers and smooth operations (Nelson and Winter, 1982). This accumulation of knowledge and skills by decision-making leads to the creation of products that are difficult to imitate and a sustainable competitive advantage (Wang and Wang, 2012). Similarly, the organization has the skills to make decisions in business that will improve performance, have more quality products and lowering production costs (Morgan, Wardy and Bartonz, 2004; Paiva, Roth and Fensterseifer, 2008). Based on the discussion above, it seems that decision-making skill emphasis will influence new idea generation, organizational innovation, organizational creativity, and firm performance as presented in Figure 4.

Figure 4: Relationships among Decision-Making Skill Emphasis, New Idea Generation, Organizational Innovation, Organizational Creativity, and Firm Performance



Hypothesis 3a: The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational creativity.

Hypothesis 3b: The higher the decision-making skill emphasis is, the more likely that firms will obtain greater new idea generation.

Hypothesis 3c: The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational innovation.

Hypothesis 3d: The higher the decision-making skill emphasis is, the more likely that firms will obtain greater firm performance.

Organizational Experience Usefulness

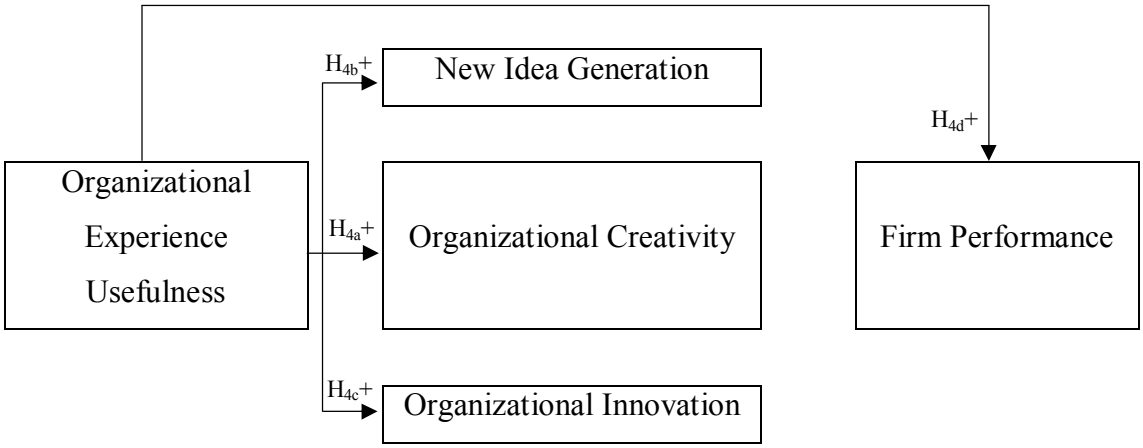
The view of distinctive organizational knowledge is a practice caused by past accumulated experience which becomes a guideline for future behavior (Levitt and March, 1996). These are the criteria of operation and norms methods, which become the framework for determining the operation of the organization. These experiences will be recorded as a shared memory that is often interlinked and modified as learning experiences that lead to innovation (Levitt and March, 1996). The knowledge or experience of an organization is the factor that contributes empowerment to business

operations (Teece, Pisano and Shuen, 1997; Zollo and Winter, 2002) and it is a major source of competitive advantage (Grant, 1996). The creation of organizational knowledge can be achieved by clearly accumulating the experience and knowledge sharing of individuals and groups. Thus, it is an experience that can only be accessed by members of the organization and can also be stored in the organizational memory, for future use (Zollo and Winter, 2002). The organizations themselves cannot gain experience, but organizational experience can take place through the members of an organization (Choe, 2004). However, organizational experiences are embedded within the structure and processes already existing in the organization, even though members leave (Cardy and Selvarajan, 2006). Also significantly, experience increases the ability of information analysis such as resolving complex situations (Hutzschenreuter and Horstkotte, 2012). Experience is the ability to perform tasks well and gain from practice (Reuber, 1997). In this research, organizational experience usefulness is defined as a firm's ability to understand and utilize the advantages and shortcomings of past events or practices, being most beneficial to the organization (Reuber, 1997). When a company is able to experience the application of competition this will lead to more efficient operations and better quality compared to its competitors (Singh, 2012).

For example, the review of past literature found a significant trend in the relationship of useful organizational experience, new ideas generation creativity, innovation and firm performance may occur. In addition, this learning from the experience of manufacturing and service firms has a positive, direct and indirect effect on market performance (Emden, Yaprak and Cavusgil, 2005). Apart from that, Choe (2004) finds that learning, organizational experiences have a moderating effect on the relationship between the provision of information and performance improvement. In another study, firms that were able to understand past organizational experience led to improvement in strategy to attain competitive advantage (Gottschalg and Zollo, 2007). Furthermore, in the application of organizational experience, it may be the foundation for creativity and innovation leading to increased performance (Amabile, Hadley and Kramer, 2002; Morgan, Kaleka and Katsikeas, 2004). In contrast, Prempree, Ussahawanitchakit and Boonlua (2013) found that experience is knowledge which has the limitation of gained knowledge transfers across different tasks; insufficient task repetition prevents effective learning achievement. Based on the discussion above, it seems that useful organizational

experience will possibly influence new idea generation, organizational innovation, organizational creativity and firm performance as presented in Figure 5

Figure 5: Relationships among Organizational Experience Usefulness, New Idea Generation, Organizational Innovation, Organizational Creativity, and Firm Performance



Hypothesis 4a: The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational creativity.

Hypothesis 4b: The higher the organizational experience usefulness is, the more likely that firms will obtain greater new idea generation.

Hypothesis 4c: The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational innovation.

Hypothesis 4d: The higher the organizational experience usefulness is, the more likely that firms will obtain greater firm performance.

Environmental Education Dynamism

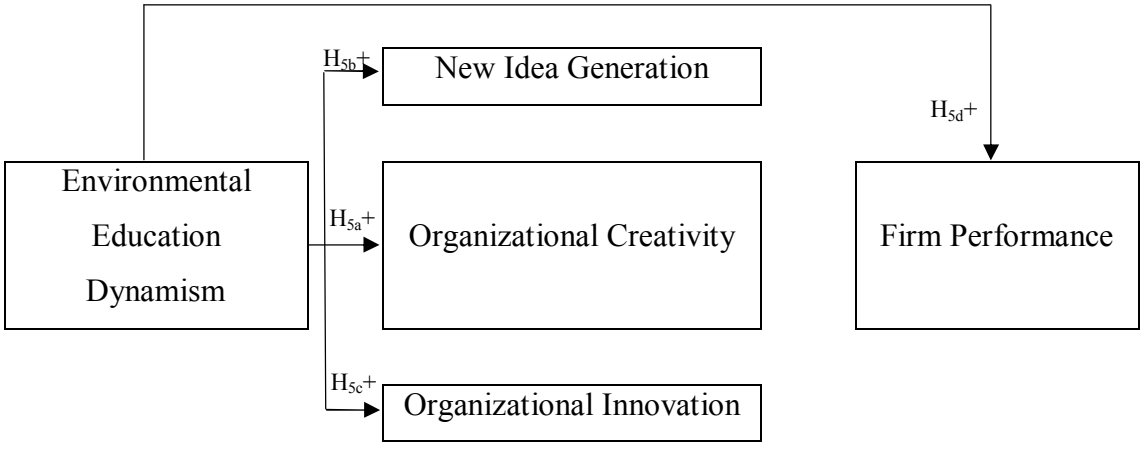
Environmental education is mastering knowledge and awareness of the dynamic changing environments (internal and external) increases through acquiring, assimilating, transforming and exploiting existing knowledge leads to the generation of new knowledge, innovation, and creativity (Bartosh, 2003). A review of past literature found strategic knowledge in the form of ability to accumulate and positioning organizations to improve business competitiveness (Rosenzweig and Roth, 2004). Organizational context or strategic knowledge means coping with the external environment, the development of the state, the position in the industry, the social strategy of core competencies and competitive positions. Germain et al. (2001) stated that the sharing of knowledge in operations management creates a competitive advantage. This is divided into two parts, including a dynamic view of the development of knowledge will lead to a division of the firm constantly evolving to meet the changing environment (Liedtka and Rosenblum, 1996; Teece, Pisano and Shuen, 1997); and knowledge of the organization from external sources. This will allow anticipation and response to environmental changes (Badri, Davis and Davis, 2000). The creation of new knowledge causes inter-operability using specific knowledge (explicit and/or tacit) as a tool to make a more efficient operation. It is a dynamic interaction with society and environment (Cook and Brown, 1999). Knowledge is embedded in social interaction and relationships within the organization (Badaracco, 1998). According to the view of Cook and Brown (1999), knowledge is created through a process of interaction with the world community and the environment. It demonstrates the interdependence of environmental education that supports a dynamic view of knowledge, clarity of form and the differences in society (Nonaka and Takeuchi, 1995); it features the relative importance of social interaction to the creation of new knowledge. Evans and Easterby-Smith (2001) suggest that organizational system of knowledge is as a result of its interaction with the environment with both inside and outside stakeholders. Also, Liao (2007) found that positive relationships among knowledge transfer, competitive advantage and environmental uncertainty.

In this research, environmental education dynamism is defined as adjustments in the learning of organizations, with a focus on pursuing and analyzing opportunities, is caused by changes in both internal and external organizations thus leading to the adaptation of the continuing organization (Bartosh, 2003; Pothong and Ussahawanitchakit,

2011). Information exchange with the external environment is suggested that to influence ideas generation (Cummings and O'Connell, 1978). Moreover, organizational knowledge influences how a firm dynamically deals with environmental changes under a dynamic environment (Grant, 1996). The firm will have the ability to increase knowledge of the organization to reduce risk and uncertainty (Liebeskind, 1996).

For example, the review of past literature found a significant trend in the relationship of environmental education dynamism, new ideas generation, creativity, innovation and firm's performance may result. Firms that benefit from service-based competitive advantage, compared to rivals (such as in product line breadth, technical support, higher product flexibility, and delivery speed) have succeed in comparatively better performance (Gimenez and Ventura, 2003). Eventually, organizations that can be qualified as dynamic may result in the organizational capability of innovation, positive performance improvement and effectiveness (Damanpour, Walker and Avellaneda, 2009). In contrast, some studies suggested that the environmental dynamism doesn't affect operations strategy. Based on the discussion above, it seems that environmental education dynamism will possibly influences new idea generation, organizational innovation, organizational creativity and firm performance as presented in Figure 6.

Figure 6: Relationships among Environmental Education Dynamism, New Idea Generation, Organizational Innovation, Organizational Creativity, and Firm Performance



Hypothesis 5a: The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational creativity.

Hypothesis 5b: The higher the environmental education dynamism is, the more likely that firms will obtain greater new idea generation.

Hypothesis 5c: The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational innovation.

Hypothesis 5d: The higher the environmental education dynamism is, the more likely that firms will obtain greater firm performance.

Organizational Creativity

Creativity refers to the thought processes of the brain, which are diverse, exotic and applied. If in terms of a firm, it is to implement these ideas lead to reinvention and innovation (Lumpkin and Dess, 2001). Creativity is trying to do better and to attempt the connection between the notion and emotions of individuals in the organization via the relationship between individuals, leading to initiatives that benefit the organization. This suggests that creativity is an ability of the organization (Amabile, 1998), since it is a source of the effectiveness of the firm (Woodman, Sawyer and Griffin, 1993). This research focuses on organizational creativity by integrating the definition that the overall ability of a firm to support the concept is aimed at inspiring novelty (Williams and Yang, 1999; Woodman, Sawyer and Griffin, 1993; Taggar, 2002). Creativity is a compilation of ideas and insights of employees, who would not only help solve problems within the organization, but who can also design creative solutions and new ideas. Creativity is fundamental to the development of ideas regarding procedures, practices, products or services that are both novel and potentially useful to the firm (Shalley, Zhou and Oldham, 2004). Thus, creativity is confirmed as a process of affecting novel and useful ideas in any domain (Amabile et al., 1996) caused by the collaboration of a group or organization aimed at bringing ideas to an application (Stein, 1994). The empirical research found that employees who are creative are likely to meet the needs of customers

through innovative ideas, leading to the creation of superior performance (Grewal, Levy and Kumar, 2009).

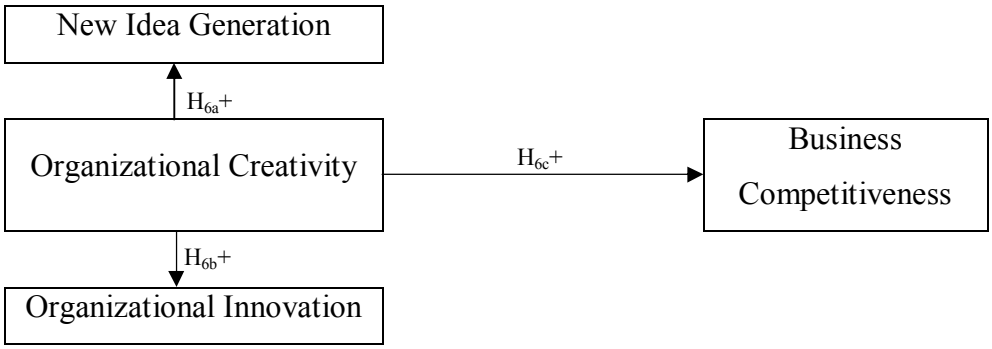
From the definition of organizational creativity discussed above it is the creation of new products that are useful and procedures or new ideas from the collaboration of employees within the organization. Woodman, Sawyer and Griffin (1993) showed clearly in their results, that creativity is the key factor to solving problems and difficulties through the inspiration of the communication process and development of ideas will lead to innovation (Majaro, 1991). To build the behavior of creativity within an organization requires several factors which may lead to maximizing resource utilization (Lawson, Yang and Yuan, 2009). Empirical research has found a positive correlation between creativity and innovation (Paolillo and Brown, 1978). This innovation is born from success in adopting organizational creativity into practice (Ekvall, 1999).

According to Amabile et al. (1996), the difference between creativity and innovation is that innovation begins with creative ideas from individuals or teams. Innovation that will occur requires a creative nature from insights essential to the operation to make a difference, leading to new things or changes in business processes, products or services (Morris, 2006). The creativity of persons in the organization will lead to innovative creation (Bharadwaj and Menon, 2000). This is organizations that are creative and which are likely to have the opportunity to create innovative ideas from the resources they have (Martins and Terblanche, 2003). They will find a way to create a process that is beneficial to the organization. Therefore, organizational creativity is a process of the development of ideas, leading to innovation real possibility. The creativity of the individual is considered as a basis for organizational creativity and innovativeness (Shalley and Gilson, 2004).

In addition to the creativity mechanism that will lead to innovation, it also shows that organizational creativity and innovation can lead to a better performance than competitors (Bharadwaj and Menon, 2000) due to the fact that creativity is a creative process that is difficult to imitate (Barney, 1991) and it is of competitive advantage. Increasing competitiveness in the business environment is dynamic, requiring creative thinking that leads to new ideas and innovations and is generated by a focus on the application of knowledge within the organization to try to build processes, methods,

or new products to target the ongoing response of an organization (Martins and Terblanche, 2003). Hence, it seems that organizational creativity will influences new idea generation, organizational innovation and business competitiveness as presented in Figure 7.

Figure 7: Relationships among Organizational Creativity, New Idea Generation, Organizational Innovation, and Business Competitiveness



Hypothesis 6a: Organizational creativity will have a positive influence on new idea generation.

Hypothesis 6b: Organizational creativity will have a positive influence on organizational innovation.

Hypothesis 6c: Organizational creativity will have a positive influence on business competitiveness.

New Idea Generation

In an environment that is rapidly changing and complex, each firm has a need to adapt by dwelling on the ability of ideas generation constantly such as in the creation or development of new production processes offered to the industry, and the changes or updates to existing organizations to create more value. This leads to a response to changes and competitive advantage (Massetti, 1996). Review of past literature found a significant trend in the positive relationship between product ideas and competitive advantage, by mostly focused studies on products that must be new or different from existing products (Koberg, Detienne and Heppard, 2003) and that are more than a

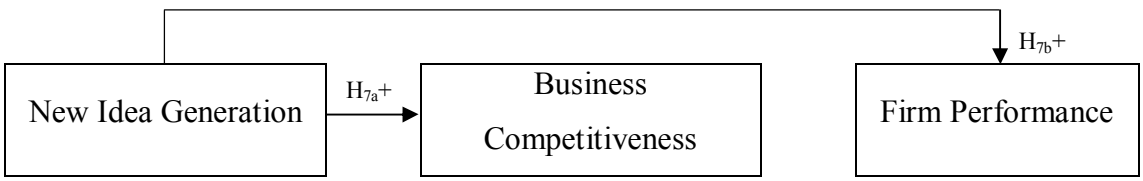
concept of new production processes. However, in this research, the researchers focused on relationships in terms of processing steps or operations of the firm, as it is socially complex, imitates, and leads to a sustainable competitive advantage (Barney, 1991). The formation and development processes are a solution approach and overlook many valuable solutions leading to the creation of added value to the organization. Each organization is comprised of designers or creators of new ideas, often using different techniques in ideas generation, to design new processes or useful techniques (Pahl and Beitz, 1996). Ideas generation must be a concept about operations that is of practical use. It must look new and valuable (Thompson, 2003; Wilson, Nelson and Yen, 2009). Grandi and Grimaldi (2005) defined new ideas generation as the organization's ability to create a new process of effectiveness and efficiency. Consistent with the definition in this research, new idea generation refers to a firm's ability to create new processes or methods of operation for application of organizational efficiency (Howell and Boies, 2004; Grandi and Grimaldi, 2005; Thipsri and Ussahawanitchakit, 2009). This research focuses on new ideas generation regarding operations management or business processes as it is necessary to create, produce goods or services by new processes resulting from these ideas, they will lead to success in innovation and performance of the organization in the long-term. The literature review found core business processes that include procurement operations, marketing and sales, customers and after-sales services (Brown, 2008).

Firstly, this procurement defines a new concept of logistics and distribution this considers levying activities, factors of production and transportation of products to customers. Examples are new concepts in faster shipping to customers, or more competitors led to the development of the organization’s competitiveness (Calantone, Cavusgil and Zhao, 2002). Secondly, for this research, “operations” refers to ideas about the process or how to change the inputs to the product or service, e.g. a method to produce a product that conforms to engineering design, leading to saving production costs or acquisition of diverse products and a high quality to foster continuous customer satisfaction (Zhang, Vonderembse and Cao, 2009). Thirdly, marketing and sales have new ideas in activities aimed at buyers, such as modifications of how to use marketing tools ensuring the satisfaction of customers toward the organization, to change strategies in a timely manner. The firm should recognize the response to marketing and new business

opportunities that require new ideas generation (Thipsri and Ussahawanitchakit, 2009). Moreover, new ideas generation recognizes that it is important to influence effectiveness and ability to drive continued marketing success, as it is a key factor in efficiently solving business problems. Finally, for customer and after-sales services this research refers to the concept of after sale customer support, such as call-center services and guarantees. These concepts are ideas that build brand image, brand loyalty and lead to maintaining market share in the long-term (Massetti, 1996). The evidence in empirical research, for instance, new ideas generation is the dynamic ability to create and evolve a process or activity in the efficient operation of business (Eisenhardt and Martin, 2000).

In the past, the consequence of new ideas generation has been studied as leading implementation to achieve the goals of the organization (Nakata and Sivakumar, 1996). Furthermore, previous research has shown that new ideas generation is a major source of competitive advantage. Emphasizing new ideas generation is a necessary foundation for competition in the long-term (Henderson and Clark, 1990) and the increase of the firm's revenues (McAdam and McClelland, 2002). Similarly, new ideas generation is a major source of the company continuing to build products to meet market demand (Massetti, 1996) and increasing customer satisfaction that leads to market performance (Thipsri and Ussahawanitchakit, 2009). A review of literature in the past demonstrated the significant trend that, if the organization has created a new process or method of operation for application, efficiency in the organization over rivals helps them in price, cost, quality, innovation of the product, image of the organization and performance efficacy in the long-run. Hence, it seems that new ideas generation will influence business competitiveness and firm performance as presented in Figure 8.

Figure 8: Relationships among New Idea Generation, Business Competitiveness, and Firm Performance



Hypothesis 7a: New idea generation will have a positive influence on business competitiveness.

Hypothesis 7b: New idea generation will have a positive influence on firm performance.

Organizational Innovation

The changing market and changing customer needs happen quickly, resulting in the organization needing to have the ability to adapt and cope with the increasing complexity for survival (Brown and Eisenhardt, 1998). The ability of a firm to adapt and cope to meet these factors will enhance the performance of the organization and create a sustainable competitive advantage in the long-run (Calantone, Cavusgil and Zhao, 2002). Previous research has shown that the success of an organization is based on innovation (Calantone, Cavusgil and Zhao, 2002). Innovation is the application of knowledge and creative ideas used to create or improve a product or service, leading to new things and to meet the requirements of a market under circumstances which are turbulent and highly competitive. Innovation helps to increase opportunities for a product of the organization (Lyon and Ferrier, 2002) and enables organizations to increase awareness of the value of goods and services to meet the needs of customers and increase the competitiveness of the organization as well (Sandvik and Sandvik, 2003). The research on organizational innovation has focused on three views, including the perspective on newness, perspective on improvements and perspective of the consumer (Certo, 2000; Robbins and Judge, 2007).

Firstly, as to the perspective of newness, the research study focused on innovation in terms of new products or services, such as offering new goods and services to the market, the development of a new product or a new feature added to the original product and the development of new materials or inputs. Innovation uses creativity to benefit, leading to value-added goods or services (Certo, 2000; Robbins and Judge, 2007). For example, new products which are outstanding or unique, lead in customer satisfaction to achieve marketing success and maintain the competitive advantage necessary to take advantage of new opportunities in the development of new products or services to the market (Tajeddini, 2010).

Secondly, the perspective on improvements is a focus on developing an original item to become new, which is consistent with Morton's (1971) definition of innovation, which states that innovation is to improve the original and the development of new items in an organization. Innovation is not to eliminate or eradicate the original, but to maintain and enhance the development, modifying an existing product to a new positioning and reducing production costs (Booz, Allen and Hamilton, 1982). It improves the characteristics of original goods or services. Baker and Sinkula (1999) stated that the organization must be conducive to being flexible, be able to adapt to changes or updates to respond to a severe competitive environment and most importantly, to modify or develop organizational innovation to respond to the changing corporate environment (Bessant et al., 2005). This gives organizations the ability to increase their long-term performance (Garcia-Morales, Aragon-Correa and Cordon-Pozo, 2007). Finally, in the perspective of the consumer, a review of the literature found that innovation tended to fulfill customer satisfaction, which corresponds to Shepherd (1997) compares innovation to a supply caused by creativity; customers are compared to a demand, through the process or the ingenuity of entrepreneurs to create new options for the diversity and the furtherance of the firm. Thus, innovation is defined as mutable characteristics that pose a modern rather than natural stationary creation. For instance, organizational innovation that is responsive to the needs of customers in product or service terms leads the organization to capture new markets for increased sustainable competitive advantage (Damanpour, 2010) and the acceptance or offer of new products that meet the needs of customers will continually enhance competitiveness and profitability (Leskovar-Spacapan and Bastic, 2007). Most literature review found a positive relationship between innovation, growth of companies and performance (Simpson, Siguaw and Enz, 2006; Mansury and Love, 2008). Moreover, a previous study showed that innovation is one of the main factors of long-term business success (Darroch and McNaugton, 2002; Lyon and Ferrier, 2002). The above suggests that the ability for innovation within organizations is an important and a necessary strategic direction for the company to succeed in long-term (Noble, Sinha and Kumar, 2002).

Organizational innovation in this research is defined as the ability of an organization to increase value, to develop new products or services, leading to satisfying continued customer demand (Damanpour, 1991; Garcia and Calantone, 2002;

Ussahawanitchakit, 2007). The researchers mainly focused on the consequence of organizational innovation in quantitative research (Mazzanti, Pini and Tortia, 2006). Likewise, the evidence of empirical research shows that organizational innovation is a source of strategic assets that have led to the development of competition and the creation of the firm's revenues (Camison and Villar-Lopez, 2014). Also, organizational innovation is positively related to firm performance, which shows a positive correlation in both terms of organizational innovation, innovative services and innovative products (Barney, Wright and Ketchen, 2001; Prajogo and Sohal, 2006).

Furthermore, the view of the KBV is aimed at analyzing organizational innovation, resulting from the application of knowledge in the creation and development of innovations leading to a sustainable competitive advantage (Ortega, 2009; Yang, Zheng and Viere, 2009) and affect organizational competitiveness (Fraj, Matute and Melero, 2015). A review of past literature shows that the major trends, if an organization can continuously add value and develop new products of services to meet the needs of customers, results in organizations that can conduct business better than its competitors in terms of price, cost, quality, innovation, corporate image and efficiency of performance in the long-term. Hence, it seems that organizational innovation will influence business competitiveness and firm performance as presented in Figure 9

Figure 9: Relationships among Organizational Innovation, Business Competitiveness, and Firm Performance

Hypothesis 8a: Organizational innovation will have a positive influence on business competitiveness.

Hypothesis 8b: Organizational innovation will have a positive influence on firm performance.

Business Competitiveness

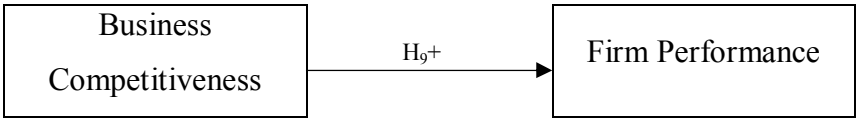
In a review of past literature, competitiveness is defined in a variety of ways, such as the ability to produce goods or services that are more efficient than competitors. Moreover, competitiveness is also regarded as the sustainable success of marketing. Administrative costs will allow an increase in competitiveness, including the benefits from superior productivity. Competitiveness is the presentation of goods or a product that meets the standards of marketing at a price at which a firm can compete and still earn sufficient returns. Competitiveness that remains a key goal is defined as setting up business policies. The study about competitiveness has received attention from researchers in terms of strategic management as the factor of success of the organization (Rumelt, Schendel and Teece, 1991), which is viewed in terms of the results achieved in the long-term (Man, Lau and Chan, 2002). Thus, the competitiveness of business is the ability to conduct business better than its competitors and as a result, that firm can be in a market position among superior competitors (Pungboonpanich, Ussahawanitchakit and Ieamvijarn, 2010). Competitiveness is divided into four features including long-term oriented, controllable, relative, and dynamic (Man, Lau and Chan, 2002).

Firstly, “long-term oriented” is to focus on performance in the long-term, such as when an organization can recognize that their market position always has affected the organization's ability to maintain or increase sustainable market share (Fahy, 2000). Secondly, “controllable” is the nature of different management capabilities, of which competitiveness is a measure of the excellence of the organization or is outstanding from more efficient internal processes (Wang and Lo, 2003). Thirdly, “relative” is to consider comparing with other firms in the same industry. This comparison is considered a very important aspect of competitiveness. Pungboonpanich, Ussahawanitchakit and Ieamvijarn (2010) argue that competitiveness is a comparison to competitors in the results of the organization caused by the ability to operate in a better and superior way in a market position. Finally, “dynamic” is constantly updated by creating a new form for the competitive advantage of the organization that is continuous and fast. Fahy (2000) indicated that the success of the market position is caused by the ongoing competitive advantage that quickly leads to superior corporate performance or profitability. Thus, it is found that researchers have a view about the competitiveness of business as being different in many aspects. Neely (2005) found that a correlation between

competitiveness and performance of organizations as conversely measured by revenue, sales, profits, value-added market share, and the growth of the product. Wang and Lo (2003) indicated the relationship between competitiveness and performance with a focus on internal processes that create customer satisfaction.

From the above, business competitiveness refers to the organization's ability to manage and operate a business superior to its competitors in terms of outperforming them in price, cost, quality, innovation of product, and image (Henri, 2006; Pungboonpanich, Ussahawanitchakit and Ieamvijarn, 2010; Singh, 2012), such as in creating satisfied customers and to deliver value to consumers at lower prices, coupled with the benefits of quality or service to consumers (Prempree, Ussahawanitchakit and Boonlua, 2013). Business competitiveness is the basis for superior performance (Ma, 1999). Likewise, Singh (2012) also indicated that competitiveness contributing to the increased performance of the company or an organization's quality rivals, led to results of increased benefits for the company. The evidence in empirical research such as that of Prempree, Ussahawanitchakit and Boonlua (2013) argues that business competitiveness is positively correlated with firm value. In addition, early studies suggest that a relationship between competitiveness and firm performance (Wiklund and Shepherd, 2005). A review of past literature demonstrates a significant trend that, if, the organization has superior achievement over competitors in price, cost, quality, innovation, and corporate image; then, it results in operations with continuous performance. Thus, it seems that business competitiveness will have a positive influence on firm performance as presented above in Figure 10.

Figure 10: The Relationship between Business Competitiveness and Firm Performance



Hypothesis 9: The business competitiveness will have a positive influence on firm performance.

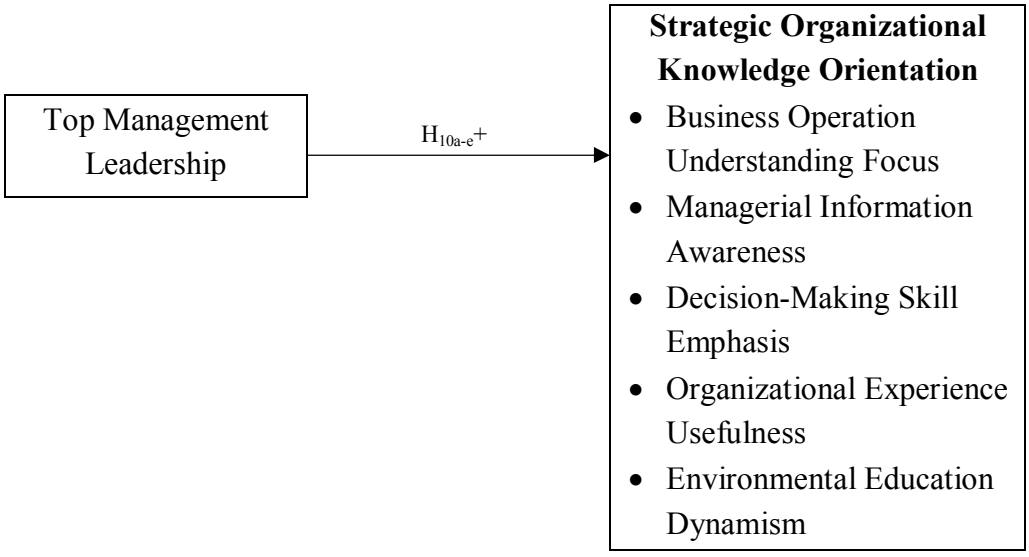
Top Management Leadership

Top management leadership is the first antecedent variable of SOKO, in which top management leaderships refers to the practice of management and takes the initiative to encourage and create job motivation among employees to recognize and understand the pathway in an organizational mechanism, and to achieve productivity according to the organization's target (Pansuppawatt and Ussahawanitchakit, 2011). A review of past literature shows that administrator support is the most key variable for the successful implementation of the target organization (Huh, Yook and Kim, 2008). The "leader" is different from "leadership" in that the leader means a person, but leadership is the process that involves the use of influence, which is the power of the leader, and includes influencing task objectives and strategies, as well as Affecting compliance in task behavior to achieve these achieve goals (Yukl, 2006). The past study found that executive leadership must construct moral support leading to stimulate employees to have intention and participate in the process of consistently producing new ideas in order to enhance useful creativity. Also, executive leadership affects organizational characteristics as the important role of the firm's ability to effectively implement strategies (Harmancioglu, Grinstein and Goldman, 2010) leading to the development of the firm's innovation (Soliman, 2011). Top management leadership is a prerequisite for the successful implementation of any strategy or innovation (Rodriguez, Perez and Gutierrez, 2008; Johne, 1999). Past empirical studies found knowledge transfer and application mediated the relationship between transformational leadership, product and process innovation (Birasnav, Albufalasa and Bader, 2013).

Besides, transformational leadership plays a part in the environment generating knowledge for employees (Shin and Zhou, 2003) evocative of environmental education dynamism. Moreover, the executive's support in documents, data, information and transfer of knowledge affects and inspires employees to accept the utilization of new technology, and to understand the aim of implementing new technology (Schepers, Wetzels and De Ruyter, 2005), or to accept the practice of management that brings operational business understanding. Constrained top management leadership must create an environment in the organization where employees are free to form new ideas (Patiar and Mia, 2009), practice skills and decision-making (after that, sharing them with colleagues), and experiment with those ideas to support strategic linkage to meet

strategic goal achievement. A token of executive leadership is the firm's systematic learning management under the existing knowledge foundation and new knowledge that is going to continuously happen (Garcia-Morales, Llorens-Montes and Verdu-Jover, 2006). Apart from strategic knowledge arising from top management leadership, it also supports employees to apply existing or new knowledge to solve job-related problems and to create new products and processes (Jung, Chow and Wu, 2003). If senior management leadership desires, it will cause the motivation to work for the employees and the behavior toward individuals within the organization. It can enhance the understanding of the operational skills and the ability to change with the circumstances, leading to the goal of creativity and innovation in organizations. In addition, transformational leadership has strong and positive influences on knowledge management process (Birasnav, 2014). However, Sookaneknun and Ussahawanitchakit (2012) found that the leader is only part of the operations of firm, however, businesses required have on both the good system and the ability of the staff of the firm for achieve goals. Thus, it seems that top management leadership influences business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism above, as presented in Figure 11.

Figure 11: Relationships among Top Management Leadership and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 10a: The higher the top management leadership is, the more likely that firms will obtain greater business operation understanding focus.

Hypothesis 10b: The higher the top management leadership is, the more likely that firms will obtain greater managerial information awareness.

Hypothesis 10c: The higher the top management leadership is, the more likely that firms will obtain greater decision-making skill emphasis.

Hypothesis 10d: The higher the top management leadership is, the more likely that firms will obtain greater organizational experience usefulness.

Hypothesis 10e: The higher the top management leadership is, the more likely that firms will obtain greater environmental education dynamism.

Entrepreneurial Mindset

Nature or the personality of the successful entrepreneur is not innate, but it is acquired by learning or training (Baumback, 1988). The differences of the individuals in the organization are an important factor that explains the entrepreneur (Shane and Venkataraman, 2000). The nature or personality of the entrepreneur can then be driven by an organization that aims to make the dreams of the organization come true (Bygrave, 1994), and leads to a variety of products or services for business competitiveness. The past literature discusses the features of successful entrepreneurs in a wide range such as achievement orientation and autonomy orientation. It is characteristic of entrepreneurs to try to find a way to bring opportunities to succeed under the constraints.

These achievements depend on the personality of someone liking a job challenge and it is motivated to work for the better (Frese, 2000). Besides, characteristics of entrepreneurs that lead to success are: to be ready to face risk-taking (the courage to risk something that is unknown), the daring to risk using a large asset for business establishment, and daring to use a large loan amount (Frese, 2000). In addition, the entrepreneur must be able to deal with obstacles (Bygrave, 1994), have tolerance of a situation that is ambiguous and lack uncertainty avoidance. Importantly, they must

devote themselves to the business, love what they do, and orient a course to initiate new things. More than that, these operators have the ability to deploy an aggressive strategy or strategies that attack weak points leading to the success of the competitive organization above the competition in every aspect (Bygrave, 1994; Frese, 2000).

However, the characteristics of the above operators are not just the personality traits of entrepreneurs only, but they include the attitudes and behavior characteristics of entrepreneurs operating in the business under the terms of cultural and environmental organizations (Zimmerer and Scarborough, 1996). Also, individual differences lead to different abilities in organization levels (Corbett, 2005). Personnel in the organization need to have entrepreneurial habit (Shane and Venkataraman, 2000; Nicolaou et al., 2008). Entrepreneurship is a phenomenon related to the behavior of people in the organization that acts in a manner that is enterprising, contributes to the development of basic activities, adds value and enhances efficiency in the organization. Due to these characteristics, it will affect the success of the company (Ucbasaran, Westhead and Wright, 2008) through the ability of individuals within an organization who can identify opportunities that will lead to new ideas that are effectively used in the organization's manufacturing process. Past literary studies found that entrepreneurship mindset can respond to globalization and economic conditions that are effectively competitive. Attributes of entrepreneurs or the entrepreneurial mindset lead an organization to success, and is the behavior of people in organizations that is open to new opportunities, takes reasonable risks, tolerates ambiguity, and implements an aggressive strategy (Bygrave, 1994; Frese, 2000; Gurel, Altinay and Daniele, 2010). The key to the entrepreneurial mindset is based on the characteristics of the individuals in the organization who are ready to open new opportunities and to create value for the organization in terms of knowledge and innovation (Hitt, Ireland and Lee, 2000).

From the foregoing, entrepreneurial mindset in this research is defined as the behavior of people in the organization who are open to opportunities, accept reasonable risk-taking, tolerate ambiguity in the situation, and are ready to take on proactive strategy to achieve the ongoing goals of the organization (Watson, 2001; Lumpkin and Dess, 1996). Exposure to business opportunities or proactiveness is the organization's efforts to find or seek new opportunities in the market demands of the future, which may or may not relate to the ongoing business operations. It includes open-minded new

ideas leading to new knowledge that benefits the organization. Reasonable risk tolerance is the most important characteristic of an entrepreneur (Venkatraman, 1989). It refers to the acceptance of risks by the management of the organization, and acceptance in using resources that will lead to opportunities or failure for investment (Miller and Friesen, 1983). However, risks must be reasonable, moderate risk to be able to lead the organization to success (Begley and Boyd, 1987). The tolerance of ambiguity in the a situation refers to the ability to face a situation of uncertainty without being anxious about finding the problem and tenacity in problem-solving. It is also the availability of using an aggressive strategy or characteristics committed to an effort to dynamically step ahead rivals (Frese, 2000). The evidence in empirical research for entrepreneurs to succeed shows there must be a way that can lead to successful organizations, including being open to new opportunities, ready to face risks, being highly committed, or having a thirst for success. Likewise, their fear of failure will lead to an analysis and business solutions for inventing new knowledge, ideas and imagination to create benefit for continued business opportunities. A review of the past literature demonstrates a significant trend that, if the organization is able to cultivate the people to an entrepreneurial mindset, then it has the potential to raise awareness and to take advantage of the learning experience and information of the firm, to effectively achieve the objectives of the organization.

Firstly, when individuals within the organization are aggressive in style, it will make them responsible to try to think and act for themselves. They will seek to learn about the basic processes of the organization or the work they are responsible for, to understand and recognize an activity itself (Frese, 2000). Furthermore, an organization with skill encourages people to take risks and seize market opportunities (Kreiser et al., 2002). It will contribute to success through the implementation of the strategy of the organization and it sends a positive effect to success in learning (Gollwitzer and Brandstaetter, 1997; Frese, 2000). Organizations with the entrepreneur concept will lead to an increased understanding of the business and the ability to apply that knowledge to work for response to business opportunities that need to develop new abilities (Atuahene-Gima, Slater and Olson, 2005), and to a new product or effective process (Lumpkin and Dess, 1996; Wang, 2008).

Secondly, the nature of an organization with the focus to seek information and marketing to help strengthen its superior value to customers (Keh, Nguyen and Ng, 2007), will result in the organization's awareness and confidence in the data or information. Moreover, the nature of the organization that focuses on the implementation of risk management under uncertainty leads to the utilization of information within the organization because of the need to rely on the information that is sufficient to reduce ambiguity (Cromie, 2000). Therefore, organizations need to develop the in distribution and use of information technology effectively to respond to competitive and operational advantage over competitors.

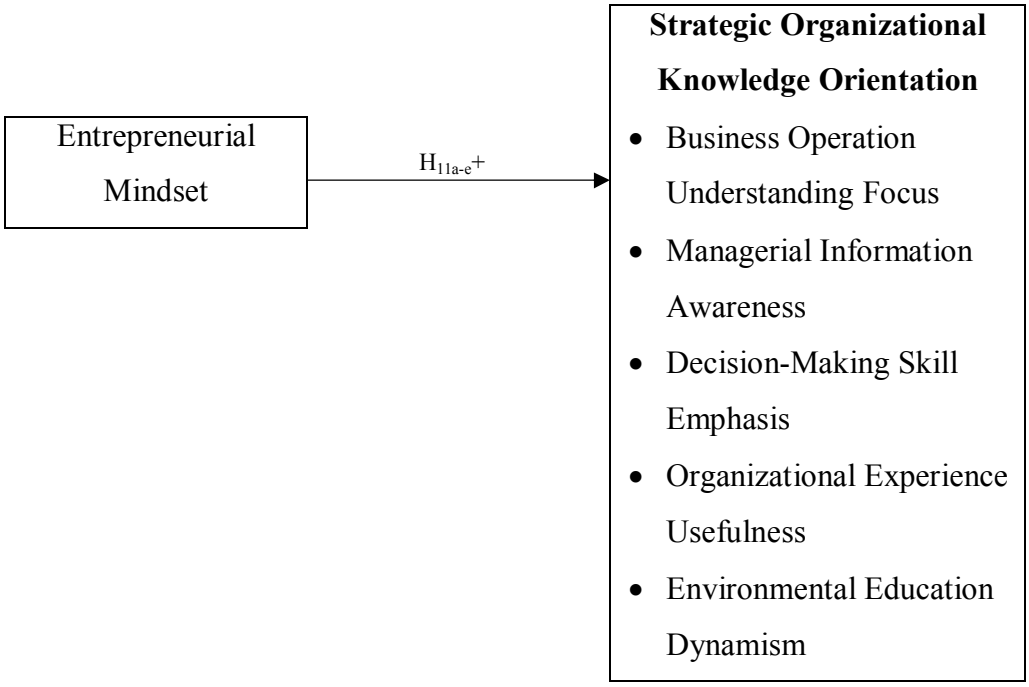
Thirdly, cultivated people in the organization to behave towards success or have the spirit of fighters that will help them build confidence in themselves, the ability to seek ways through analyzing the problems, and the specialization in making decisions effectively (Frese, 2000; Gurol and Atsan, 2006).

Fourth, when people in the organization look stable and organizations do not vacillate in changing situations, it results in organizations having the ability to take a mistake or advantage in the past, to apply it, and learn it effectively (Frese, 2000). In addition, the behavior aims to find a way to success that will lead to experience, and apply it to work (Cope and Watts, 2000).

Finally, the concept of entrepreneurship leads to the ability to exploit market monitoring, and adapt it to changes over time. The nature of the organization with the concept of an entrepreneur is successful, must have confidence in its own ability to lead to the adaptation of the organization to conform to the environment; and when an error occurs, to admit mistakes and try to improve and take advantage of opportunities, leading to new practices or processes that are more efficient (Sheeran and Webb, 2011). Besides, organizational characteristics open opportunity to the outside or have the environmental sensitivity to contribute to the ongoing efforts of organizations to analyze the external environment and adapt to changes (Keh, Nguyen and Ng, 2007). Also, the organization is always looking for new opportunities that will help to introduce new products, competition, and a strategy in developing goods (Venkatraman, 1989). In contrast, Pataraarechachai, Ussahawanichakit and Suwannarat (2010) found that dynamic business vision and transformational mindset operation is not influenced on the firm capability development. Therefore, an entrepreneurial mindset in beverage

businesses might possibly affect business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism. As mentioned above, it seems that entrepreneurial mindset influences business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism as presented above in Figure 12.

Figure 12: Relationships among Entrepreneurial Mindset and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 11a: The higher the entrepreneurial mindset is, the more likely that firms will obtain greater business operation understanding focus.

Hypothesis 11b: The higher the entrepreneurial mindset is, the more likely that firms will obtain greater managerial information awareness.

Hypothesis 11c: The higher the entrepreneurial mindset is, the more likely that firms will obtain greater decision-making skill emphasis.

Hypothesis 11d: The higher the entrepreneurial mindset is, the more likely that firms will obtain greater organizational experience usefulness.

Hypothesis 11e: The higher the entrepreneurial mindset is, the more likely that firms will obtain greater environmental education dynamism.

Human Resource Practices Effectiveness

Human resources are a valuable asset of the organization as a key factor that determines the success or failure of an organization in a changing environment (Dessler, 2005). The impact on human resource practices have to be modified to comply with the guidelines or the environment. Human resource practices are policies and procedures that indicate an activity in supplying, utilizing and retaining valuable human resources, because practitioners greatly affect the success of the organization (Wright, Basco and Thase, 2006). Moreover, human resource practices are a remarkable method of the organization's activities in the administration of employment with activities that seek to create benefits, and from the ability of staff members to comply with the goals of the organization (Wright and Snell, 1991; Storey, 2001). In past literature, human resource practices that affect performance are known as best practices (Huselid, 1995). Human resource effective practices contribute to the performance of the improved organization (Collins and Smith, 2006), the behavior of people in the organization such as the commitment of staff, flexibility in better operation (Koch and McGrath, 1996), and the increased skills of employees. From the foregoing, human resource practices effectiveness in this research refers to the achievement of the distinctive approach in employment activities of a firm, including job analysis, recruitment, training, evaluation and compensation (Lee and Lee, 2007; Tseng and Lee, 2009).

Past research and a variety of studies on best practices of human resource management state that flexible job design can increase the capacity of staff, the admissions system, the recruiting of people to transparently join work, training to enhance skills for employees, or the evaluation of employees; by the link between performance and reward leading to generating satisfaction for employees (Delery and Doty, 1996; Redman and Matthews, 1998; Bamberger and Meshoulam, 2000; Lepak and Snell, 2002), workforce planning that is appropriate for the job, and the development of

a plan for each employee position within the organization (Chang and Chen, 2002; Osman, Ho and Galang, 2011).

This research focused on five components of effective human resource practices, including analysis and job design, recruiting, training, evaluation, and the payment of compensation. The past research found that each component affected the ability to understand and to take advantage of the learning experience and information for achieving the organization's objectives. For example, a transparent selection process creates visual interest in the organization or building a good image, entailing talented employees, leading to desirable characteristics (Bretz, Ash and Dreher, 1989; Stone, Lukaszewski and Isenhour, 2005). Also, the functional design that will enhance employee motivation (Kase, Paauwe and Zupan, 2009) and training will contribute increasing accountability incentives to reduce errors in the job (Casalino et al., 2003). Moreover, an organization with a training system and a evaluation of operations quality will result in the transfer of knowledge within the firm (Minbaeva, 2005). Furthermore, organizations that have evaluated the performance link with payment of compensation will lead to increased knowledge and reinforcing the behavior of employees to meet the needs of the organization (Collins and Clark, 2003).

However, the past research has attempted to study the relationship between human resource practices and knowledge in terms of individual differences within the organization (Felin and Hesterly, 2007). Human resource practices that can effectively impact the level of an organization through its effects on perception and working behavior shares the knowledge of each individual within the organization (Bowen and Ostroff, 2004) and leads to higher performance (Wright and Nishii, 2007; Minbaeva, Makela and Rabbiosi, 2012). The link between human resource practices and success, such as a training program, selecting the method of paying compensation, the influence of knowledge, skills, abilities (KSAs) and behavior, allows the company to meet the strategic objectives of the organization (Wright et al., 2001). Human resource practices effectiveness will create incentives for employees to follow company policies (Wheeler, Halbesleben and Harris, 2012). Moreover, human resource practices effectiveness has an important role to facilitate the collection and use of the social capital of the organization (Lengnick-Hall et al., 2009; Kang et al., 2007). Knowledge resources in

the organization (Wright, Dunford and Snell, 2001) lead to the implementation of strategy and maintain a competitive advantage (Becker, Huselid and Ulrich, 2001). Past literature that shows the major trends of how to practice employment activities in various fields, will contribute to an understanding of the organization and take advantage of learning information and events to effectively achieve the organization's objectives.

Firstly, organizations with training on how to run continuously affect the employees' ability to understand manufacturing of goods or services to meet the changing needs of the market (Zacharatos, Barling and Iverson, 2005). Furthermore, organizations with analysis or allocation of job duties are clearly a result. Employees can understand the responsibilities of each party clearly, which helps reduce the conflicts caused by the different and diverse knowledge of each individual who contributes to the creativity (Kang, Morris and Snell, 2007).

Secondly, organizations that have improved work skills, contribute to the flow of their knowledge through training that is part of human resource practices; or, they design a job in the manner in which employees can access information easily and will enhance executives and employees to take advantage of the information available to the individual person for the benefit of the organization (Kang, Morris and Snell, 2007; Gittell, Seidner and Wimbush, 2010).

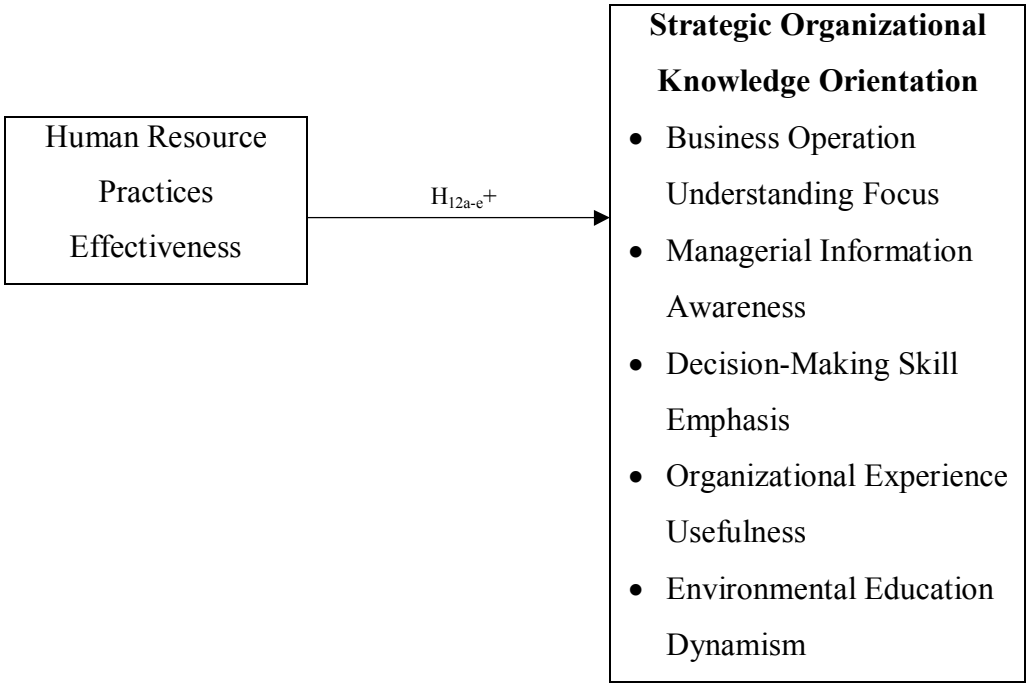
Thirdly, business decisions of a firm require the skills and expertise of the management and staff. For an organization to have qualified personnel, and the capability to come to work together, it requires a transparent selection process to generate a good image, leading to confidence in joint working with other organizations (Cable and Judge, 1996). When an organization is filled with talented individuals, it affects decision-making skills in order to resolve problems within the organization. Therefore, organizations need to retain talented individuals in the firm. Organizations need to have a system of evaluation and compensation for the satisfaction of the employees such as in the evaluation the performance with links to a reward system to support employees' perceptions of the fairness of the organization, and leading to the improvement of employee behavior in a positive way (Redman and Matthews, 1998). Then, human resource practices effectiveness can increase employee motivation for the efforts to make decisions (Appelbaum et al., 2000), leading to strategic work efficiency

such as employees with behavior focused on the transfer of knowledge and increased skills in decision-making (Jiang, 2012).

Fourth, the organization has procedures or guidelines in employment activities that effectively lead the organization's ability to support and apply the past experience of the organization to achieve maximum benefit. Moreover, the job design that challenges the ability of these individuals to lead them to express the knowledge, skill, ability and potential to be applied in the work, fulfills the objectives of the organization (Guest, 1997). This is because the design in the organization that is flexible to help encourage employees to have the courage to take on applied historical experience and learn ways to improve operations in the organization, lead to the learning behavior of employees (Levitt and March, 1996; Martin and Salomon, 2003).

Finally, creating an organization with the ability to exploit and analyze the external environment leads to the application to adapt to a changing needs analysis and an appropriate allocation of tasks to employees, to ensure that employees have enough time to innovate through alternative learning opportunities to explore and take advantage of what is available (Raisch et al., 2009). Executive visions for HR work and excellent business operation have a positive impact on valuable organization development and performances (Jirawuttinunt and Ussahawanitchakit, 2011). Conversely, the exploitation and depth of knowledge that are currently in efficient business operations or external environments (Lubatkin et al., 2006) lead to organization performance (Subramony, 2009). As mentioned above, it seems that human resource practices effectiveness influences business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism as presented above in Figure 13.

Figure 13: Relationships among Human Resource Practices Effectiveness and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 12a: The higher the human resource practices effectiveness is, the more likely that firms will obtain greater business operation understanding focus.

Hypothesis 12b: The higher the human resource practices effectiveness is, the more likely that firms will obtain greater managerial information awareness.

Hypothesis 12c: The higher the human resource practices effectiveness is, the more likely that firms will obtain greater decision-making skill emphasis.

Hypothesis 12d: The higher the human resource practices effectiveness is, the more likely that firms will obtain greater organizational experience usefulness.

Hypothesis 12e: The higher the human resource practices effectiveness is, the more likely that firms will obtain greater environmental education dynamism.

Organization Development Continuity

Researchers in the past stated that organization development is an attempt to plan by an expert, or skills, to change links with the knowledge of scientific behavior, strategy, and organizational culture; leading to optimize the organization's sustainability (Beckhard, 1969; Shatrevich, 2014). Moreover, organizational development is a process or reinforcement strategy used to respond to changes in the environment both inside and outside the organization, such as market demand, changed organizational structure or emerging technology to contribute to strengthening the features of the organization (such as processes that are appropriate to the competition, or organizational culture that creates efficiency and effectiveness within the organization) (Warrick, 2005).

Organization development is not the way to better training to enhance the skills of employees, but it is a process that reflects changing corporate behavior through the transformation process in planning a flexible system, and analyzing the organization as a whole to harmonize with the environment, in both internal and external changes (Weisbord, 2004). However, organizational development, with a clear aim to strengthen the concordance between organizational structure change and strategic reinforcement in the organization, will lead to develop new organizations (Beer, 1980). The changes of the above-mentioned severely affect organizations, and eventually will lead to organizational revolution (Porras and Silvers, 1991; Burke, 2002). For a change or update, this style requires the implementation or development of an ongoing strategy to effectively be stable and enhance ability in the driven organization (Beer, 2001). The organization can maintain the ability to change and make it happen quickly, leading to the ability to adapt to the environment, the ability to reform, and the survival of the organization (Burke, 2002; Weisbord, 2004). It reduces a gap of not providing for organizations to be motionless for too long until there is an impact on the overall performance in the organization (Shatrevich, 2014). Organization development continuity, of this research, refers to the efforts of organizations in the flexibility of planning and strategy reinforcement, consistently lead to the ability to change processes and the behavior of organizations for success in management, according to the objectives of the organization (Cummings and Worley, 2001; Jirawuttinunt and Ussahawanitchakit, 2011).

This research focuses on important practice in organizational development, including survey feedback, management by objectives, the planning of the organization

that can support change, and the reinforcement of regular strategy (Balzac, 2011). Survey feedback is a technique to allow the exchange of feedback from customers, and enables organizations to appropriately understand problems and solutions (Buchanan and Huczynski, 1997). The organization is focused on taking advantage of customer feedback that is reliable (Rick, 2005) and relies on external environmental changes as feedback to contribute to improving the performance of individuals and organizations (Burke and Litwin, 1992). An example is action research, where the organization explores the needs and satisfaction of customers or products (French and Bell, 1999; Rick, 2005), leading to a plan of action to meet the changing needs of its customers (Burke, 2002) and the ability to effectively develop the organization. Management by objectives (MBO) is a tool for practitioners to consider the goals or objectives of the organization that must take action. It is management by objectives or goals shared between management and employees (Rick, 2005). The organization has a clearly-defined objective to reduce the problems and optimize the development process of implementing both long-term and short-term policies (Shatrevich, 2014) and by setting goals clearly to affect the behavior and practices of employees in the firm (Locke and Latham, 2002; Eikenberry, 2011) to bring them to the same goal. Flexible planning determines how to practice as a whole, with flexibility to support implementation that has changed; or, it is the process of improving the design of existing maps (Weisbord, 2004) that have been affected by the changing needs of customers and the environment (Burke, 2002). It includes a focus on the dynamics of change that leads to a quick rectification of the problem (Rick, 2005). Increasing organizational performance alters employee behavior (Balzac, 2011), which leads to the ongoing development and adaptation of the organization (Rick, 2005). Regular strategic reinforcement is an activity that the organizations use to intervene in original implementation by focusing on the outputs for the best benefit of the organization. The activities or strategies must be painstakingly evaluated through the position of an organization in the market such as the set direction, strategy in promoting the organization's marketing, the development and improvement of the organization's products, or even corporate restructuring to respond to changes and adaptation to the challenges from the outside. This review of past literature shows the following trends.

Firstly, an organization's efforts in planning and flexibility support the implementation of change (Rick, 2005), or improve existing schemes (Weisbord, 2004). It allows organizations to change employee behavior (Balzac, 2011) by creating awareness among staff in basic business activities to meet the goals of the organization (Byington and Chrisensen, 2005). Besides, when the original plan of an organization has modifications, it results in an adjustment of new strategies (Burke, 2002). The impact from the changing needs of customers and the environment (Burke, 2002) will lead to an ongoing effort to better understand the changes in the method of operation, and will lead to an increase in the development process, both in the implementation of long-term and short-term policies (Shatrevich, 2014), and in achieving organizational success (Srichanapun, Ussahawanitchakit and Boonlua, 2013).

Secondly, the data are latent in a person who is part of a common plan for the organization (Marshak and Grant, 2008). Especially, the plan has the flexibility under conditions of uncertainty that will lead to realize the importance of information within the organization. For example, the organization will focus on the management by focusing on objectives that create a clear and informed objective to members. It will affect positive behavior and practices (Eikenberry, 2011) toward the same goal, or collect information for planning and implementing that are new for them, leading to improved performance of the individual and the organization (Burke and Litwin, 1992).

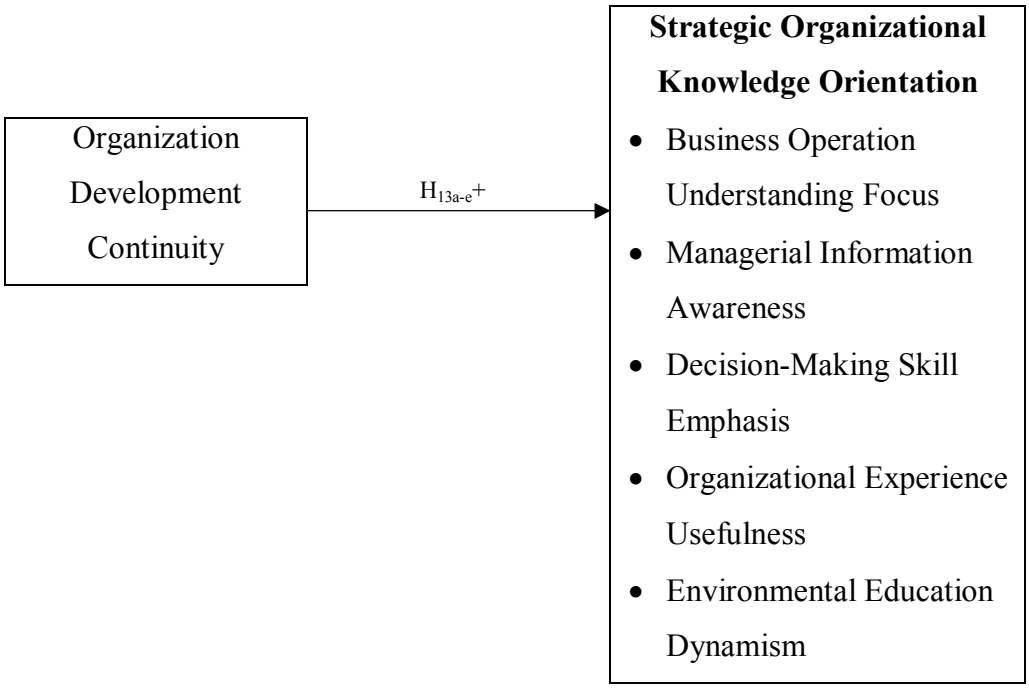
Thirdly, the organization has received feedback from the desire or satisfaction from customers to discuss problems and solutions that continue to lead organizations to understand the problems properly, by perform solutions together (Buchanan and Huczynski, 1997). Moreover, flexible corporate planning or an organization has the ability to change the way it operates quickly, leading to a change in the behavior of the people in the organization.

Fourthly, the planned improvements from the original plan to become an action plan, and to comply with the environment, impacts organizations are that able to understand and take advantage of the activities or events that have happened in the organization, in responsiveness to issues emerging from the experience of employees (Reason and McArdle, 2006).

Finally, organization development continuity is the awareness of the change. It is important to contribute to the development and adaptation of the organization's

ongoing organization (Rick, 2005), such as survey feedbacks for information from the external environment, which leads to the exploitation and analysis of the external environment. Therewith, it leads to a plan of action with the goal of transferring knowledge and skills, and changing management for continuity. On the other hand, Chadwick (2007) found that the relationship between human capital practice and business performance are not directly associated and can be described as "nonlinear" depending on the situation. This consistent with Chen and Lin (2004) state that human resource management is based on the situation, it will lead to success of organizations. On the other hand, Boonstra and Vries (2005) found that large firm and robust operating system will have reduced dependence on specific resources of the organization. As mentioned above, it seems that organization development continuity influences business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism as presented above in Figure 14.

Figure 14: Relationships among Organization Development Continuity and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 13a: The higher the organization development continuity is, the more likely that firms will obtain greater business operation understanding focus.

Hypothesis 13b: The higher the organization development continuity is, the more likely that firms will obtain greater managerial information awareness.

Hypothesis 13c: The higher the organization development continuity is, the more likely that firms will obtain greater decision-making skill emphasis.

Hypothesis 13d: The higher the organization development continuity is, the more likely that firms will obtain greater organizational experience usefulness.

Hypothesis 13e: The higher the organization development continuity is, the more likely that firms will obtain greater environmental education dynamism.

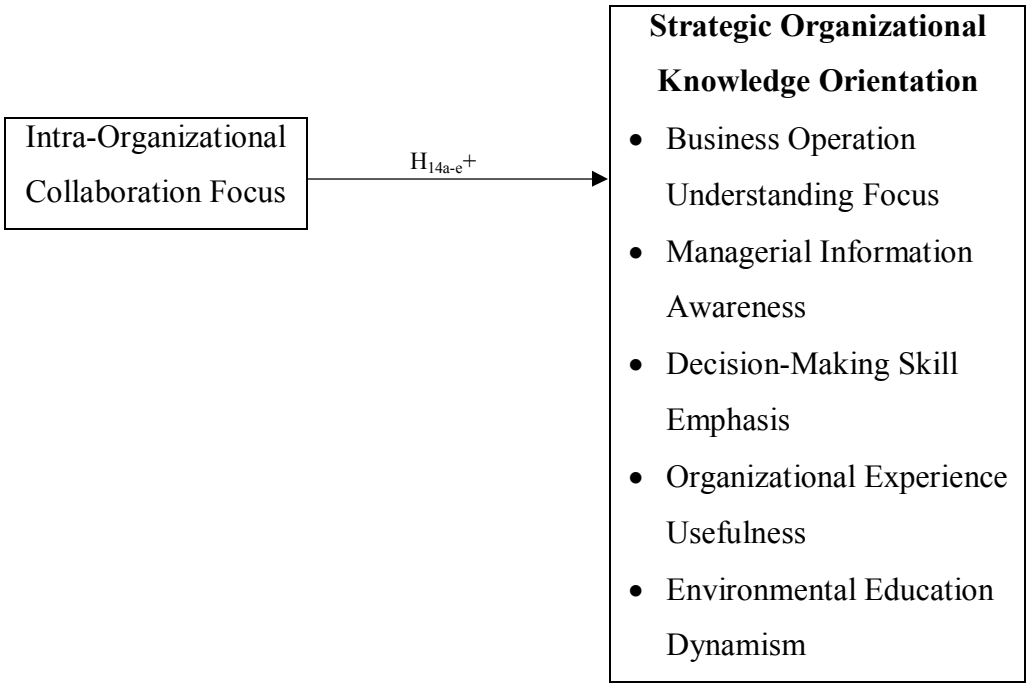
Intra-Organizational Collaboration Focus

The current business environment is changing, rapidly expanding, and more complex. Thus, organizations need to adapt and evolve continuously to ensure their own survival and success. They have to try to find new strategies or methods, and then use them to gain a competitive advantage and sustainable growth. In fact, it is not only the implementation of business strategy; but they will also develop operational activities focused on increasing cooperation in each unit in response to the idea of collaboration. Collaboration is the ability of a firm and the availability to work with others. It is a key factor to improve the efficiency of the supply chain (McCormack, Ladeira and Valderes, 2008), and is effective (Sampattikorn and Ussahawanitchakit, 2011).

In this research, intra-organizational collaboration focus refers to the concentration on encouraging orientation to the interaction between interpersonal systems in working jointly by supporting resource exchange and interdependence, leading to the achievement of the goals of the organization (Ku, Kao and Gurumurthy, 2007; Msanjila and Afsarmanesh, 2008). In addition, collaboration climate is useful for teams operating to work well together including joint project investment such as outsourcing, a team which has a clear structure and is well defined, willing to share and receive knowledge in order to

increase the firm efficiency and effectiveness, and to a competitive advantage and achieve firm performance (Tuntrabundit and Ussahawanitchakit, 2010). Focusing on collaboration refers to the ability of the company to focus on coordination and the willingness to work with others, leading to understanding the purpose and goals of employees in the company, and together building or improving their work effectively (Sampattikorn and Ussahawanitchakit, 2011). Prior studies have demonstrated the importance of working together to create value and optimized work, continuously leading to the needs of customers (Sampattikorn and Ussahawanitchakit, 2011). Similarly, many studies have shown that a focus on collaborative innovation that allows an organization to have sustainable development (Worley, Feyerherm and Knudsen, 2010) contributes to better firm performance (Swaminathan and Moorman, 2009). For this reason, it seems that intra-organizational collaboration focus in beverage businesses might possibly affect business operation understanding focus, managerial information awareness, decision-making skill emphasis, organizational experience usefulness, and environmental education dynamism as presented above in Figure 15.

Figure 15: Relationships among Intra-Organizational Collaboration Focus and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 14a: The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater business operation understanding focus.

Hypothesis 14b: The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater managerial information awareness.

Hypothesis 14c: The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater decision-making skill emphasis.

Hypothesis 14d: The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater organizational experience usefulness.

Hypothesis 14e: The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater environmental education dynamism.

Technology Support

The success of today's organization, based on production systems that will lead to the development of innovation, meets customer needs. Currently, the production system is a sophisticated system and is filled with diverse components such as devices that must rely on software as a controller, or a machine that uses modern technology controlled by a computer. However, organizations also need to rely on technology to be used in operations that steadily increase, because it allows conducting business to be more effective, such as in facilitating the work to be easier and faster (Schneckenberg, 2009), saving time, reducing costs (Vaccaro, Parente and Veloso, 2010), and create a positive image into the organization (Saenz, Aramburu and Rivera, 2009). Beside, organizations which are creating new knowledge will leads to develop good products and excellent services (Vemic, 2007). Technology is the application of knowledge in science to be useful in the development of cognition within the organization, and it finds a way to apply its advantage, leading to the production of new goods and services to meet the needs of customers (Zhou et al., 2005). Likewise, technology is the import process of science for applications to provide benefits for operations of the organization such as equipment, specialized tools, materials, or intangible systems such as software.

In this research, technology support is defined as the assisting and promoting by organizations of advanced tools to enhance the ability of the employee to utilize it effectively (McDermott and Stock, 1999; Parasuraman, 2000; Kim and Covusgil, 2006). It is accomplished by organizations that are likely to promote new technology in the workplace. It is likely to create new products to meet market demand and contribute to the implementation of effective organizations.

This research focuses on three types of technologies including product technology, process technology and mix technology (Heinich, Molenda and Russell, 1993). Product technology is the material and equipment or tools, specific and tangible, for use in the production, leading to innovations such as newly-developed equipment and the accessories that help faster production. Process technology is a system or a scientific intangible approach for use in the operation leading to the success of the organization. Communication networks are through the internet, finance and accounting software, and E-Commerce. Mix technology is a combination between the product and the process technologies such as computer systems that require the interaction between a person and a program. Technology support is the support for organizations, by focusing on the recognition of employees in terms of technology (Eisenbeger et al., 2002). For example, the perception of the distribution of resources, such as equipment, software or technology that is equally sufficient to work among employees (Rhoades and Eisenberger, 2002) affects increased motivation. Similarly, support from the organization gives employees a sense of obligation that leads to helping the organizations to achieve goals (Eisenbeger et al., 2002). A review of the past literature found this evidence in empirical research:

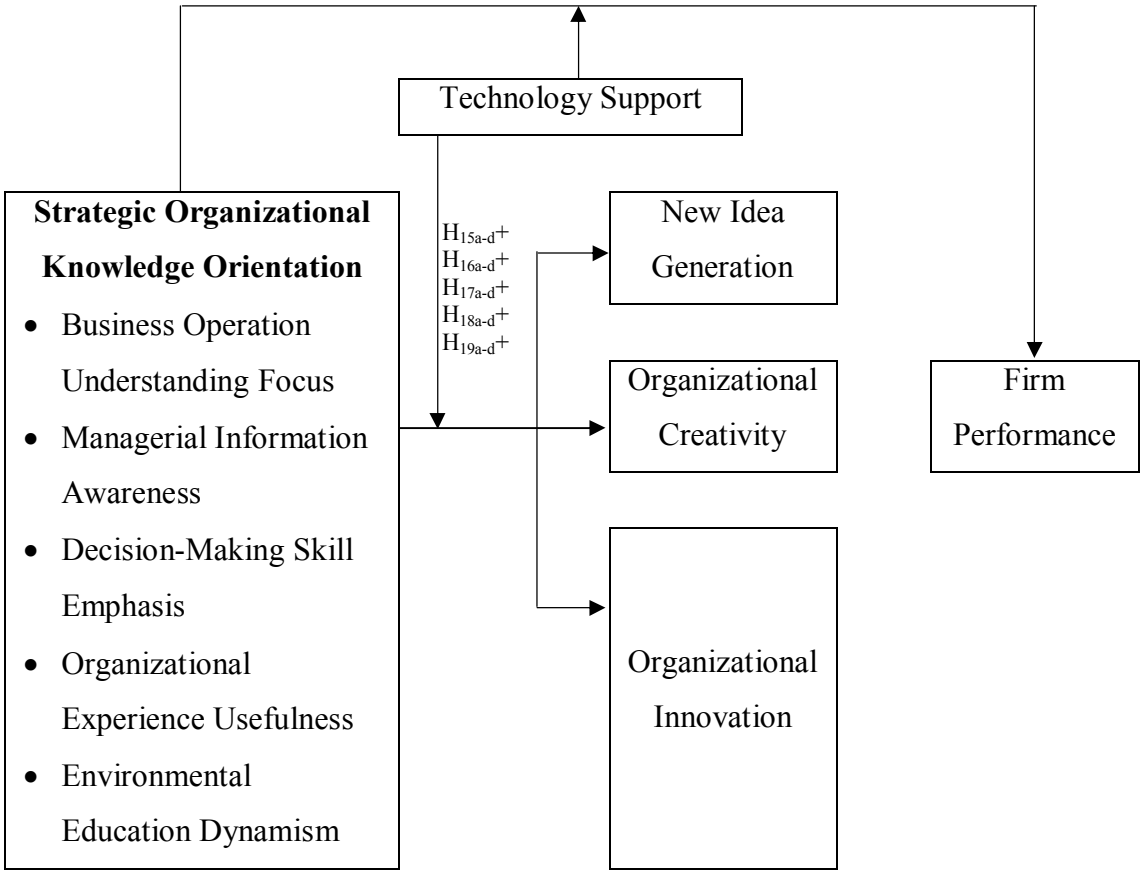
Firstly, the organization that can achieve success must encourage staff that has the ability to apply knowledge. Most importantly, organizations need to combine modern technology with sufficiency and appropriation, due to the integration of organizational knowledge and technology that will lead to increased firm performance (Agrawal et al., 2004).

Secondly, modern equipment will enhance the communication ability and update business processes, for employees who can efficiently apply information, leading to creativity and the development of new products (Schneckenberg, 2009) to meet customer needs better than competitors.

Thirdly, it encourages employees to have the skills and the ability to apply the knowledge to the organization such as in planning, decisions, and by invariably combining with technological support. It makes a positive impact on sharing knowledge effectively, leading to innovation and creating value for the organization (Saenz, Aramburu and Rivera, 2009). Besides, research in the past found that organizations that sufficiently support technology affect innovation and have a positive operating result (Vaccaro, Parente and Veloso, 2010) and positive effect to firm performance (Bharadwaj, Bharadwaj and Konsynski, 1999)

Fourthly, if the organization improves or develops software to fix the flaws of the old system and use it in the operation, the majority found that it reduces cost efficiency and adds rapidity in sharing and knowledge transfer, affecting the generation of new ideas. Finally, organizations that support technology, in types of knowledge networks such as online forums in specialist areas, will enable themselves to better transfer knowledge, since the organization has modifications to be consistent with changes, both inside and outside of the organization, to meet customer needs (Crilly, Jashapara and Ferlie, 2010). An example is the interaction between people within the organization by an intranet platform which can lead to reduced costs and enhance operational performance (Guerra-Lopez, 2009). In contrast, Eker (2009) found that advanced manufacturing technology does not sufficient for the build performance of firm. Beside, technology uncertainty decreases growth rates of revenue by lowering efficiencies both in creating new knowledge (Kim and Lee, 2011). For this reason, it seems that technology support maybe is a moderating variable, having a positive impact on the relationship between each dimension of SOKO, organizational creativity, new idea generation, organizational innovation as presented above in Figure 16.

Figure 16: Moderating Effects of Technology Support on Relationships among Five Dimensions of Strategic Organizational Knowledge Orientation, New Idea Generation, Organizational Innovation, and Organizational Creativity



Hypothesis 15a: The relationship between business operation understanding focus and organizational creativity will be positively moderated by technology support.

Hypothesis 15b: The relationship between business operation understanding focus and new idea generation will be positively moderated by technology support.

Hypothesis 15c: The relationship between business operation understanding focus and organizational innovation will be positively moderated by technology support.

Hypothesis 15d: The relationship between business operation understanding focus and firm performance will be positively moderated by technology support.

Hypothesis 16a: The relationship between managerial information awareness and organizational creativity will be positively moderated by technology support.

Hypothesis 16b: The relationship between managerial information awareness and new idea generation will be positively moderated by technology support.

Hypothesis 16c: The relationship between managerial information awareness and organizational innovation will be positively moderated by technology support.

Hypothesis 16d: The relationship between managerial information awareness and firm performance will be positively moderated by technology support.

Hypothesis 17a: The relationship between decision-making skill emphasis and organizational creativity will be positively moderated by technology support.

Hypothesis 17b: The relationship between decision-making skill emphasis and new idea generation will be positively moderated by technology support.

Hypothesis 17c: The relationship between decision-making skill emphasis and organizational innovation will be positively moderated by technology support.

Hypothesis 17d: The relationship between decision- making skill emphasis and firm performance will be positively moderated by technology support.

Hypothesis 18a: The relationship between organizational experience usefulness and organizational creativity will be positively moderated by technology support.

Hypothesis 18b: The relationship between organizational experience usefulness and new idea generation will be positively moderated by technology support.

Hypothesis 18c: The relationship between organizational experience usefulness and organizational innovation will be positively moderated by technology support.

Hypothesis 18d: The relationship between organizational experience usefulness and firm performance will be positively moderated by technology support.

Hypothesis 19a: The relationship between environmental education dynamism and organizational creativity will be positively moderated by technology support.

Hypothesis 19b: The relationship between environmental education dynamism and new idea generation will be positively moderated by technology support.

Hypothesis 19c: The relationship between environmental education dynamism and organizational innovation will be positively moderated by technology support.

Hypothesis 19d: The relationship between environmental education dynamism and firm performance will be positively moderated by technology support.

Learning Culture

The pressure of competition will impact the organization's need to adapt and to develop new knowledge (Drucker, 1999), new operating procedures or a new management strategy for the organization (Damanpour, 1991) to meet the market demand. The organizational culture is a key to promote or stimulate the management

process within the organization's knowledge (Khazanchi, Lewis and Boyer, 2007). It is necessary for survival of a firm in the long term, and plays a role in the practice of the organization under the changed dynamic (Santos-Vijande and Alvarez-Gonzalez, 2007).

Culture is the shared values and beliefs that help members understand the organization's work, and it teaches them to follow the norms of the organization (Deshpande and Webster, 1989). The organizational culture is extremely useful. It is a learning culture which has been recognized as a culture that will lead the organization to success (Marquardt, 2002). When developing a learning culture that starts from the development of individuals in the organization, this culture will be buried in the organizational structure, leading to the achievement of learning outcomes and the success of the organization (Watkins and Marsick, 1998).

A learning culture is not just the sum of individual learning, but it also involves the exchange of knowledge between organizations, teams, and the environment (Argyris and Schon, 1978). The past literature identifies the meaning of a learning culture in its variety, such as learning culture is a method to adapt to the society and interact with that society (Lashley and Barron, 2006); or, it represents a culture that focuses on the promotion and facilitation of the learning of employees in the company, by promoting the sharing and spreading of what is learned, and aiming at the development and success of the firm. In this research, learning culture is defined as the norms of the firm that lead to improved attitudes and beliefs of the people in the organization to have the ability of knowledge-sharing to meet new opportunities (Bontis, 1999; Murray and Donegan, 2003; Jarvis and Parker, 2007).

This research is focused on two types of learning culture, including knowledge-friendly culture, and the creating communities of practice culture. Knowledge-friendly culture refers to modifications to the values of the employee who has the thirst for knowledge or pursuing knowledge (Gurteen, 1999). For example, learning culture is the characteristics of employees who have dared to speak and dare to ask openly and honestly. The values of knowledge-friendly rely on top managers in the support of infrastructures and databases. It leads to seeking information, the application of experience, and expertise in the work, for quickly creating innovation (Andriopoulos, 2001). Communities of practice is a forum for people interested in creating knowledge willingly by meeting and exchanging unofficially, such as a manufacturing engineer operative exchanging

information with a sales representative in format caused by wanting to share, stories to understand and apply knowledge for the workplace, leading to creativity and positive performance (Hahn, Lee and Lee, 2015). A review of past literature is evidence in the empirical research.

Firstly, the leader has a role in the creation of knowledge in organizations, performing and strengthening incentives for employees; and, they can support the potential of a firm by stimulating learning culture such as leaders who behave as an example of life-long learners for employees. It impacts to change behavior and increases the ability of employees to work effectively leads to their greater understanding in the operation of the organization (Garvin, 1993).

Secondly, for developing the capacity of organizations in the application of that knowledge, organizations must have a shared vision and it must have been supported in learning by the manager. They encourage discussion between members in an organization un-officially; or, advocate communities of practice to continuously exchange data or information. They make staff to be able to get information, which leads to an attitude or a different perspective to increase the likelihood of innovation, enterprise (Song and Chermack, 2008). Also, they can be used for data or the experience of enterprise business success (Wang, Yang and McLean, 2007).

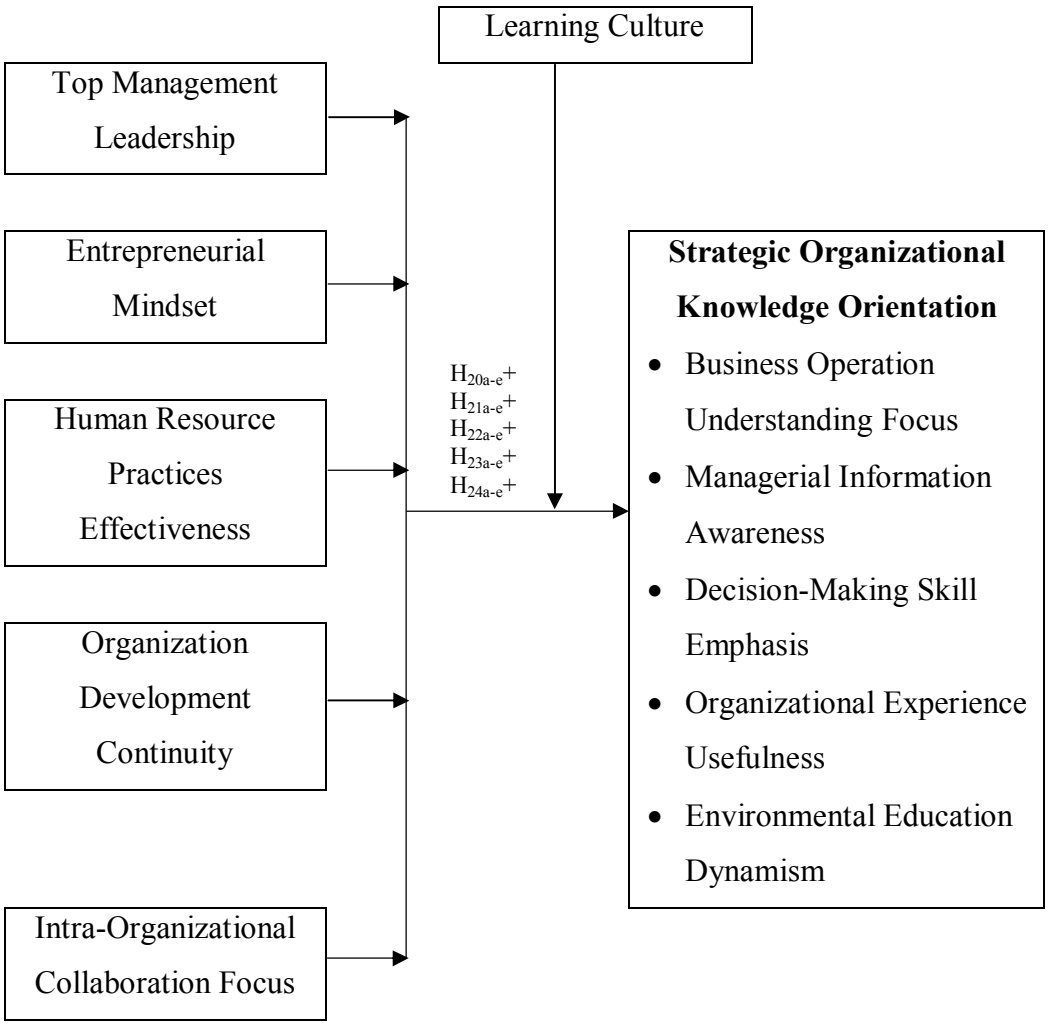
Thirdly, organizations support a culture of self-learning by supplying an appropriate infrastructure or appropriate system for learning, such as that which leads to error and business efficacy (Argyris and Schon, 1978). After the organization's personnel, who are able to attend to the organization's seeking to instill their values, they have dedication and a thirst for knowledge; and, it may affect their positive attitude. Importantly, learning culture is crucial in supporting the changes in employee behavior, and sustainable influences for the competitive advantage of an organization (Senge, 1990).

Fourth, organizations that promote participation to ensure that employees have a great motivation to learn, are further supported by learning culture, such as in creating values of trust or having the confidence in the ability of experts from outside the organization. This leads to the capabilities of a firm in the application of corporate experience to operate and maximize competitive advantage (Argyris and Schon, 1978). However, the culture of learning does not directly affect performance, but indirectly

influences the creation of dynamic ability to accumulate knowledge and experience to contribute to innovation (Gold, Malhotra and Segars, 2001).

Finally, the organization that has developed a strong culture of learning will have a result in the behavioral change of staff to support the change of the environment. Learning culture is a value linked to social interaction and the environment (Easterby-Smith and Araujo, 1999), which leads to the ability to recognize and understand the dynamic of a firm (Hung et al., 2010) and to achieve the organizational goals. On the other hand, Slack (2005) states that executive with having character a flexible manner, or have little control will impact on feelings and behavior of employees, this affect them to fulfill successful corporate strategy. Other than, some studies found that organizational learning capability had no significant effect management goal achievement (Sookaneknun, Ussahawanitchakit and Boonlua, 2013). On the other hand, Dawes, Lee and Midgley (2007) suggest that the type of communication has an influence on organizational learning capability, which an informal effect more than a formal one. In addition, organizational learning capability cannot affect in the shot-time but it has effect in the long-time (Lenard, 2003). For this reason, it seems that learning culture maybe is a moderating variable, having a positive impact on the relationship between antecedents of SOKO and each dimension of SOKO as presented above in Figure 17.

Figure 17: Moderating Effects of Learning Culture on Relationships among Its Antecedents and Five Dimensions of Strategic Organizational Knowledge Orientation



Hypothesis 20: The relationship between top management leadership and (a) business operation understanding focus, (b) managerial information awareness, (c) decision-making skill emphasis, (d) organizational experience usefulness, and (e) environmental education dynamism will be positively moderated by learning culture.

Hypothesis 21: The relationship between entrepreneurial mindset and (a) business operation understanding focus, (b) managerial information awareness, (c) decision-making skill emphasis, (d) organizational experience usefulness, and

(e) environmental education dynamism will be positively moderated by learning culture.

Hypothesis 22: The relationship between human resource practices effectiveness and (a) business operation understanding focus, (b) managerial information awareness, (c) decision-making skill emphasis, (d) organizational experience usefulness, and (e) environmental education dynamism will be positively moderated by learning culture.

Hypothesis 23: The relationship between organization development continuity and (a) business operation understanding focus, (b) managerial information awareness, (c) decision-making skill emphasis, (d) organizational experience usefulness, and (e) environmental education dynamism will be positively moderated by learning culture.

Hypothesis 24: The relationship between intra-organizational collaboration focus and (a) business operation understanding focus, (b) managerial information awareness, (c) decision-making skill emphasis, (d) organizational experience usefulness, and (e) environmental education dynamism will be positively moderated by learning culture.

Summary

This chapter shows and provides the relevant literature review, KBV of the firm, the conceptual framework, hypotheses development, and the proposed set of twenty-four testable hypotheses. SOKO is the key concern of this research that focuses on its antecedents and consequences. Moreover, it investigates the impact of new idea generation, organizational innovation, organizational creativity, and business competitiveness on firm performance. In addition, learning culture is proposed as the moderator to prove its effect on relationships among five antecedents of SOKO and each dimension of SOKO. Besides, this research provides technology support is proposed as the moderator to prove its effect on relationships among each dimension of SOKO

and its consequence. This shows the summary of all hypothesized relationships on Table 2. The next chapter focuses on describing the research methods, including the population and sample selection, the data collection procedure, the variable measurements of each construct, the statistics and equations to test the hypotheses, and a summary of the variable and operational definitions for this research.

Table 3: Summary of Hypothesized Relationships

Hypotheses	Description of Hypothesized Relationships
H1a	The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational creativity.
H1b	The higher the business operation understanding focus is, the more likely that firms will obtain greater new idea generation.
H1c	The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational innovation.
H1d	The higher the business operation understanding focus is, the more likely that firms will obtain greater firm performance.
H2a	The higher the managerial information awareness is, the more likely that firms will obtain greater organizational creativity.
H2b	The higher the managerial information awareness is, the more likely that firms will obtain greater new idea generation.
H2c	The higher the managerial information awareness is, the more likely that firms will obtain greater organizational innovation.
H2d	The higher the managerial information awareness is, the more likely that firms will obtain greater firm performance.
H3a	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational creativity.
H3b	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater new idea generation.
H3c	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational innovation.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H3d	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater firm performance.
H4a	The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational creativity.
H4b	The higher the organizational experience usefulness is, the more likely that firms will obtain greater new idea generation.
H4c	The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational innovation.
H4d	The higher the organizational experience usefulness is, the more likely that firms will obtain greater firm performance.
H5a	The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational creativity.
H5b	The higher the environmental education dynamism is, the more likely that firms will obtain greater new idea generation.
H5c	The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational innovation.
H5d	The higher the environmental education dynamism is, the more likely that firms will obtain greater firm performance.
H6a	Organizational creativity will have a positive influence on new idea generation.
H6b	Organizational creativity will have a positive influence on organizational innovation.
H6c	Organizational creativity will have a positive influence on business competitiveness.
H7a	New idea generation will have a positive influence on business competitiveness.
H7b	New idea generation will have a positive influence on firm performance.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H8a	Organizational innovation will have a positive influence on business competitiveness.
H8b	Organizational innovation will have a positive influence on firm performance.
H9	The business competitiveness will have a positive influence on firm performance.
H10a	The higher the top management leadership is, the more likely that firms will obtain greater business operation understanding focus.
H10b	The higher the top management leadership is, the more likely that firms will obtain greater managerial information awareness.
H10c	The higher the top management leadership is, the more likely that firms will obtain greater decision-making skill emphasis.
H10d	The higher the top management leadership is, the more likely that firms will obtain greater organizational experience usefulness.
H10e	The higher the top management leadership is, the more likely that firms will obtain greater environmental education dynamism.
H11a	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater business operation understanding focus.
H11b	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater managerial information awareness.
H11c	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater decision-making skill emphasis.
H11d	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater organizational experience usefulness.
H11e	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater environmental education dynamism.
H12a	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater business operation understanding focus.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H12b	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater managerial information awareness.
H12c	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater decision-making skill emphasis.
H12d	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater organizational experience usefulness.
H12e	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater environmental education dynamism.
H13a	The higher the organization development continuity is, the more likely that firms will obtain greater business operation understanding focus.
H13b	The higher the organization development continuity is, the more likely that firms will obtain greater managerial information awareness.
H13c	The higher the organization development continuity is, the more likely that firms will obtain greater decision-making skill emphasis.
H13d	The higher the organization development continuity is, the more likely that firms will obtain greater organizational experience usefulness.
H13e	The higher the organization development continuity is, the more likely that firms will obtain greater environmental education dynamism.
H14a	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater business operation understanding focus.
H14b	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater managerial information awareness.
H14c	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater decision-making skill emphasis.
H14d	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater organizational experience usefulness.
H14e	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater environmental education dynamism.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H15a	The relationship between business operation understanding focus and organizational creativity will be positively moderated by technology support.
H15b	The relationship between business operation understanding focus and new idea generation will be positively moderated by technology support.
H15c	The relationship between business operation understanding focus and organizational innovation will be positively moderated by technology support.
H15d	The relationship between business operation understanding focus and firm performance will be positively moderated by technology support.
H16a	The relationship between managerial information awareness and organizational creativity will be positively moderated by technology support.
H16b	The relationship between managerial information awareness and new idea generation will be positively moderated by technology support.
H16c	The relationship between managerial information awareness and organizational innovation will be positively moderated by technology support.
H16d	The relationship between managerial information awareness and firm performance will be positively moderated by technology support.
H17a	The relationship between decision-making skill emphasis and organizational creativity will be positively moderated by technology support.
H17b	The relationship between decision-making skill emphasis and new idea generation will be positively moderated by technology support.
H17c	The relationship between decision-making skill emphasis and organizational innovation will be positively moderated by technology support.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H17d	The relationship between decision-making skill emphasis and firm performance will be positively moderated by technology support.
H18a	The relationship between organizational experience usefulness and organizational creativity will be positively moderated by technology support.
H18b	The relationship between organizational experience usefulness and new idea generation will be positively moderated by technology support.
H18c	The relationship between organizational experience usefulness and organizational innovation will be positively moderated by technology support.
H18d	The relationship between organizational experience usefulness and firm performance will be positively moderated by technology support.
H19a	The relationship between environmental education dynamism and organizational creativity will be positively moderated by technology support.
H19b	The relationship between environmental education dynamism and new idea generation will be positively moderated by technology support.
H19c	The relationship between environmental education dynamism and organizational innovation will be positively moderated by technology support.
H19d	The relationship between environmental education dynamism and firm performance will be positively moderated by technology support.
H20a	The relationship between top management leadership and business operation understanding focus will be positively moderated by learning culture.
H20b	The relationship between top management leadership and managerial information awareness will be positively moderated by learning culture.
H20c	The relationship between top management leadership and decision-making skill emphasis will be positively moderated by learning culture.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H20d	The relationship between top management leadership and organizational experience usefulness will be positively moderated by learning culture.
H20e	The relationship between top management leadership and environmental education dynamism will be positively moderated by learning culture.
H21a	The relationship between entrepreneurial mindset and business operation understanding focus will be positively moderated by learning culture.
H21a	The relationship between entrepreneurial mindset and business operation understanding focus will be positively moderated by learning culture.
H21b	The relationship between entrepreneurial mindset and managerial information awareness will be positively moderated by learning culture.
H21c	The relationship between entrepreneurial mindset and decision-making skill emphasis will be positively moderated by learning culture.
H21d	The relationship between entrepreneurial mindset and organizational experience usefulness will be positively moderated by learning culture.
H21e	The relationship between entrepreneurial mindset and environmental education dynamism will be positively moderated by learning culture.
H22a	The relationship between human resource practices effectiveness and business operation understanding focus will be positively moderated by learning culture.
H22b	The relationship between human resource practices effectiveness and managerial information awareness will be positively moderated by learning culture.
H22c	The relationship between human resource practices effectiveness and decision-making skill emphasis will be positively moderated by learning culture.
H22d	The relationship between human resource practices effectiveness and organizational experience usefulness will be positively moderated by learning culture.

Table 3: Summary of Hypothesized Relationships (Continued)

Hypotheses	Description of Hypothesized Relationships
H22e	The relationship between human resource practices effectiveness and environmental education dynamism will be positively moderated by learning culture.
H23a	The relationship between organization development continuity and business operation understanding focus will be positively moderated by learning culture.
H23b	The relationship between organization development continuity and managerial information awareness will be positively moderated by learning culture.
H23c	The relationship between organization development continuity and decision-making skill emphasis will be positively moderated by learning culture.
H23d	The relationship between organization development continuity and organizational experience usefulness will be positively moderated by learning culture.
H23e	The relationship between organization development continuity and environmental education dynamism will be positively moderated by learning culture.
H24a	The relationship between intra-organizational collaboration focus and business operation understanding focus will be positively moderated by learning culture.
H24b	The relationship between intra-organizational collaboration focus and managerial information awareness will be positively moderated by learning culture.
H24b	The relationship between intra-organizational collaboration focus and managerial information awareness will be positively moderated by learning culture.
H24c	The relationship between intra-organizational collaboration focus and decision-making skill emphasis will be positively moderated by learning culture.
H24d	The relationship between intra-organizational collaboration focus and organizational experience usefulness will be positively moderated by learning culture.
H24e	The relationship between intra-organizational collaboration focus and environmental education dynamism will be positively moderated by learning culture.

CHAPTER III

RESEARCH METHODS

The previous chapter presented a review of prior studies and relevant literature concerning strategic organizational knowledge orientation (SOKO) and other variables in the conceptual model, including the theoretical foundations, definition of all variables, and hypotheses development. To understand the research methods, this chapter details them in four parts as follows: Firstly, the sample selection and data collection procedures, including the population and sample, the data collection, and the test of non-response bias are detailed. Secondly, measurements including the dependent variable, independent variables, and mediating variables, as well as antecedent variables, moderating variables, and control variables are developed. Thirdly, the method of this research, including the tests of validity, reliability, and the statistical techniques are presented. Finally, a table summarizing the variable definitions and operational definitions is included.

Sample Selection and Data Collection Procedure

Population and Sample

The population and sample of this research are the beverage businesses in Thailand. The beverage businesses in this research produce beverages within Thailand and are registered with the Department of Industrial Works. Basically, the beverage business in Thailand is divided into two major groups, including alcoholic beverages (such as beer, liquor, wine, fruit liquor, etc.) and non-alcoholic beverages (such as soft drinks, soda, and juice drinks). The beverage businesses are an interesting subject for investigation for three reasons.

Firstly, the sample of this research is the beverage business because it is one of the businesses that is important to stimulate the economic development of the country. This is demonstrated from the amount of excise tax on the beverage business, which was 1 in 5 of all goods sold in Thailand (The Excise Department, 2015). Moreover, the beverage business contributes to the employment of many people, both in the beverage industry directly and industries related to the manufacture of beverages, such as the

manufacture of glass, cans, or bottles; including the agricultural business that produces the raw material for the manufacture of beverages.

Secondly, the current condition of the beverage business is a market that has intense competition, since the effect of major beverage multinational business is likely to expand investment in Thailand using preferential taxes under the ASEAN Free Trade Area (AFTA). Likewise, the beverage business in this country is likely to have more intense competition among the manufacturers producing non-alcoholic beverages. These major operators in the alcohol beverage business will begin penetration into the non-alcoholic beverages business. The alcohol beverage business wants to expand production in order to reduce the risks of a sluggish economy. This will severely affect the non-alcoholic beverages business, especially among smaller manufacturers who need to adapt to survive.

Lastly, due to consumers currently focusing on health even more, there is a behavior change of consumers in the buying of drinks, which previously were alcohol drinks, soft drinks, and coffee, which were their favorites, but this has now changed to buying water, sports drinks, and beverages with ingredients that benefit the body (Deichert et al., 2006). This shows that the beverage business is likely to change according to consumer behavior. Likewise, although the beverage business in 2014 was affected by political factors in the country, the results of a survey of the Kasikorn Research Center (2015) found that overall, the beverage businesses in Thailand have a growth rate that should increase continuously, due to the continuous entry into the market of new operators which are non-alcoholic beverage business (tea, healthy drinks).

Moreover, the American Beverage Association (2006) argues that the beverage businesses have created new strategies to combat competitors at rates that were too low, which resulted in increased occurrences of new competitors entering the market. The statement above demonstrates the increasing competition in the beverages market that is due to the entry of new operators in Thailand and around the world. Business opportunities are caused by the changes in consumer behavior that are so important, which include the health factor and the cheap raw material factor (herbs, vegetables, and fruits). As a result, new entrepreneurs need to learn and enhance their ability to use organizational knowledge in creating innovation for drinks with exotic flavors and ingredients with positive impacts on health, which could result in them being able to compete effectively

in the beverage market. In addition, the cycle of the beverage business in Thailand in the present has changed and so has the entry-exit in the market of operators, based on the preference of consumers in Thailand. Thus, the operators of the beverage business must adapt strategies to strengthen their businesses, such as market research, raw material supply, and leveraging organizational knowledge that will lead to a sustainable competitive advantage (Kasikorn Research Center, 2015).

This is consistent with American Beverage Association (2005) who argues that today's consumers are demanding innovations in drinks such as new tastes, new smells, healthy ingredients, and beautiful packaging all of which lead to new alternatives in the beverage market. Hence, the knowledge-based view is used to explain the phenomenon that beverage businesses in Thailand require the ability to take advantage of learning from their past experiences and the information of the organizations that will lead to competitive advantage over rivals (Barnery, 1991). Besides this, Hjalager (2010) argues that organizations that have orientation in leveraging organizational knowledge will lead to greater innovation and creativity of those organizations. Therefore, the circumstances and the framework of the theory mentioned above show that the beverage businesses in Thailand are appropriate to be selected as the population for this research. Moreover, this is considered to be the first time for empirical research to investigate the influences of SOKO on firm performance in the context of beverage businesses in Thailand.

The sample of this research was chosen from the online database of Thailand's industrial directory of the Department of Industrial Works, Ministry of Industry of the Thai government as of March 2015, totaling 634 companies (http://www.diw.go.th, accessed March 15, 2015). The beverage businesses are the sample population and the key informants in this research are the managing directors or a manager-partner. The samples used in this research are calculated using the sample size and Yamane's (1967) simplified formula. This formula was used to calculate the sample sizes for a population with a 95% confidence level and a 5% sample error and this was considered an appropriate sample size that can be calculated as follows:

Formula $$n = \frac{N}{1 + N(e)^2}$$

Where;

n = Sample size

N = Number of population

e = Acceptable error = 0.05

$$n = \frac{634}{1 + 634(0.05)^2}$$

n = 246

Ancillary information for the simplified formula is an appropriate sample size of 246 firms with a 95% confidence level for this calculation. According to Aaker, Kumer and Day (2001), the response rate for a mail survey, without an appropriate follow-up procedure and if greater than 20%, is deemed sufficient. Also, the following formula was used to calculate the sample sizes for a population:

$$n = 264 \times \frac{100}{20}$$

n = 1,230

Therefore, 1,230 firms are an appropriate sample size for a distributed mail survey. However, there are only 634 firms, and using this population for sampling is considered appropriate, as described above. Therefore, the questionnaires were mailed directly to all 634 firms. Furthermore, the managing director or managing partnership of each firm is considered the appropriate key informant. For replies from participants, a postcard is sent four weeks after the first mailing to remind them to complete and return the questionnaires.

As a result, this research uses 634 firms as a population sample. With reference to the questionnaires sent to respondents, 77 surveys were undeliverable because some of the firms had changed addresses or were no longer in business. The undeliverable surveys were deducted from the original 634 surveys. As a consequence, the valid mailing list was 557 surveys, with 120 responses received. However, three incomplete

surveys were found to have missing data and were discarded. Thus, there were only 117 surveys that were usable for further analysis. The effective response rate was approximately 21.01 percent. According to Aaker, Kumer and Day (2001), the response rate for a mail survey is considered acceptable if greater than 20%. The details of the questionnaire mailing process are shown in Table 4.

Table 4: Details of Questionnaire Mailing

Details	Numbers
Mailed Questionnaires	634
Undelivered Questionnaires	77
Valid Questionnaires Mailed	557
Received Questionnaires	120
Unusable Questionnaires	3
Usable Questionnaire	117
Response Rate (117/557) x 100	21.01%

Data Collection

This research collected data from a cross-sectional design, in which the variables are measured at one time. The research instrument was the questionnaire, adapted by reviewing the related literature, definitions, and instruments used in previous research. This was an appropriate and effective survey employing a mail questionnaire in a widely-used method for large-scale data collection in geographical areas (Neuman, 2006). A representative sample can be collected from the chosen population in a variety of locations at low cost and with time savings (Kwok and Sharp, 1998). The 634 questionnaires were distributed directly by mail to each managing director or managing partnership of the beverage firms in Thailand. Afterwards, the completed questionnaires were returned directly to the researcher with the prepaid return envelopes included in the original mailing to ensure confidentiality. Furthermore, each package of the instrument consisted of a cover letter containing an explanation of the research, a questionnaire, and a pre-paid postage return envelope. The survey resulted in 117 completed and

usable questionnaires. The effective response rate is approximately 21.01%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey is appropriate if more than 20%, as shown in Table 4.

The mailing questionnaire consists of six parts. Part one asks for personal information such as gender, age, and marital status, as well as education level, working experience, monthly salary, and current position. Part two concerns general information about the beverage businesses in Thailand, such as business owner type, type of business, and period of time in business operation, as well as number of employees, operational capital of the firm, and average annual income. The firms' awards regarding distinctive and qualified management, as well as primary customers, are also solicited. Part three relates to evaluating each construct in the conceptual model. All questions deal with the measurement of SOKO, which consists of business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism. Part four details the consequences of SOKO, which include organizational creativity, new idea generation, organizational innovation, business competitiveness, and firm performance. Part five details the antecedents and moderators of SOKO, consisting of top management leadership, entrepreneurial mindset, human resource practices effectiveness, organization development continuity, intra-organizational collaboration focus, technology support, and learning culture. Finally, an open-ended question for the managing director or managing partnership's suggestions and opinions is included in part six. An example of the questionnaire is attached in Appendix F (English version) and Appendix G (Thai version).

Test of Non-Response Bias

Following the recommendations of Armstrong and Overton (1977), non-response bias is tested by employing a t-test to compare the differences of the group mean of organizational demographics between early and late-responding firms. The expected result should indicate statistically insignificant differences between two groups, for which non-response bias is not an issue in this research (Armstrong and Overton, 1977). Thus, this research employs a t-test by comparing the group mean of the firm characteristics between early and late-responding firms. The total number of 117 responding firms is divided into two equal groups; the first fifty-eight questionnaires

received are treated as early respondents and the rest are treated as late respondents. The organizational demographics in these terms include type of business, the period of time in business operation, and the number of employees, as well as operational capital of the firm, average annual income, a firm's awards regarding distinctive and qualified management, and its primary customers.

The results are as follows: type of business ($t = -0.239$, $p > 0.05$), the period of time in business operation ($t = -0.524$, $p>0.05$), the number of employees ($t = 0.548$, $p > 0.05$), operational capital of the firm ($t=1.026$, $p > 0.05$), average annual income ($t = -0.978$, $p > 0.05$), a firm's awards regarding distinctive and qualified management ($t=-0.195$, $p > 0.05$), and main customers ($t =-0.146$, $p > 0.05$). These results provide the evidence that there were no statistically significant differences between the two groups at a 95% confidence level. Therefore, it can be said that a non-response bias is not a concern in this research (Armstrong and Overton, 1977). The results of the non-response bias test are presented in Appendix A. These results provide evidence that there were no statistically significant differences between the two groups, at a 95% confidence level. Therefore, it can be said that non-response bias is not a concern in this research (Armstrong and Overton, 1977). The results of the non-response bias test are presented in Appendix A.

Measurements

The measurement process involved multiple-item development for measuring each variable in the conceptual model. In fact, all variables are abstractions that cannot be measured or observed directly and should be measured by multiple items (Churchill and Iacobucci, 2002). These variables were transformed into operational variables for true measurement by adapting them to the relevant literature. To measure each variable in the conceptual model, all of the variables obtained from the survey were measured by using a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Table 6 provides the definition of each variable, operational definition, and scale source. The variable measurements of the independent variables, dependent variable, moderating variables, mediating variables, and control variables of this research are elaborated as follows:

Dependent Variable

Firm Performance. Previous research suggests that capturing the multi-dimensionality of performance requires the use of multiple measures (Wiklund and Shepherd, 2005; Stam and Elfring, 2008). This variable focuses on the multi-dimensionality of performance, including efficiency and stability of operating results, sales growth, market share, gross profits, and market reputation (Wiklund and Shepherd, 2005; Stam and Elfring, 2008). This construct is measured by using a five-item scale modified from Li and Zhang (2007), Stam and Elfring (2008), and Dolsopol and Ussahawanitchakit (2014).

Independent Variables

The independent variable of this research is SOKO and serves as the core construct of this research. It is referred to as the potentiality of the organization in raising awareness and a focus on the utilization of learning from data and events that have already occurred, as well as those that are emerging, to effectively achieve the objectives of the organization (Quintas, Lefrere and Jones, 1997; Moorman and Miner, 1997; Marakas, 1999; Wang et al., 2009). This variable was developed as a new scale and measured by using five dimensions, including business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism. The measure of each dimension depends on its definition, which is also detailed below.

Business Operation Understanding Focus. Business operation understanding focus is defined as the concentration on the recognition of the fundamental activities of business that is oriented toward value-added assets of the organization, leading to achievement of the organization's goals (Byington and Christensen, 2005; Srichanapun, Ussahawanitchakit and Boonlua, 2013). This variable focuses on the organization's operating system, including the linking together of strategic vision, operational readiness, environment analysis, forecasting in the environment, process integration and process improvement (Fitzsimmons and Fitzsimmons, 2004; Hanke and Wichern, 2009; Ninlaphay, Ussahawanitchakit and Boonlua, 2012). This construct is measured by using a five-item scale developed as a new scale, based on its definition.

Managerial Information Awareness. Managerial information awareness is defined as the realization by the firm on the importance of business data through advocating its accumulation and utilization, leading to innovation to respond to customer demands over competitors (Rad, Shams and Naderi, 2009; Chitmun, Ussahawanitchakit and Boonlua, 2012; Chaikambang, Ussahawanitchakit and Boonlua, 2012). This variable focuses on awareness capabilities in a variety of information, the linking of information between departments, developing database systems and data mining, information system development and the application of information management (Tanriverdi, 2005; Chaikambang, Ussahawanitchakit and Boonlua, 2012). This construct was developed as a new scale including five items, based on its definition.

Decision-Making Skills Emphasis. Decision-making skills emphasis is defined as the realization of the ability to build expertise in deliberation (identifying and choosing alternatives) to solve business problems more efficiently and effectively (Walker, 2001; Brock and Russell, 2009; Towler, 2010; Schoenfeld, 2011). This variable focuses on the decision support phase, with diverse alternatives (Yim et al., 2004) including a number of options, involved processes and desired results (Eisenfuhr, 2011), such as the developmental skills of an employee in solving complex business problems, establishing criteria for determining the benefits to be derived from alternative decisions and the effectiveness of the decision (Yim et al., 2004). This construct is measured by using a five-item scale developed as a new scale, based on its definition.

Organizational Experience Usefulness. Organizational experience usefulness is defined as a firm's ability to understand and utilize the advantages and shortcomings of past events, or the practices that provide the most benefit to the organization (Reuber, 1997; Prempree, Ussahawanitchakit and Boonlua, 2013). This variable focuses on the analysis of both advantages and disadvantages of work experience and the application of past experiences to improve performance at work (Singh, 2012; Hutzschenreuter and Horstkotte, 2012; Prempree, Ussahawanitchakit and Boonlua, 2013). This construct was developed as a new scale including four items, based on its definition.

Environmental Education Dynamism. Environmental education dynamism is defined as adjustments in methods of learning in organizations, with a focus on the pursuit and analysis of opportunities caused by changes in both internal and external organizations, leading to the adaptation of the continued organization (Bartosh, 2003;

Eisenhardt and Martin, 2000; Zander and Kogut, 2001; Pothong and Ussahawanitchakit, 2011). This variable focuses on a check of customer needs, a situational analysis of operations, learning the rules and regulations, and research and development in an operations environment (Zander and Kogut, 2001; Pothong and Ussahawanitchakit, 2011). This construct is measured by using a five-item scale developed as a new scale, based on its definition.

Mediating Variables

For this research, business competitiveness, new idea generation, organizational innovation, and organizational creativity are the mediating variables of SOKO. The measure of each variable is in its definition and discussed as follows:

Business Competitiveness. This variable focuses on several elements of competitiveness, including price, cost, and quality, as well as innovation of product and image (Singh, 2012). The characteristics of competitiveness include long-term orientation, being controllable, relative, and dynamic (Man, Lau and Chan, 2002). A four-item scale is modified from Man, Lau and Chan (2002), Pungboonpanich, Ussahawanitchakit and Ieamvijarn (2010), and Singh (2012).

New Idea Generation. This variable focuses on idea generation about core business processes, including procurement, operations, marketing and sales, and customer or after-sales services (Brown, 2008). A four-item scale is modified from Howell and Boies (2004) and Thipsri and Ussahawanitchakit (2009).

Organizational Innovation. This variable focuses on three perspectives of innovation, including a perspective of newness, a perspective of improvement, and a perspective of the consumer (Shepherd, 1997; Certo, 2000; Robbins and Judge, 2007) such as the newness, added value, diversity and uniqueness of the goods or service, and the application of modern technology in organizational management (Robbins and Judge, 2007; Chuang, 2005). A four-item scale is modified from Robbins and Judge (2007), Chuang (2005), and OECD/Eurostat (2005).

Organizational Creativity. This variable focuses on the elements of creativity, including originality, fluency, flexibility and elaboration of concept novelty (Guilford, 1986) such as the novelty of the concept in production, differences from the original

concept, and extension of the original concept (Brown, 1989). A four-item scale is modified from Brown (1989), Yilmaz (2010), and Beheshtifar and Kamani-Fard (2013).

Antecedent Variables

For this research, top management leadership, entrepreneurial mindset, human resource practices effectiveness, organization development continuity, and intra-organizational collaboration focus are the antecedents of SOKO. The measure of each variable is in its definition and discussed as follows:

Top Management Leadership. This variable focuses on clear vision and policy, modern management, and development of continuing work development, as well as supporting personnel in attending training, and investment in the development of advanced technologies (Pansuppawatt and Ussahawanitchakit, 2011; Tontiset and Choojan, 2012; Laonamtha, Ussahawanitchakit and Boonlua, 2013). This construct is measured using a five-item scale modified from Lunenburg and Ornstein (2000), Rodriguez, Perez and Gutierrez (2008), and Laonamtha, Ussahawanitchakit and Boonlua (2013).

Entrepreneurial Mindset. This variable focuses on the personality of the entrepreneur, including autonomy focus, innovative orientation, and proactive capability, as well as risk-taking competency, uncertainty avoidance, and competitive aggressiveness (Frese, 2000; Li, Huang and Tsai, 2009). A five-item scale is modified from Lumpkin and Dess (1996), Li, Huang and Tsai (2009), and Jitnom and Ussahawanitchakit (2009).

Human Resource Practices Effectiveness. This variable focuses on five elements of human resource practices, including the analysis and design job, recruitment, training, evaluation, and compensation (Stone, Lukaszewski, and Isenhour, 2005; Minbaeva, 2005; Kase, Paauwe and Zupan, 2009). A five-item scale is modified from Pfeffer (1998), Minbaeva (2005), and Tseng and Lee (2009).

Organization Development Continuity. This variable focuses on the analysis feedback and environment, management by objectives, organizational planning that can support change, and reinforcing the strategy regularly (Buchanan and Huczynski, 1997; Cummings and Worley, 2001). A four-item scale is modified from Cummings and Worley (2001), Balzac (2011), and Warrick (2005).

Intra-Organizational Collaboration Focus. This variable focuses on six-components of collaboration, including environment, member characteristics, communication, purpose, process and resources (Garstka et al., 2012). This construct is measured by using a five-item scale modified from Mattessich et al. (2004) and Garstka et al. (2012).

Moderating Variables

Technology support and learning culture are the moderating variables of this research. The measure of each variable is in its definition and discussed as follows:

Technology Support. This variable focuses on three types of technologies, including product technology, process technology and mix technology (Heinich, Molenda and Russell, 1993). It also focuses on investing in technology, research and technological development, learning and training technology, and budget allocation for technology (Rhoades and Eisenberger, 2002; Eisenberger et al., 2002). A five-item scale is modified from Heinich, Molenda and Russell (1993), McDermott and Stock (1999), Parasuraman (2000), and Kim and Cavusgil (2006).

Learning Culture. This variable focuses on two types of learning culture, including knowledge of friendly culture and communities, and practice culture (Gurteen, 1999; Hahn, Lee and Lee, 2015) such as the development the knowledge and ability to keep pace with the changes, analysis of work experience in the past, and the creation of knowledge and information systems development (Yang, Watkins and Marsick, 2004; Wang, Yang and McLean, 2007). A four-item scale is modified from Kandemir and Hult (2005), Marsick and Watkins (2003), and Hahn, Lee and Lee (2015).

Control Variables

Two control variables include firm age and firm size, which may affect the relationship between SOKO, outcomes, and antecedent variables–SOKO relationships.

Firm Age. Firm age is measured by the number of years that a firm has been in business (Zhou et al., 2005; Jonas and Diamant, 2006; Phokha and Ussahawanitchakit, 2010). It is a critical control variable that may have effects on strategic knowledge orientation. Firm age is normally associated with better resource ability and higher competitiveness (Lau, Wong and Eggletion, 2008). A firm operating for a long time has

the ability to allocate and manage organizational resources more effectively than later entrants (Lau, Wong and Eggletion, 2008). Thus, firm age may affect SOKO. In this research, firm age is a dummy variable, in which 0 means the firm has been in business less than or equal to 10 years, and 1 means the firm has been in business for more than 10 years (Kanchanda, Ussahawanitchakit and Jhundra-Indra, 2012).

Firm Size. Firm size is defined as how large or small the firm is, measured by the number of full-time employees of the firm (Tangpinyoputtikhun and Ussahawanitchakit, 2009). Firm size may affect the ability of the firm to adjust and redefine a firm's strategy (Baden-Fuller and Volberda, 1997). Also, most of the strategic management literature indicates that firm size is the main factor pursuing firm competitive advantage and success (Fullerton and McWatters, 2002; Ussahawanitchakit, 2005). It may also affect the knowledge, capability, and performance of a firm (Zahra, Neubaum and Larraneta, 2007). Thus, firm size may affect SOKO. In this research, firm size is a dummy variable, in which 0 means the firm has less than or equal to 100 full-time employees and 1 means the firm has more than 100 full-time employees (Pungboonpanich, Ussahawanitchakit and Ieamvijarn, 2010).

Methods

In this research, all constructs in the conceptual model are developed by adopting the relevant literature. Consequently, a pre-test method is conducted to assure validity and reliability of the questionnaire. The reason for the pre-test is to check clearly and accurately for understanding of the questionnaire before using real data collection. The pre-test was conducted during May, 2015. The first thirty firms, which were comprised of early respondents, were chosen for the pre-test. The pre-test of 30 representative informants is power of test with enough to identify problems with a questionnaire that conformed to Perneger et al. (2015). After the pre-test, the questionnaire was modified and adjusted to improve it as an effective instrument. Therefore, the purpose of conducting the pre-test was to examine the validity and reliability of each measure employed in the questionnaire. Finally, these questionnaires were included in the final data analysis.

Validity

Validity refers to the degree to which a measure precisely represents the correct and accurate instrument (Peter, 1979; Hair et al., 2010). Thus, this research examines the content and construct validity of the questionnaire.

Face Validity and Content Validity. Face validity reflects the extent to which it is intended to measure. It is a subjective assessment of the correspondence between individual items and the concept through rating by expert judges (Hair et al., 2010). Face validity is the extent to which the measure represents the relevant content domain for the construct by individual judges or experts (Trochim, 1999). Content validity is based on the extent to which a measurement reflects the specific intended content domain of the theoretical construct (Kwok and Sharp, 1998). Content validity is an inspection system to reflect the content universe to which the instrument will be generalized. In this case, face and content validity are improved by an extensive review of the literature questionnaires (Hair et al., 2010).

In this research, two professionals in academic research have been asked to review and suggest necessary recommendations to review the instrument in order to ensure that all constructs are sufficient to cover the contents of the variables. Based on their feedback, some questions were deleted or adjusted accordingly so as to attain the best measurement. According to Nunnally and Bernstein (1994), content validity is the scale containing items which are adequate to measure what it is intended to measure and rational judgments by academics that are evaluating the adequacy of the measurement. Moreover, each of the items in a questionnaire is subjectively assessed by two related academic experts to ensure content validity (see Appendix H).

Construct Validity. Construct validity refers to a set of measured items that reflect the theoretical latent construct that those items are designed to measure (Hair et al., 2010). It is an agreement between a theoretical concept and a specific measuring instrument or procedure. Construct validity is evaluated by testing both convergent and discriminant validity. Convergent validity refers to the degree to which two measures are designed to measure the same construct related to that convergence, and it will be found if the two measures are highly correlated (Kwok and Sharp, 1998). Discriminant validity assesses the degree to which an operation is not similar to other operations that theoretically should not be similar. The idea is that items which belong

to similar theoretical concepts are supposed to be highly intercorrelated. They are expected to measure the concept of the same variable, called convergent validity; whereas, different concepts of items should have low correlation with another item of dissimilar concept, called discriminant validity. Also, each item must be loaded on a single factor only (Bosch et al., 2006).

This research utilizes exploratory factor analysis to examine the construct validity. This is because there are 5 constructs that are newly developed and 12 constructs that are adapted from previous literature. Thus, exploratory factor analysis should be appropriate. Exploratory factor analysis is used to explore new factor structure of the construct (Milan and Esteban, 2004). In this research, all factor loadings are greater than the 0.40 cut-offs and statistically significant according to the rule-of-thumb (Nunnally and Bernstein, 1994).

Table 5 presents the factor loading and the Cronbach's alpha coefficient of all constructs from thirty beverage businesses in the pre-test (Perneger et al., 2015), of which the factor loadings range from 0.412 to 0.915. These values are greater than the cut-off score of 0.4, which indicate acceptable construct validity (Nunnally and Bernstein, 1994) (see Appendix D).

Table 5: Results of Validity and Reliability Testing

Constructs	**Factor Loadings**	**Cronbach's Alpha**
Business Operation Understanding Focus (BOU)	0.656-0.790	0.754
Managerial Information Awareness (MIA)	0.505-0.812	0.730
Decision-Making Skills Emphasis (DMS)	0.557-0.792	0.750
Organizational Experience Usefulness (OEU)	0.662-0.912	0.802
Environmental Education Dynamism (EED)	0.614-0.846	0.808
Organizational Creativity (OC)	0.745-0.805	0.785
New Idea Generation (NI)	0.692-0.852	0.749
Organizational Innovation (OI)	0.578-0.907	0.756
Business Competitiveness (BC)	0.773-0.878	0.823
Firm Performance (FP)	0.717-0.874	0.850
Top Management Leadership (TL)	0.753-0.849	0.876
Entrepreneurial Mindset (EM)	0.664-0.843	0.776

Table 5: Results of Validity and Reliability Testing (Continued)

Constructs	Factor Loadings	Cronbach's Alpha
Human Resource Practices Effectiveness (HR)	0.520-0.821	0.728
Organization Development Continuity (OD)	0.557-0.843	0.716
Intra-Organizational Collaboration Focus (IC)	0.519-0.855	0.816
Learning Culture (LC)	0.679-0.859	0.787
Technology Support (TS)	0.412-0.915	0.707

Reliability

Reliability refers to an assessment of the degree of consistency between multiple measurements of a variable (Hair et al., 2010). In addition, it is the extent to which measurements of the particular test are repeatable (Nunnally and Berstein, 1994). This research tests the reliability of each construct by using Cronbach's alpha because it is the most popular measure of internal consistency reliability. Cronbach's alpha is the most widely-used measure of internal consistency reliability for two reasons: it is provided by many popular statistical software programs, and it is well understood by most researchers. This research uses Cronbach's alpha to measure the internal consistency, which should be greater than 0.70 (Nunnally and Berstein, 1994; Hair et al., 2010).

In this research, testing validity and reliability of the questionnaire, as qualities of a good instrument, are conducted by factor analysis and Cronbach's Alpha, respectively, to revise the questionnaire as well as to ensure validity and reliability. According to the results shown in Table 5, the Cronbach's alpha coefficients range is 0.707-0.876, which is greater than 0.70. The general agreements for acceptable Cronbach's alpha coefficient is that it should not be lower than 0.70 (Hair et al., 2006), and it is used as a criterion in this research (see Appendix D). The reliability scale of all measures appears to confirm the internal consistency of the measures used in this research. Thus, these measures are deemed appropriate for further analysis because they express acceptable validity and reliability.

Statistical Techniques

In this research, a variance inflation factor (VIF) is applied to test multicollinearity among independent variables and Pearson's correlation analysis is determined to test the primary correlations between the two variables. Importantly, regression analysis using an ordinary least squared method (OLS) is operated to statistically estimate the coefficient of hypotheses testing.

Variance Inflation Factors. Variance inflation factors (VIF's) are applied to test for the severity of multicollinearity among the independent variables and Pearson's correlation. It provides an indication that measures how much the variance of an estimated regression coefficient is increased as a result of collinearity. Large VIF values indicate a high degree of multicollinearity among the independent variables. All VIF values should be smaller than 10 to consider that the associations among the independent variables are not problematic (Hair et al., 2010; Stevens, 2002). The results of regression analysis provide evidence that the VIF values of each regression model are in the range of 1.086-8.163, well below the cut-off value of 10 recommended by Neter, William and Michael (1985). Therefore, these VIF values imply that there are no substantial multicollinearity problems encountered in this research.

Correlation Analysis. Pearson's product-moment correlation techniques analysis is used to test the correlations among all variables. This research has two purposes for examining a correlation analysis. Firstly, it is to check the problem of correlation that occurs when any single independent variable is highly correlated with other independent variables. In other words, a variable can be explained by the other variables in the analysis of multicollinearity, which indicates when the inter-correlation between explanatory variables exceeds 0.80 (Hair et al., 2006). Secondly, correlation analysis is performed to explore the relationships between variables. Cohen et al. (2003) suggest that the covariance of two variables by the product of their standard deviation values is between +1 and –1, inclusively. Importantly, when the relationships between variables are equal or greater than 0.80, it indicates a multicollinerity problem (Hair et al., 2010). The results of an examination of the correlation matrix for SOKO and all constructs (as shown in Table 7) reveal that the correlations among SOKO and all constructs are in a range from 0.346 to 0.784. In addition, associations among the independent variables are lower than 0.80, which means that each independent variable is not correlated with

all other independent variables at a high level that might be causing the multicollinearity problem (Hair et al., 2010). Therefore, the initial assumption is that there are no multicollinearity problems in this research.

Regression Analysis. According to Hair et al (2010), regression analysis is appropriate to investigate the relationships among constructs which are based on data qualified as interval and categorical scales. Therefore, OLS regression analysis is employed to test all hypotheses in a conceptual model. Before hypotheses testing, all raw data is diagnosed for basic assumptions of regression analysis, including autocorrelation, normality, heteroscedasticity, and linearity (Williams, Grajales and Kurkiewicz, 2013). The results of testing the basic assumption of regression analysis show that variance of error constant (no heteroscedastic problem) and the Durbin-Watson statistic does not exceed 2.5 (no autocorrelation), with error having a normal distribution (see Appendix E).

The above-mentioned research analyzes the data, which is calculated in the form of factor scores, for which all variables are prepared to avoid multicollinearity problems and evaluated by OLS regression analysis. Therefore, all hypotheses in this research are transformed to twenty-two equations. Each equation consists of the main variables related to the hypotheses testing, which is described in the previous chapter. Furthermore, two control variables, firm age and firm size, are included in all of the equations for hypotheses testing. The details for each equation are presented in the following:

$$\textit{Equation 1:}\quad OC = \alpha_1 + \beta_1 BOU + \beta_2 MIA + \beta_3 DMS + \beta_4 OEU + \beta_5 EEO + \beta_6 FA + \beta_7 FS + \varepsilon_1$$

$$\textit{Equation 2:}\quad OC = \alpha_2 + \beta_8 BOU + \beta_9 MIA + \beta_{10} DMS + \beta_{11} OEU + \beta_{12} EEO + \beta_{13} TS + \beta_{14}(BOU*TS) + \beta_{15}(MIA*TS) + \beta_{16}(DMS*TS) + \beta_{17}(OEU*TS) + \beta_{18}(EEO*TS) + \beta_{19} FA + \beta_{20} FS + \varepsilon_2$$

$$\textit{Equation 3:}\quad NI = \alpha_3 + \beta_{21} BOU + \beta_{22} MIA + \beta_{23} DMS + \beta_{24} OEU + \beta_{25} EEO + \beta_{26} FA + \beta_{27} FS + \varepsilon_3$$

$$\textit{Equation 4:}\quad NI = \alpha_4 + \beta_{28} BOU + \beta_{29} MIA + \beta_{30} DMS + \beta_{31} OEU + \beta_{32} EEO + \beta_{33} TS + \beta_{34}(BOU*TS) + \beta_{35}(MIA*TS) + \beta_{36}(DMS*TS)$$

$$+ \beta_{37}(OEU*TS) + \beta_{38}(EEO*TS) + \beta_{39}FA + \beta_{40}FS + \varepsilon_4$$

Equation 5: $NI = \alpha_5 + \beta_{41}OC + \beta_{42}FA + \beta_{43}FS + \varepsilon_5$

Equation 6: $OI = \alpha_6 + \beta_{44}BOU + \beta_{45}MIA + \beta_{46}DMS + \beta_{47}OEU + \beta_{48}EEO + \beta_{49}FA + \beta_{50}FS + \varepsilon_6$

Equation 7: $OI = \alpha_7 + \beta_{51}BOU + \beta_{52}MIA + \beta_{53}DMS + \beta_{54}OEU + \beta_{55}EEO + \beta_{56}TS + \beta_{57}(BOU*TS) + \beta_{58}(MIA*TS) + \beta_{59}(DMS*TS) + \beta_{60}(OEU*TS) + \beta_{61}(EEO*TS) + \beta_{62}FA + \beta_{63}FS + \varepsilon_7$

Equation 8: $OI = \alpha_8 + \beta_{64}OC + \beta_{65}FA + \beta_{66}FS + \varepsilon_8$

Equation 9: $BC = \alpha_9 + \beta_{67}OC + \beta_{68}NI + \beta_{69}OI + \beta_{70}FA + \beta_{71}FS + \varepsilon_9$

Equation 10: $FP = \alpha_{10} + \beta_{72}BOU + \beta_{73}MIA + \beta_{74}DMS + \beta_{75}OEU + \beta_{76}EEO + \beta_{77}FA + \beta_{78}FS + \varepsilon_{10}$

Equation 11: $FP = \alpha_{11} + \beta_{79}BOU + \beta_{80}MIA + \beta_{81}DMS + \beta_{82}OEU + \beta_{83}EEO + \beta_{84}TS + \beta_{85}(BOU*TS) + \beta_{86}(MIA*TS) + \beta_{87}(DMS*TS) + \beta_{88}(OEU*TS) + \beta_{89}(EEO*TS) + \beta_{90}FA + \beta_{91}FS + \varepsilon_{11}$

Equation 12: $FP = \alpha_{12} + \beta_{92}NI + \beta_{93}OI + \beta_{94}BC + \beta_{95}FA + \beta_{96}FS + \varepsilon_{12}$

Equation 13: $BOU = \alpha_{13} + \beta_{97}TL + \beta_{98}EM + \beta_{99}HR + \beta_{100}OD + \beta_{101}IC + \beta_{102}FA + \beta_{103}FS + \varepsilon_{13}$

Equation 14: $BOU = \alpha_{14} + \beta_{104}TL + \beta_{105}EM + \beta_{106}HR + \beta_{107}OD + \beta_{108}IC + \beta_{109}LC + \beta_{110}(TL*LC) + \beta_{111}(EM*LC) + \beta_{112}(HR*LC) + \beta_{113}(OD*LC) + \beta_{114}(IC*LC) + \beta_{115}FA + \beta_{116}FS + \varepsilon_{14}$

Equation 15: $MIA = \alpha_{15} + \beta_{117}TL + \beta_{118}EM + \beta_{119}HR + \beta_{120}OD + \beta_{121}IC + \beta_{122}FA + \beta_{123}FS + \varepsilon_{15}$

Equation 16: $MIA = \alpha_{16} + \beta_{124}TL + \beta_{125}EM + \beta_{126}HR + \beta_{127}OD + \beta_{128}IC + \beta_{129}LC + \beta_{130}(TL*LC) + \beta_{131}(EM*LC) + \beta_{132}(HR*LC) + \beta_{133}(OD*LC) + \beta_{134}(IC*LC) + \beta_{135}FA + \beta_{136}FS + \varepsilon_{16}$

Equation 17: $DMS = \alpha_{17} + \beta_{137}TL + \beta_{138}EM + \beta_{139}HR + \beta_{140}OD + \beta_{141}IC + \beta_{142}FA + \beta_{143}FS + \varepsilon_{17}$

$$\textit{Equation 18:}\quad DMS = \alpha_{18} + \beta_{144}TL + \beta_{145}EM + \beta_{146}HR + \beta_{147}OD + \beta_{148}IC + \beta_{149}LC + \beta_{150}(TL*LC) + \beta_{151}(EM*LC) + \beta_{152}(HR*LC) + \beta_{153}(OD*LC) + \beta_{154}(IC*LC) + \beta_{155}FA + \beta_{156}FS + \varepsilon_{18}$$

$$\textit{Equation 19:}\quad OEU = \alpha_{19} + \beta_{157}TL + \beta_{158}EM + \beta_{159}HR + \beta_{160}OD + \beta_{161}IC + \beta_{162}FA + \beta_{163}FS + \varepsilon_{19}$$

$$\textit{Equation 20:}\quad OEU = \alpha_{20} + \beta_{164}TL + \beta_{165}EM + \beta_{166}HR + \beta_{167}OD + \beta_{168}IC + \beta_{169}LC + \beta_{170}(TL*LC) + \beta_{171}(EM*LC) + \beta_{172}(HR*LC) + \beta_{173}(OD*LC) + \beta_{174}(IC*LC) + \beta_{175}FA + \beta_{176}FS + \varepsilon_{20}$$

$$\textit{Equation 21:}\quad EED = \alpha_{21} + \beta_{177}TL + \beta_{178}EM + \beta_{179}HR + \beta_{180}OD + \beta_{181}IC + \beta_{182}FA + \beta_{183}FS + \varepsilon_{21}$$

$$\textit{Equation 22:}\quad EED = \alpha_{22} + \beta_{184}TL + \beta_{185}EM + \beta_{186}HR + \beta_{187}OD + \beta_{188}IC + \beta_{189}LC + \beta_{190}(TL*LC) + \beta_{191}(EM*LC) + \beta_{192}(HR*LC) + \beta_{193}(OD*LC) + \beta_{194}(IC*LC) + \beta_{195}FA + \beta_{196}FS + \varepsilon_{22}$$

Where,

BOU	=	Business operation understanding focus
MIA	=	Managerial information awareness
DMS	=	Decision-making skills emphasis
OEU	=	Organizational experience usefulness
EED	=	Environmental education dynamism
OC	=	Organizational creativity
NI	=	New idea generation
OI	=	Organizational innovation
BC	=	Business competitiveness
FP	=	Firm performance
TL	=	Top management leadership
EM	=	Entrepreneurial mindset
HR	=	Human resource practices effectiveness
OD	=	Organization development continuity
IC	=	Intra-organizational collaboration focus
TS	=	Technology support

LC = Learning culture

FA = Firm age

FS = Firm size

ε = Error term

Summary

This chapter details the research methods used in this research for gathering data and examining all variables in the conceptual model to answer the research questions. Moreover, this chapter describes the sample selection and data collection procedure, including population and sample, data collection, and test of non-response bias. In fact, 634 beverage businesses in Thailand were chosen from Thailand's industrial directory of the Department of Industrial Works database, Ministry of Industry of the Thai government as of March 2015, which were selected as the sample for this research.

The selected key informant was the managing director or managing partnership of each beverage firm. The main research instrument was a mail survey questionnaire. Table 4 shows the details of the questionnaire mailing and effective response rate, which was approximately 21.01 percent. Moreover, variable measurements were followed by each of the variables in the conceptual model (Figure 1). Furthermore, instrumental verifications, including a test of validity and reliability, as well as the statistical analysis, were presented in Table 5. In addition, this chapter presents the variable measurements for each construct and summarizes them, as shown in Table 6. Finally, twenty-two statistical equations for hypotheses testing are also included.

Table 6: Variable Definitions and Operational Definitions

Variables	Definition	Operational Definition	Scale Source
Independent Variables			
Business Operation Understanding Focus	The concentration on the recognition of fundamental activities of business that oriented value added asset on organization, leads to achieve the organization's goal.	The degree to evaluate of understanding in the linking together between the strategic vision and operational readiness, environment analysis, forecasting in environment, process integration, and process improvement.	New Scale
Managerial Information Awareness	The realization of the firm on the importance of business data, by advocating of accumulation and utilization from it, leads to innovating to respond customer demands over competitors.	The degree to evaluate of the variety of business data, the linking of data between departments, developing database systems, and data mining, information system development and the application of information management.	New Scale
Decision-Making Skills Emphasis	The realization on the ability to build expertise in deliberation (identifying and choosing alternatives) to solve business problems more efficiently and effectively.	The degree to evaluate of the developed skills of employee in solving complex business problems with itself, establishing criteria for determining the benefits to be derived from alternative decisions, and the effectiveness of the decision.	New Scale
Organizational Experience Usefulness	The firm's ability to understand and utilize on advantages and shortcomings of past events or the practices provide the most benefit to the organization.	The degree to evaluate the analysis of both the advantages and disadvantages of work experience and the application of past experiences to improve performance in work.	New Scale

Table 6: Variable Definitions and Operational Definitions (Continued)

Variables	Definition	Operational Definition	Scale Source
Independent Variables			
Environmental Education Dynamism	The adjustments in how learning of organizational, with a focus on pursuit and analyzing opportunities, caused by changes both internal and external organization, led to the adaptation of the organization continued.	The degree to evaluate learning of organizational with checking of customer needs, the situation analysis on operation, learning the rules and regulations, the research and development in an operations environment.	New Scale
Mediating Variables			
Organizational Creativity	The overall ability of firm to support the concept and aimed at inspiring with novelty.	The degree to evaluate the novelty of the concept in production, differences from the original concept, and extension of the original concept.	Brown (1989), Yilmaz (2010), and Beheshtifar and Kamani-Fard (2013)
New Idea Generation	The firm's ability to create new process or methods of operation for application in organizational efficiency.	The degree to evaluate idea erection about core business processes including procurement, operations, marketing, and sales, customer and aftersales services.	Howell and Boies (2004) and Thipsri and Ussahawanitchakit (2009)
Organizational Innovation	The ability of an organization to increase value or to develop new products or services, leads to satisfy customer demand continued.	The degree to evaluate, innovate, and develop new products, the improved features and added value to the product or service, the uniqueness of the product and to focus the needs of customers.	Robbins and Judge (2007), Chuang (2005), and OECD/Eurostat (2005)

Table 6: Variable Definitions and Operational Definitions (Continued)

Variables	Definition	Operational Definition	Scale Source
Mediating Variables			
Business Competitiveness	The organization's ability to manage and operate a business superior to its competitors in terms of outperforming them in price, cost, quality, innovation of product, and image.	The degree to evaluate outperforming of administrative price, cost, quality, innovation of product, and image that looks long-term oriented, controllable, relative, and dynamic.	Man, Lau and Chan (2002), Pungboonpanich, Ussahawanitchakit and Ieamvijarn (2010), and Singh (2012)
Dependent Variable			
Firm Performance	The continual operational outcome of the firm to succeed in financial performance and non-financial performance of the firm over the long term.	The degree to evaluate stability of operating results, sales growth, market share, gross profits, and market reputation.	Li and Zhang (2007), Stam and Elfring (2008), and Dolsopol and Ussahawanitchakit (2014)
Antecedent Variables			
Top Management Leadership	The practices of senior management to encourage and motivate employees to recognize and understand the pathway in organizational mechanism to achieve the organization's target.	The degree to evaluate the practices of clearly vision and policy, modern management, development of development work continues, support personnel in attending training, investment, and development of advanced technologies.	Lunenburg and Ornstein (2000), Rodriguez, Perez and Gutierrez (2008), and Laonamtha, Ussahawanitchakit and Boonlua (2013)

Table 6: Variable Definitions and Operational Definitions (Continued)

Variables	Definition	Operational Definition	Scale Source
Antecedent Variables			
Entrepreneurial Mindset	The behavior of people in the organization that makes it look open to opportunities, accepts risks-taking reasonable, tolerance of ambiguity in the situation and ready to take on proactive strategy to achieve the goals of organization ongoing.	The degree to evaluate personality entrepreneur in autonomy focus, innovative orientation, proactive capability, risk-taking competency, uncertainty avoidance, and competitive aggressiveness.	Lumpkin and Dess (1996), Li, Huang and Tsai (2009), and Jitnom and Ussahawanitchakit (2009)
Human Resource Practices Effectiveness	The achievement of the distinctive approach in employment activities of firm including job analysis, recruitment, training, evaluation and compensation.	The degree to evaluate analysis and design job, recruitment, training, evaluation, and compensation.	Pfeffer (1998), Minbaeva (2005), and Tseng and Lee (2009)
Organization Development Continuity	The efforts of organizations in the flexibility of planning and strategy reinforcement, consistently lead to the ability to changes of process and behavior on organization for success in management according objectives of organization.	The degree to evaluate analysis feedback and environment, management by objectives, organizational planning that can support the change and the reinforcing the strategic regularly.	Cummings and Worley (2001), Balzac (2011), and Warrick (2005)
Intra-Organizational Collaboration Focus	The concentration on encouraging orientation the interaction between interpersonal and system in working jointly by supporting resource exchange and interdependence, leading to the achievement on the goals of the organization.	The degree to evaluate environment, member characteristics, communication, purpose, process, and resources.	Mattessich et al. (2004) and Garstka et al. (2012)

Table 6: Variable Definitions and Operational Definitions (Continued)

Variables	Definition	Operational Definition	Scale Source
Moderating Variables			
Technology Support	The assist and promote from organizations in the advanced tools to enhance the ability of the employee to utilize it effectively.	The degree to evaluate investing in technology, research and technological development, learning and training technology, and budget allocation in technology.	Heinich, Molenda and Russell (1993), McDermott and Stock (1999), Parasuraman (2000), and Kim and Cavusgil (2006)
Learning Culture	The norms of the firm that lead to improve attitudes and beliefs of the people in the organization to have ability of knowledge sharing to meet new opportunities.	The degree to evaluate belief in developing the knowledge and ability to keep pace with the changes, analysis of work experience in the past and the value of the creation of knowledge and information systems development.	Kandemir and Hult (2005), Marsick and Watkins (2003), and Hahn, Lee and Lee (2015)
Control Variables			
Firm Age	The period of time in the proceeding business.	Dummy variable 0 = below and equal to 10 years, 1 = higher than 10 years	Kanchanda, Ussahawanitchakit and Jhundra-Indra (2012)
Firm Size	Large or small the firm is and measured by the number of full time employees of the firm.	Dummy variable 0 = below and equal to100 employees 1 = higher than 100 employees	Pungboonpanich, Ussahawanitchakit and Ieamvijarn (2010)

CHAPTER IV

RESULTS AND DISCUSSION

The previous chapter described the research methods, which include the sample selection, data collection procedure, measurements, measure validation, and statistical techniques. This chapter presents the analyses of the survey data and the results of the hypothesis testing and discussion, which are organized as follows. Firstly, the respondent characteristics and descriptive statistics are explained for an increased understanding of the sample characteristics. Secondly, the hypotheses testing and results are detailed. Finally, the summary of all hypotheses testing is also provided.

Respondent Characteristics and Descriptive Statistics

In this research, beverage businesses are the unit of analysis, and the key informants are certain managing directors, partnership managers, or general managers who are responsible for the organizational strategy in the beverage business. They are also called respondents, because they represent their firm and completed the questionnaire of this research. The respondent characteristics are categorized by their demographic characteristics including gender, age, marital status, educational level, work experience, monthly salary, and current position. The general information of the beverage businesses is also described by business ownership type, type of business, the period of time in business operation, number of employees, operational capital of the firm, average annual income, the firm's awards regarding distinctive and qualified management, and their main customers.

Table B1 in Appendix B shows the demographic characteristics of the 117 participants with returned questionnaires, showing that most respondents are male (53.85 percent). The age range the majority of respondents is more than 45 years old (52.14 percent). Most respondents are married (67.52 percent). For education level, the majority of respondents obtained a bachelor's degrees or lower (64.10 percent). In addition, most respondents have working experience with beverage firms for more than 15 years (39.32 percent). Moreover, most respondents received revenues of

30,000-45,000 baht per month (36.75 percent). Finally, the majority of the respondents work in the position of managing director (40.17 percent).

As shown in Table 2B in Appendix B, the most common business ownership type is a limited company (64.96 percent). For the type of business, most are non-alcoholic beverages businesses (78.63 percent). The period of time in business operation is mostly more than 15 years (33.33 percent), the number of full-time employees in the organization for most is less than 50 persons (35.90 percent), and the amount of current operational capital is mostly more than 15,000,000 baht (36.75 percent). Meanwhile, the majority of businesses in the sample have an average annual income of more than 15,000,000 baht (45.30 percent). Moreover, most firms have not been awarded for quality excellence in management and service quality (53.85 percent). Most of the samples have Thais as their main customer group (71.79 percent).

Correlation Analysis

A bivariate correlation analysis of the Pearson Correlation is conducted on all variables in this research for two purposes. The first purpose is that it is used for exploring the relationship between variables. And the second purpose is to check for the presence of any multicollinearity problems. A correlation matrix can prove the correlation between two variables and verify multicollinearity problems by intercorrelations among independent variables. It is indicated when independent variables have an intercorrelation exceeding 0.80 (Hair et al., 2006). Table 7 shows the results of the correlation analysis of all variables. The bivariate correlation procedure is subject to a two-tailed test of statistical significance at two levels, which are $p < 0.01$ and $p < 0.05$. Therefore, a correlation matrix can prove the correlation between two variables and verify multicollinearity problems by intercorrelations among independent variables. The results indicate several multicollinearity problems in this research. The correlation matrix reveals the correlation between each dimension of strategic organizational knowledge orientation and its consequences as lower than 0.80.

Results show that all dimensions of strategic organizational knowledge orientation have a significant positive relationship with organizational creativity, new idea generation, organizational innovation, and firm performance ($r = 0.346$-0.784; $p < 0.01$). The antecedent variables, including top management leadership, entrepreneurial

mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus are significantly related to all dimensions of strategic organizational knowledge orientation ($r = 0.394$-0.678; $p < 0.01$). The correlations between two moderating variables (learning culture and technology support) and all variables in this conceptual model are moderately correlated. Results show a significant correlation between 0.359 and 0.704; $p < 0.01$. The evidence suggests that there are intercorrelations among the independent variables which are less than 0.80 as recommended by Hair et al. (2006), meaning that each variable is not highly correlated with each other. As a result, the indication of multicollinearity problems may not occur. Moreover, generally accepted levels of multicollinearity are diagnosed using variance inflation factors (VIFs) (Hair et al., 2010), which are described in the next section.

Table 7: Descriptive Statistics and Correlation Matrix of Variables

Variables	BOU	MIA	DMS	OEU	EED	OC	NI	OI	BC	FP	TL	EM	HR	OD	IC	TS	LC	FA	FS
Mean	4.10	4.04	4.15	4.03	4.06	3.90	3.57	3.42	3.68	3.73	4.14	3.99	3.96	3.97	4.03	3.92	4.05	2.68	2.47
SD	.58	.54	.54	.63	.63	.67	.76	.78	.72	.68	.51	.63	.61	.55	.57	.68	.55	1.11	1.26
BOU	1.000																		
MIA	.628***	1.000																	
DMS	.504***	.605***	1.000																
OEU	.556***	.602***	.624***	1.000															
EED	.639***	.697***	.623***	.589***	1.000														
OC	.630***	.661***	.625***	.623***	.660***	1.000													
NI	.478***	.546***	.560***	.429***	.621***	.628***	1.000												
OI	.346***	.457***	.461***	.397***	.470***	.553***	.784***	1.000											
BC	.361***	.456***	.528***	.366***	.517***	.543***	.731***	.784***	1.000										
FP	.399***	.445***	.484***	.389***	.504***	.592***	.632***	.579***	.775***	1.000									
TL	.555***	.455***	.544***	.394***	.533***	.553***	.531***	.388***	.491***	.590***	1.000								
EM	.503***	.496***	.622***	.480***	.463***	.432***	.488***	.340***	.385***	.448***	.639***	1.000							
HR	.527***	.525***	.481***	.659***	.539***	.493***	.421***	.265***	.286***	.388***	.524***	.702***	1.000						
OD	.678***	.542***	.447***	.409***	.469***	.400***	.391***	.260***	.350***	.397***	.530***	.591***	.502***	1.000					
IC	.559***	.653***	.627***	.562***	.639***	.565***	.554***	.426***	.462***	.530***	.566***	.696***	.674***	.560***	1.000				
TS	.482***	.481***	.519***	.598***	.453***	.540***	.515***	.494***	.512***	.552***	.460***	.458***	.445***	.388***	.452***	1.000			
LC	.580***	.637***	.599***	.665***	.610***	.630***	.499***	.359***	.488***	.517***	.532***	.504***	.547***	.542***	.704***	.539***	1.000		
FA	.034	-.104	.028	-.021	-.090	-.086	-.063	-.033	-.079	-.099	.080	.168	.097	.046	-.026	-.024	-.049	1.000	
FS	.233**	.116	.129	.019	.197**	.166	.133	.117	.046	.121	.206**	.105	.092	.136	.168	.042	.123	.213**	1.000

***p<0.01, **p<0.05, FA= Firm Age, FS= Firm Size

Hypotheses Testing and Results

This research employs the Ordinary Least Squares (OLS) regression to investigate the hypothesized relationships. The regression equation generated is a linear combination of the independent variables that best explains and predicts the dependent variables. Moreover, all hypotheses in this dissertation are transformed into twenty-two equations. Furthermore, there are two dummy variables for firm age and firm size, which are consistent with the data collection included in those equations for testing as follows.

Relationships among Five Dimensions of Strategic Organizational Knowledge Orientation, Its Consequences, and the Moderating Role of Technology Support

Figure 18: Relationships among Five Dimensions of Strategic Organizational Knowledge Orientation, Its Consequences, and the Moderating Role of Technology Support

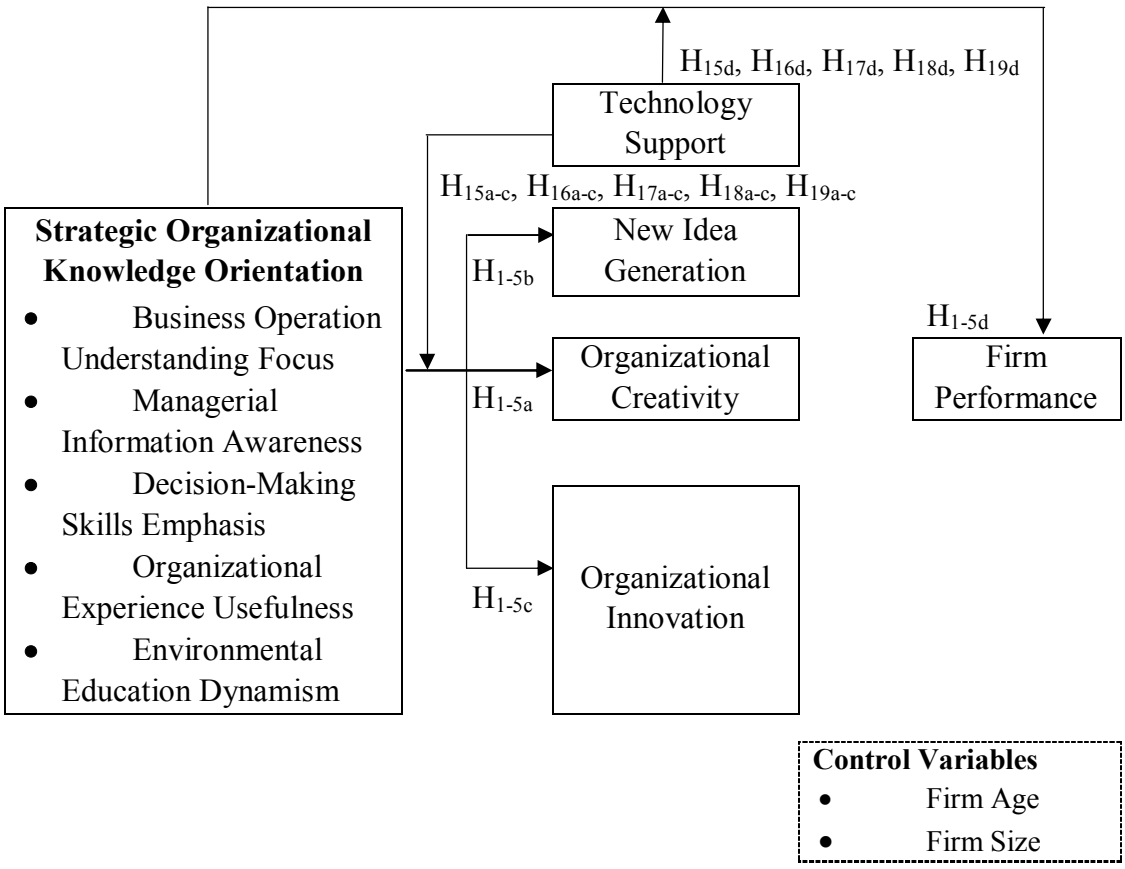


Figure 18 illustrates relationships among the each dimension of SOKO and consequence variables based on Hypotheses 1a-1d, 2a-2d, 3a-3d, 4a-4d, and 5a-5d. This research proposes that SOKO (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism) is positively associated with the overall consequences, which are organizational creativity, new idea generation, organizational innovation, and firm performance. These hypotheses are analyzed by the regression equation in equations 1, 3, 6, and 10. Additionally, the moderating role of technology support on each dimension of SOKO, organizational creativity, new idea generation, organizational innovation, and firm performance is analyzed based on Hypotheses 15a-15d, 16a-16d, 17a-17d, 18a-18d, and 19a-19d, in which this research determines that the relationship of all hypotheses are positive, based on the analysis of these hypotheses by the regression equations 2, 4, 7, and 11 found in Chapter 3.

Table 8: Descriptive Statistics and Correlation Matrix of Five Dimensions of Strategic Organizational Knowledge Orientation, Its Consequences, and the Moderating Role of Technology Support

Variables	BOU	MIA	DMS	OEU	EED	OC	NI	OI	FP	TS	FA	FS
Mean	4.10	4.04	4.15	4.03	4.06	3.90	3.57	3.42	3.73	3.92	2.68	2.47
S.D.	.58	.54	.54	.63	.63	.67	.76	.78	.68	.68	1.11	1.26
BOU	1.000											
MIA	.628***	1.000										
DMS	.504***	.605***	1.000									
OEU	.556***	.602***	.624***	1.000								
EED	.639***	.697***	.623***	.589***	1.000							
OC	.630***	.661***	.625***	.623***	.660***	1.000						
NI	.478***	.546***	.560***	.429***	.621***	.628***	1.000					
OI	.346***	.457***	.461***	.397***	.470***	.553***	.784***	1.000				
FP	.399***	.445***	.484***	.389***	.504***	.592***	.632***	.579***	1.000			
TS	.482***	.481***	.519***	.598***	.453***	.540***	.515***	.494***	.552***	1.000		
FA	.034	-.104	.028	-.021	-.090	-.086	-.063	-.033	-.099	-.024	1.000	
FS	.233**	.116	.129	.019	.197**	.166	.133	.117	.121	.042	.213**	1.000

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

The correlations among each dimension of SOKO, organizational creativity, new idea generation, organizational innovation, firm performance, and technology support are shown in Table 8. The results demonstrate that each dimension of SOKO, consisting of business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism, is significantly and positively correlated with consequence variables. Firstly, the results identify the positive correlation between each dimension of SOKO and organizational creativity ($r = 0.630, 0.661, 0.625, 0.623, 0.660$; $p < 0.01$, respectively). Secondly, each dimension of SOKO has a significant positive correlation to new idea generation ($r = 0.478, 0.546, 0.560, 0.429, 0.621$; $p < 0.01$, respectively). Thirdly, relationships among each dimension of SOKO are significantly and positively correlated to organizational innovation ($r = 0.346, 0.457, 0.461, 0.397, 0.470$; $p < 0.01$, respectively). Finally, the results demonstrate that each dimension of SOKO is significantly and positively correlated to firm performance ($r = 0.399, 0.445, 0.484, 0.389, 0.504$; $p < 0.01$, respectively). In addition, technology support, as a moderator, has a significant and positive correlation with each dimension of SOKO ($r = 0.482, 0.481, 0.519, 0.598, 0.453$; $p < 0.01$, respectively), organizational creativity ($r = 0.540$; $p < 0.01$), new idea generation ($r = 0.515$; $p < 0.01$), organizational innovation ($r = 0.494$; $p < 0.01$), and firm performance ($r = 0.552$; $p < 0.01$).

Accordingly, the evidence suggests that there are intercorrelations among all variables. However, most of these correlations are less than 0.80 as recommended by Hair et al. (2006). As a result, the multicollinearity problems should not be of concern. With regard to potential problems related to multicollinearity, variance inflation factors (VIFs) are used to test multicollinearity problems in each part of the regression analysis. In this case, the results in equations 1, 3, 6, 10 and 2, 4, 7, 11 indicate that the maximum VIF is 2.578 and 8.163 in a sequence (shown in Table 9). Thus, the VIF value is well below the cut-off value of 10 (Hair et al., 2010). Consequently, there are no significant multicollinearity problems presented in this research.

Table 9: Results of Regression Analysis for Relationships among Five Dimensions of Strategic Organizational Knowledge Orientation, Its Consequence, and the Moderating Role of Technology Support

Independent Variables	Dependent Variables							
	OC		NI		OI		FP	
	1	2	3	4	6	7	10	11
	H1a-H5a	H15a-H19a	H1b-H5b	H15b-H19b	H1c-H5c	H15c-H19c	H1d-H5d	H15d-H19d
Business Operation Understanding Focus (BOU)	**.207**** **(.087)**	**.174*** **(.092)**	.073 (.102)	.092 (.103)	-.040 (.117)	-.061 (.121)	.067 (.114)	.042 (.114)
Managerial Information Awareness (MIA)	**.181*** **(.095)**	**.163*** **(.096)**	.127 (.112)	.139 (.108)	.171 (.127)	.157 (.126)	.063 (.125)	.039 (.119)
Decision-Making Skills Emphasis (DMS)	**.196**** **(.087)**	**.237**** **(.095)**	**.264**** **(.102)**	.154 (.106)	**.205*** **(.117)**	.129 (.125)	**.254**** **(.114)**	**.202*** **(.117)**
Organizational Experience Usefulness (OEU)	**.183**** **(.087)**	.092 (.095)	-.062 (.102)	**-.201*** **(.106)**	.071 (.117)	-.072 (.125)	.014 (.114)	-.158 (.117)
Environmental Education Dynamism (EED)	.155 (.097)	**.178*** **(.098)**	**.354***** **(.114)**	**.387***** **(.110)**	.198 (.130)	.211 (.129)	**.235*** **(.127)**	**.231*** **(.121)**
Technology Support (TS)		**.154*** **(.081)**		**.305***** **(.091)**		**.354***** **(.107)**		**.439***** **(.101)**
BOU*TS		.082 (.080)		**.210**** **(.089)**		.078 (.105)		-.039 (.099)
MIA*TS		-.168 (.106)		-.138 (.119)		-.092 (.140)		.077 (.131)
DMS*TS		**.193*** **(.105)**		-.128 (.118)		-.023 (.139)		.059 (.130)
OEU*TS		-.010 (.090)		-.038 (.101)		-.060 (.119)		-.138 (.112)
EED*TS		-.053 (.106)		.115 (.119)		.106 (.139)		.072 (.131)
Firm Age (FA)	-.146 (.126)	-.106 (.127)	-.060 (.149)	-.025 (.142)	-.017 (.169)	.005 (.167)	-.176 (.166)	-.158 (.157)
Firm Size (FS)	.106 (.129)	.066 (.132)	.010 (.153)	.080 (.148)	.083 (.174)	.119 (.174)	.074 (.170)	.080 (.163)
Adjusted R^2	.578	.584	.413	.476	.239	.279	.271	.362
Maximum VIF	2.578	8.163	2.578	8.163	2.578	8.163	2.578	8.163

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

Table 9 presents the results of analyses of relationships among SOKO (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism), its consequences (organizational creativity, new idea generation, organizational innovation, and firm performance), and the moderating role of technology support. The standardized coefficient, with standard errors in parentheses, is reported.

The results indicate that five hypotheses focus on relationships among each dimension of SOKO and its consequences. The findings indicate that business operation understanding focus has a significant positive impact on organizational creativity ($\beta_1 = 0.207$; $p < 0.05$, $\beta_8 = 0.174$; $p < 0.10$). This finding shows that when a firm has the concentration on the recognition of the fundamental activities of business, it will help the employees within the organization have the inspiration to create something new for the organization, by which they will be trying to create a new thing by extension from the original concept, or a novelty that is uniquely different from any other organization. According to prior research, it is suggested that recognition of employees in organizations regarding their roles and responsibilities of manufacturing goods or services, and the understanding of the strategies, leads to organizational creativity (Gurteen, 1999). Moreover, business operation understanding focus contributes to the application of knowledge for the benefit of the organization (Byington and Christensen, 2005). ***Therefore, Hypothesis 1a is supported.*** On the contrary, business operation understanding focus has no significant relationships with new idea generation ($\beta_{21} = 0.073$, $\beta_{28} = 0.092$; $p > 0.10$), organizational innovation ($\beta_{44} = -0.040$, $\beta_{51} = -0.061$; $p > 0.10$), and firm performance ($\beta_{72} = 0.067$, $\beta_{79} = 0.042$; $p > 0.10$). The results of this research show that having a better understanding of the policies, processes or basic business activity of the people in the organization is not enough to create a new process and develop new products to meet customer needs. Stemming from this, a firm needs to understand which knowledge is beneficial to the firm and uses that knowledge to enhance its work efficiency. If a firm is not able to understand such knowledge, it is not useful to the firm's work efficiency (McGill and Brockbank, 2004). Organizational knowledge may be gained through the process of changing into a concept which is substantial in order to create new processes or procedures, including organizational innovation, and lead to an increase in performance of the firm. This is consistent with research of Ngowsiri,

Ussahawanitchakit and Pratoom (2013), who found that knowledge value mindset has no significant relationships with service innovation success. ***Thus, Hypotheses 1b, 1c, and 1d are not supported.***

Additionally, the relationship of managerial information awareness has a significant positive influence on organizational creativity ($\beta_2 = 0.181$, $\beta_9 = 0.163$; $p < 0.10$). This result shows that when organizations are able to take advantage of business data, it will improve the ability of the organization to create something new that will benefit the organization. Consistent with prior research, this suggests that the application of information within the organization will lead to the creativity of that organization (Allen, Lee and Tushman, 1980). ***Therefore, Hypothesis 2a is supported.*** Conversely, managerial information awareness has no significant relationships with new idea generation ($\beta_{22} = 0.127$, $\beta_{29} = 0.139$; $p > 0.10$), organizational innovation ($\beta_{45} = 0.171$, $\beta_{52} = 0.157$; $p > 0.10$), and firm performance ($\beta_{73} = 0.063$, $\beta_{80} = 0.039$; $p > 0.10$). At present, customers receive information about products or services over the Internet quickly. As a result, they can identify the advantages or disadvantages of goods and make a comparison of each firm's goods resulting in their buying decisions, which has a direct impact on firm performance. This shows that companies require more business data to create innovative business and performance. Firms are required to link the information needs of customers and be competitive in the current environment in order to use it in making business decisions correctly, and the firm should be undertaking the development of a powerful database system to provide it with the ability to filter out only the information that contributes to innovation. However, some studies have suggested the ability of the firm's managerial information systems in providing adaptability or predictability to the management leads to ideas for context capturing and treatments of the process or system of the organization (Petrevska, Poels and Manceski, 2014). Hence, an increase in competitive turbulence may have no impact on the level of resource utilization integration. ***Thus, Hypotheses 2b, 2c, and 2d are not supported.***

Meanwhile, decision-making skills emphasis has a significant positive effect on organizational creativity ($\beta_3 = 0.196$, $\beta_{10} = 0.237$; $p < 0.05$), new idea generation ($\beta_{23} = 0.264$; $p < 0.05$), organizational innovation ($\beta_{46} = 0.205$; $p < 0.10$), and firm performance ($\beta_{74} = 0.254$; $p < 0.05$, $\beta_{81} = 0.202$; $p < 0.10$). A firm which continually promotes the decision-making skills of the employees within the organization will affect

their ability to solve business-related problems arising from the work by themselves effectively. This leads to creativity resulting from decision-making skills, which is one of the fundamental factors in support of corporate management to achieve goals. The results indicate that the decisions influenced by skills to choose an alternative and knowledge through employees' practices in the organization leads to the creation of new products that are difficult to imitate (Paiva, Roth and Fensterseifer, 2008). Likewise, explicit knowledge-sharing has more significant effects on innovation speed and financial performance, while tacit knowledge-sharing has more significant effects on innovation quality and operational performance (Wang and Wang, 2012). Furthermore, the decisions-making skills of organizations will affect improved performance (Paiva, Roth and Fensterseifer, 2008). ***Therefore, Hypotheses 3a, 3b, 3c, and 3d are supported.***

In addition, organizational experience usefulness has a significant positive effect on organizational creativity ($\beta_4 = 0.183$; $p < 0.05$). Firms that focus on using bad past experiences to determine their current approach will contribute to the creativity for development and improvement of the organization to succeed even more. These results are consistent with Amabile, Hadley and Kramer (2002), who found that the application of organizational experience has a positive impact on organizational creativity. ***Thus, Hypothesis 4a is supported.*** On the other hand, the relationship of organizational experience usefulness has a significant negative effect on new idea generation ($\beta_{31} = -0.201$; $p < 0.10$). In addition, organizational experience usefulness has no significant influence on organizational innovation ($\beta_{47} = 0.071$, $\beta_{54} = -0.072$; $p > 0.10$), and firm performance ($\beta_{75} = 0.014$, $\beta_{82} = -0.158$; $p > 0.10$). However, in organizations that have implemented a successful business continuity, they often do not have any bad experiences in the past. This may result in a lack of creativity in the corporation, because the good experience of the organization is seen as the best method and an operation which needs no improvement. This can result in a lack of development and improvement of the organization to be more effective, unlike the bad experiences that may affect the behavior of the organization in a way that forces them to change, which leads to creativity in organizations. These results are consistent with Emden, Yaprak and Cavusgil (2005), who found that there is no relationship between learning from experience and the firm's financial performance. ***Hence, Hypotheses 4b, 4c, and 4d are not supported.***

The relationships of environmental education dynamism have a significant positive influence on organizational creativity ($\beta_{12} = 0.178$; $p < 0.10$), new idea generation ($\beta_{25} = 0.354$, $\beta_{32} = 0.387$; $p < 0.01$), and firm performance ($\beta_{76} = 0.235$, $\beta_{83} = 0.231$; $p < 0.10$). Firms that focus on understanding of an environment will result in new ideas being received from the environment that has changed over time. This leads to creativity and increases the level of firm performance. These results are consistent with Damanpour, Walker and Avellaneda (2009), who propose that organizations that can be qualified as dynamic may result in the organizational capability of improving innovation. Likewise, Cummings and O'Connell (1978) found that information exchange has a positive influence on idea generation. Furthermore, Morgan et al. (2004) found that the adaptability of the firm as a dynamic company can give them more competitive advantage than competitors, which leads to positively improved performance. ***Therefore, Hypotheses 5a, 5b, and 5d are supported.*** Conversely, environmental education dynamism has no significant relationships with organizational innovation ($\beta_{48} = 0.198$, $\beta_{55} = 0.211$; $p > 0.10$). Organizations cannot afford to rely solely on only external factors for the establishment of innovation, but it is necessary to rely on learning through research and development in a concrete environment. This leads to new products or services to fulfill customer needs more effectively. These results are consistent with Yu and Ramanathan (2001), who show that environmental dynamism has no direct effect on operations strategy. Thus, employee competencies such as good creativity and improving innovation will be based on quality and flexibility strategies. ***Thus, Hypothesis 5c is not supported.***

For the control variables, firm age has no significant influence on organizational creativity, new idea generation, organizational innovation, and firm performance ($\beta_6 = -0.146$, $\beta_{26} = -0.060$, $\beta_{49} = -0.017$, $\beta_{77} = -0.176$; $p > 0.10$, respectively). Therefore, relationships among each dimension of SOKO and its consequences are not impacted by firm age. Likewise, firm size has no significant effect on organizational creativity, new idea generation, organizational innovation, and firm performance ($\beta_7 = 0.106$, $\beta_{27} = 0.010$, $\beta_{50} = 0.083$, $\beta_{78} = 0.074$; $p > 0.10$, respectively). Thus, relationships among each dimension of SOKO and its consequences are not impacted by firm size.

In part of moderating, technology support has an influence on relationships among SOKO and its consequences. Results show that technology support moderates

the positive relationship between business operation understanding focus and new idea generation (β_{34} = 0.210; p < 0.05). Likewise, technology support moderates the positive relationship between decision-making skills emphasis and organizational creativity (β_{16} = 0.193; p < 0.10). Firms which encourage personnel to have an understanding of new technology will allow them to have the ability to decide and choose to make use of those technologies. This affects the increase in new ideas and creativity within the organization. The results indicate that when employees are encouraged to have the skills and the ability to apply the knowledge of the organization, such as in planning and making decisions, and by invariably combining it with technological support, it has a positive impact on sharing knowledge effectively, leading to innovation and creating value for the organization (Saenz, Aramburu and Rivera, 2009). Vemic (2007) found that organizations which are constantly creating new knowledge, extending it through the entire organization and implementing it quickly inside the new technologies, can develop good products and excellent services. ***Therefore, Hypothesis 15b and 17a are supported.***

On the contrary, with technology support as a moderator, business operation understanding has no significant influence on organizational creativity, organizational innovation, and firm performance (β_{14} = 0.082, β_{57} = 0.078, β_{85} = -0.039; p > 0.10, respectively). Likewise, with technology support as a moderator, managerial information awareness has no significant influence on organizational creativity, new idea generation, organizational innovation, and firm performance (β_{15} = -0.168, β_{35} = -0.138, β_{58} = -0.092, β_{86} = 0.077; p > 0.10, respectively). In addition, with technology support as a moderator, decision-making skills emphasis has no significant influence on new idea generation, organizational innovation, and firm performance (β_{36} = -0.128, β_{59} = -0.023, β_{87} = 0.059; p > 0.10, respectively). Besides this, with technology support as a moderator, organizational experience usefulness has no significant influence on organizational creativity, new idea generation, organizational innovation, and firm performance (β_{17} = -0.010, β_{37} = -0.038, β_{60} = -0.060, β_{88} = -0.138; p > 0.10, respectively). Furthermore, with technology support as a moderator, environmental education dynamism has no significant influence on organizational creativity, new idea generation, organizational innovation, and firm performance (β_{18} = -0.053, β_{38} = 0.115, β_{61} = 0.106, β_{89} = 0.072; p > 0.10, respectively).

However, in the ability to expose personnel to technology in the organization, there is a difference. Also, although the organization will promote training about technology for staff, it may not help stimulate positive results in innovation. In addition, a small firm which has investments in technology cannot fully contribute to the development of enterprises as it cannot compete with large corporations and high investment. In particular, beverage businesses which are smaller often lack the money to invest in technology, which results in the incomplete development of the organization. As a result, they cannot compete with large corporations that have a high level of investment. This is consistent with some studies that have suggested a positive relationship between IT investments and firm performance (Bharadwaj, Bharadwaj and Konsynski, 1999). Likewise, Schneckenberg (2009) found that having employees who can efficiently apply information combined with modern equipment will lead to creativity and the development of new products. Moreover, the moderating effect of technology support on relationships among the four dimensions of SOKO (business operation understanding focus, managerial information awareness, organizational experience usefulness, and environmental education dynamism) and the consequences of SOKO (organizational creativity, new idea generation, organizational innovation, and firm performance) are not positively significant. These results are inconsistent with Agrawal et al. (2004), who found that organizations need to combine modern technology with sufficiency and appropriation, due to the integration of organizational knowledge and technology having a positive impact on firm performance. Likewise, research in the past found that organizations that sufficiently support technology have a positive innovation and outcome of the firm (Vaccaro, Parente and Veloso, 2010). Kim and Lee (2011) stated that an increase in the technology uncertainty decreases growth rates of income and human capital by lowering efficiency, both in creating new knowledge and in adopting new technologies. Nevertheless, the ability of operational management and advanced manufacturing technology does not only call for performance appropriateness, but it is also combined with other management techniques (Eker, 2009). ***Hence, Hypotheses 15a, 15c, 15d, 16a, 16b, 16c, 16d, 17b, 17c, 17d, 18a, 18b, 18c, 18d, 19a, 19b, 19c, and 19d are not supported.***

Regarding the control variables, firm age has no significant positive influence on organizational creativity, new idea generation, organizational innovation, and firm

performance (β_{19} = -0.106, β_{39} = -0.025, β_{62} = 0.005, β_{90} = -0.158; p > 0.10, respectively). Therefore, relationships among new idea generation, organizational innovation, business competitiveness, and firm performance are not impacted by firm age. Moreover, firm size has no significant effect on organizational creativity, new idea generation, organizational innovation, and firm performance (β_{20} = 0.066, β_{40} = 0.080, β_{63} = 0.119, β_{91} = 0.080; p > 0.10, respectively). Therefore, relationships among new idea generation, organizational innovation, business competitiveness, and firm performance are not impacted by firm size.

Relationships among Organizational Creativity, New Idea Generation, Organizational Innovation, Business Competitiveness, and Firm Performance

Figure 19: Relationships among Organizational Creativity, New Idea Generation, Organizational Innovation, Business Competitiveness, and Firm Performance

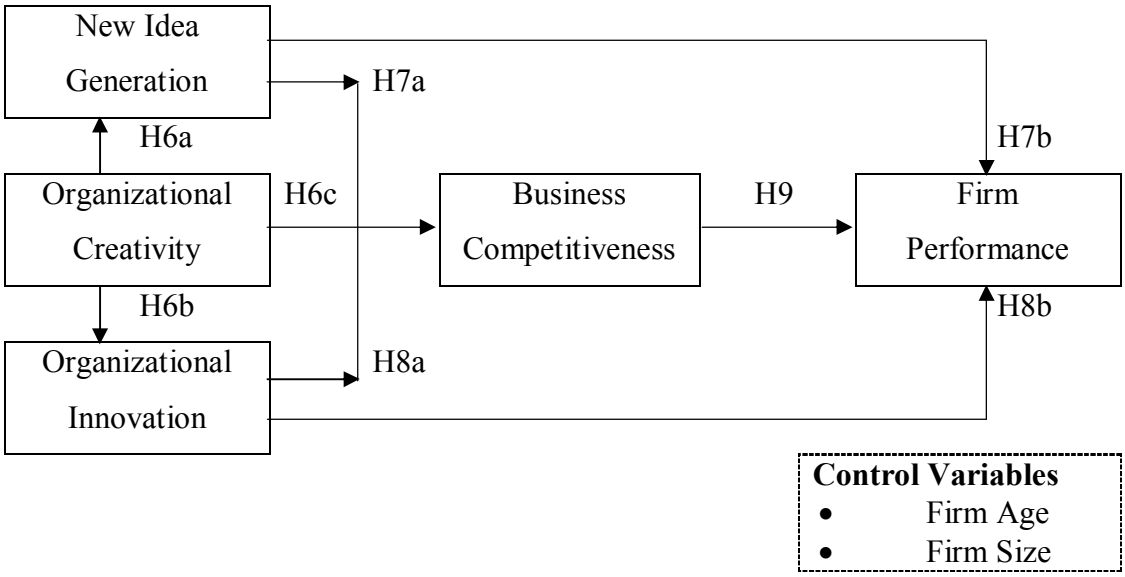


Figure 19 illustrates relationships among organizational creativity, new idea generation, organizational innovation, business competitiveness, and firm performance based on Hypotheses 6a-6c, H7a-7b, H8a-8b, and H9. These hypotheses are analyzed by the regression equation in equations 5, 8, 9, and 12 found in chapter 3. Thus, the results of the OLS regression analysis are provided in Table 10.

Table 10: Descriptive Statistics and Correlation Matrix of Organizational Creativity, New Idea Generation, Organizational Innovation, Business Competitiveness, and Firm Performance

Variables	OC	NI	OI	BC	FP	FA	FS
MEAN	3.90	3.57	3.42	3.68	3.73	2.68	2.47
S.D.	.67	.76	.78	.72	.68	1.11	1.26
OC	1.000						
NI	.628***	1.000					
OI	.553***	.784***	1.000				
BC	.543***	.731***	.784***	1.000			
FP	.592***	.632***	.579***	.775***	1.000		
FA	-.086	-.063	-.033	-.079	-.099	1.000	
FS	.166	.133	.117	.046	.121	.213**	1.000

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

Table 10 presents the results of correlation for organizational creativity, new idea generation, organizational innovation, business competitiveness, and firm performance. Firstly, results show that organizational creativity has a significant positive correlation with new idea generation, organizational innovation, and business competitiveness ($r = 0.628, 0.553, 0.543$; $p < 0.01$, respectively). Secondly, new idea generation has a significant positive correlation with business competitiveness and firm performance ($r = 0.731, 0.632$; $p < 0.01$, respectively). Thirdly, organizational innovation has a significant positive correlation with business competitiveness and firm performance ($r = 0.784, 0.579$; $p < 0.01$, respectively). Finally, business competitiveness has a significant positive correlation to service performance ($r = 0.775$; $p < 0.01$). Accordingly, the evidence suggests that there are intercorrelations among all variables. However, most of these correlations are less than 0.80 as recommended by Hair et al. (2006). As a result, the multicollinearity problems should not be of concern. With regard to potential problems related to multicollinearity, variance inflation factors (VIFs) are used to test multicollinearity problems in each part of the regression analysis. In this case, the results in equations 5, 8, 9, and 12 indicate that the maximum VIF is 3.470 as shown in Table 10. Thus, the VIF value is well below the cut-off value of 10 (Hair et al., 2010). Consequently, there are no significant multicollinearity problems found in this research.

Table 11: Results of Regression Analysis for Relationships among Organizational Creativity, New Idea Generation, Organizational Innovation, Business Competitiveness, and Firm Performance

Independent Variables	**Dependent Variables**			
	NI	**OI**	**BC**	**FP**
	5	**8**	**9**	**12**
	H6a	**H6b**	**H6c, H7a, H8a**	**H7b, H8b, H9**
Organizational Creativity (OC)	**.621***** (.075)	**.550***** (.080)	.091 (.072)	-
New Idea Generation (NI)	-	-	**.261**** (.096)	**.213**** (.098)
Organizational Innovation (OI)	-	-	**.536***** (.090)	**.205*** (.108)
Business Competitiveness (BC)	-	-	-	**.771***** (.098)
Firm Age (FA)	-.033 (.150)	.020 (.161)	-.049 (.114)	-.100 (.119)
Firm Size (FS)	.067 (.152)	.047 (.163)	-.122 (.115)	.183 (.120)
Adjusted R^2	.379	.289	.644	.613
Maximum VIF	1.086	1.086	3.021	3.470

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

Table 11 presents the results of the OLS regression analysis, which demonstrate that organizational creativity, new idea generation, organizational innovation, and business competitiveness have effects on firm performance. Results show that organizational creativity has a significant positive influence on new idea generation and organizational innovation ($\beta_{41} = 0.621$, $\beta_{64} = 0.550$; $p < 0.01$, respectively). A firm that is developing ideas about its products or services will create new concepts and develop an increase in innovation. Also, beverage businesses in Thailand should limit the use of the original concepts for the production of beverages and develop innovative options such as new flavors and new ingredients. This result, according to the previous research of Shalley and Gilson (2004), suggests that the creativity of the individual employee is considered as a basis for the creativity and innovation of the firm. Likewise, Amabile et al. (1996) found that creativity has an effect on the novelty of the firm, and this past study found a positive relationship between creativity and innovation (Paolillo and Brown, 1978).

Therefore, Hypotheses 6a and 6b are supported. On the contrary, organizational creativity has no significant relationships with business competitiveness ($\beta_{67} = 0.091$; $p > 0.10$). However, although employees in the organization have to be creative, if creativity is just an idea that cannot make a concrete difference from the products of competitors, or if it is just a concept that has not been brought into action, this may not affect the company's competitiveness and sustainability. Conversely, some studies have suggested that the organizational creativity mechanism will lead to a performance that is better than competitors (Bharadwaj and Menon, 2000). However, Gordon and Silvester (1999) show that business competitiveness depends on several behaviors, as the building up of the behavior of creativity within an organization requires several factors that may lead to maximizing resource utilization (Lawson, Yang and Yuan, 2009). ***Thus, Hypothesis 6c is not supported.***

Additionally, the result shows that new idea generation is positively related to business competitiveness and firm performance ($\beta_{68} = 0.261$, $\beta_{92} = 0.213$; $p < 0.05$, respectively). An organization that has an effective way of managing a modern organization will have a positive effect on competitiveness. Moreover, beverage businesses in Thailand which have new production processes in order to fully expand the production capacity will help to lower costs, thus leading to higher performance. This result is in line with Henderson and Clark (1990), whose study indicates that new idea generation is a major source of competitive advantage. Besides this, new ideas are the key basis for competition in the long-term and the increase of income for the firm (McAdam and McClelland, 2002). Likewise, Koberg, Detienne and Heppard (2003) suggest that product ideas have a positive influence on competitive advantage. Moreover, Thipsri and Ussahawanitchakit (2009) found that the building of customer satisfaction positively impacts market performance. Furthermore, new idea generation has been studied and is positively related to implementation to achieve the goals of the firm (Nakata and Sivakumar, 1996). ***Therefore, Hypotheses H7a and 7b are supported.***

Organizational innovation is positively associated with business competitiveness ($\beta_{69} = 0.536$; $p < 0.01$), and firm performance ($\beta_{93} = 0.205$; $p < 0.10$). Beverage businesses in Thailand with new products and services that are diverse, unique, and difficult for competitors to imitate will result in competitive advantage and help to increase performance. This is consistent with some studies that have suggested that organizational

innovation, resulting from the application of knowledge, contributes positively to a sustainable competitive advantage (Yang, Zheng and Viere, 2009; Fraj, Matute and Melero, 2015). Furthermore, organizational innovation and technological capabilities for products and processes can lead to a firm's superior income (Camison and Villar-Lopez, 2014). Moreover, organizational innovation is positively related to firm performance (Kalkan, Bozkurt and Arman, 2014). ***Thus, Hypotheses H8a and 8b are supported.***

The relationship of business competitiveness has a significant positive influence on firm performance ($\beta_{94} = 0.771$; $p < 0.01$). When a company is able to manage costs and create more value than its rivals, including the ability to deliver value in the form of outstanding innovation to customers, it always affects the performance of the company so that it grows more steadily. This finding suggests that competitiveness contributes to the increased performance of the firm (Singh, 2012). Likewise, the success of the market position is caused by the ongoing competitive advantage that quickly leads to superior firm performance (Fahy, 2000). Furthermore, Wiklund and Shepherd (2005) suggest that competitiveness contributes to positive firm performance. ***Thus, Hypothesis H9 is supported.***

For the control variables, firm age has no significant relationships with new idea generation, organizational innovation, business competitiveness, and firm performance ($\beta_{42} = -0.033$, $\beta_{65} = 0.020$, $\beta_{70} = -0.049$, $\beta_{95} = -0.100$; $p > 0.10$, respectively). Therefore, relationships among new idea generation, organizational innovation, business competitiveness, and firm performance are not influenced by firm age. Furthermore, firm size has no significant impact on new idea generation, organizational innovation, business competitiveness, and firm performance ($\beta_{43} = 0.067$, $\beta_{66} = 0.047$, $\beta_{71} = -0.122$, $\beta_{96} = 0.183$; $p > 0.10$, respectively). Thus, relationships among new idea generation, organizational innovation, business competitiveness, and firm performance are not impacted by firm size.

Relationships among Antecedents of Strategic Organizational Knowledge Orientation, Five Dimensions of Strategic Organizational Knowledge Orientation, and the Moderating Role of Learning Culture

Figure 20: Relationships among Its Antecedents, Five Dimensions of Strategic Organizational Knowledge Orientation, and the Moderating Role of Learning Culture

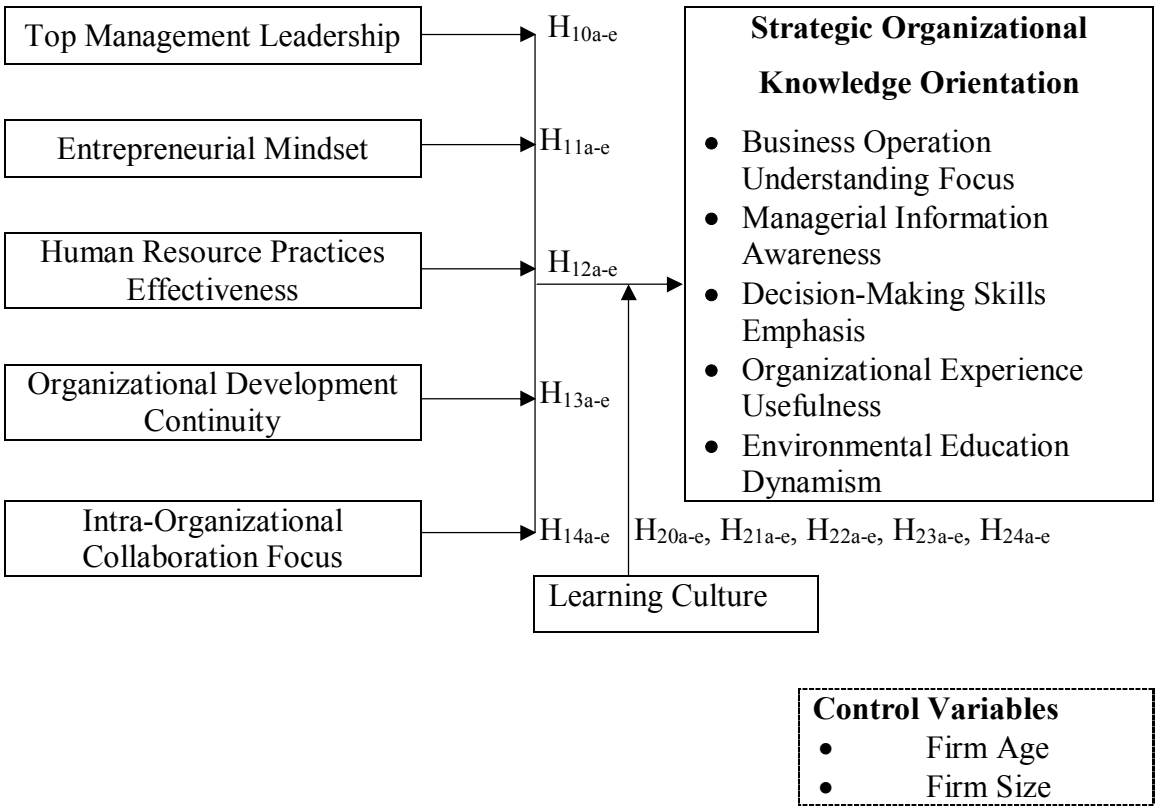


Figure 20 draws the theoretical linkage between the antecedents of SOKO (top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus) and the five dimensions of SOKO, including business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism. Moreover, the regression equations in models 13, 15, 17, 19, and 21, which are described in chapter 3, are used to develop Hypotheses H10a-14a, H10b-14b, H10c-14c, H10d-14d, and H10e-14e, which propose that there are positive relationships among all. Additionally, this research proposes

the moderating effect of learning culture on relationships among antecedents of SOKO and each dimension of SOKO as shown in Hypotheses 20a-20e, 21a-21e, 22a-22e, 23a-23e, and 24a-24e. These hypotheses are analyzed by the regression equations 14, 16, 18, 20, and 22 found in chapter 3.

Table 12: Descriptive Statistics and Correlation Matrix of Its Antecedents, Five Dimensions of Strategic Organizational Knowledge Orientation, and the Moderating Role of Learning Culture

Variables	TL	EM	HR	OD	IC	BOU	MIA	DMS	OEU	EED	LC	FA	FS
Mean	4.14	3.99	3.96	3.97	4.03	4.10	4.04	4.15	4.03	4.06	4.05	2.68	2.47
S.D.	.51	.63	.61	.55	.57	.58	.54	.54	.63	.63	.55	1.11	1.26
TL	1.000												
EM	.639***	1.000											
HR	.524***	.702***	1.000										
OD	.530***	.591***	.502***	1.000									
IC	.566***	.696***	.674***	.560***	1.000								
BOU	.555***	.503***	.527***	.678***	.559***	1.000							
MIA	.455***	.496***	.525***	.542***	.653***	.628***	1.000						
DMS	.544***	.622***	.481***	.447***	.627***	.504***	.605***	1.000					
OEU	.394***	.480***	.659***	.409***	.562***	.556***	.602***	.624***	1.000				
EED	.533***	.463***	.539***	.469***	.639***	.639***	.697***	.623***	.589***	1.000			
LC	.532***	.504***	.547***	.542***	.704***	.580***	.637***	.599***	.665***	.610***	1.000		
FA	.080	.168	.097	.046	-.026	.034	-.104	.028	-.021	-.090	-.049	1.000	
FS	.206**	.105	.092	.136	.168	.233**	.116	.129	.019	.197**	.123	.213**	1.000

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

For the correlation analysis of antecedent variables (top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus), the results are presented in Table 12. Results show that the antecedent variables are significantly and positively correlated with each dimension of SOKO.

Firstly, the correlations between each antecedent of SOKO and business operation understanding focus are positively significant ($r = 0.555, 0.503, 0.527, 0.678, 0.559$; $p < 0.01$, respectively). Secondly, each antecedent of SOKO has a significant positive correlation to managerial information awareness ($r = 0.455, 0.496, 0.525, 0.542, 0.653$; $p < 0.01$, respectively). Thirdly, the correlations between each antecedent of SOKO are significantly and positively correlated to decision-making skills emphasis ($r = 0.544, 0.622, 0.481, 0.447, 0.627$; $p < 0.01$, respectively). Fourthly, each antecedent of SOKO has a significant positive correlation to organizational experience usefulness ($r = 0.394, 0.480, 0.659, 0.409, 0.562$; $p < 0.01$, respectively). Finally, the results demonstrate that each antecedent of SOKO is significantly and positively correlated to environmental education dynamism ($r = 0.533, 0.463, 0.539, 0.469, 0.639$; $p < 0.01$, respectively). Additionally, learning culture, as a moderator, has a significant and positive correlation with top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus ($r = 0.532, 0.504, 0.547, 0.542, 0.704$; $p < 0.01$, respectively), and each dimension of SOKO ($r = 0.580, 0.637, 0.599, 0.665, 0.610$; $p < 0.01$, respectively). Accordingly, the evidence suggests that there are inter-correlations among all variables. However, most of these correlations are less than 0.80 as recommended by Hair et al. (2006).

As shown in Table 12, the multicollinearity problems should not be of concern. With regard to potential problems related to multicollinearity, variance inflation factors (VIFs) are used to test multicollinearity problems in each part of the regression analysis. In this case, the results in equations 13, 15, 17, 19, 21 and 14, 16, 18, 20, and 22 indicate that the maximum VIF is 3.038 and 5.317 as shown in Table 13. Thus, the VIF value is well below the cut-off value of 10 (Hair et al., 2010). Consequently, there are no significant multicollinearity problems found in this research.

Table 13: Results of Regression Analysis for Relationships among Its Antecedents, Five Dimensions of Strategic Organizational Knowledge Orientation, and the Moderating Role of Learning Culture

Independent Variables	Dependent Variables									
	BOU		MIA		DMS		OEU		EED	
	13	14	15	16	17	18	19	20	21	22
	H10a-H14a	H20a-H24a	H10b-H14b	H20b-H24b	H10c-H14c	H20c-H24c	H10d-H14d	H20d-H24d	H10e-H14e	H20e-H24e
Top Management Leadership (TL)	**.197**** **(.088)**	**.153*** **(.090)**	.058 (.094)	-.025 (.093)	**.179*** **(.095)**	.123 (.096)	.030 (.096)	-.069 (.091)	**.239**** **(.094)**	**.169*** **(.094)**
Entrepreneurial Mindset (EM)	-.129 (.111)	-.090 (.114)	-.062 (.119)	.026 (.117)	**.314***** **(.120)**	**.340***** **(.121)**	-.097 (.121)	.002 (.115)	-.173 (.118)	-.141 (.118)
Human Resource Practices Effectiveness (HR)	**.180*** **(.097)**	.165 (.100)	.137 (.103)	.102 (.103)	-.068 (.105)	-.124 (.106)	**.538***** **(.105)**	**.461***** **(.101)**	**.213**** **(.103)**	**.233**** **(.104)**
Organizational Development Continuity (OD)	**.471***** **(.084)**	**.386***** **(.091)**	**.242***** **(.089)**	.119 (.093)	.006 (.091)	-.082 (.096)	.067 (.091)	-.034 (.091)	.104 (.089)	-.025 (.094)
Intra-Organizational Collaboration Focus (IC)	.133 (.102)	.050 (.115)	**.430***** **(.109)**	**.258**** **(.119)**	**.347***** **(.110)**	.165 (.122)	**.222**** **(.111)**	-.061 (.116)	**.404***** **(.108)**	**.288**** **(.120)**
Learning Culture (LC)		**.170*** **(.097)**		**.281***** **(.100)**		**.343***** **(.103)**		**.508***** **(.098)**		**.242**** **(.101)**
TL*LC		.062 (.095)		-.142 (.098)		-.007 (.101)		-.126 (.096)		-.029 (.099)
EM*LC		.058 (.117)		.188 (.121)		-.146 (.125)		.025 (.118)		-.025 (.122)
HR*LC		-.019 (.100)		-.159 (.103)		.096 (.106)		.004 (.100)		-.069 (.104)
OD*LC		**-.178**** **(.005)**		**-.148*** **(.088)**		-.003 (.090)		.062 (.086)		**-.205**** **(.089)**
IC*LC		.010 (.107)		.087 (.110)		-.058 (.113)		-.039 (.108)		**.235**** **(.111)**
Firm Age (FA)	-.035 (.136)	-.030 (.135)	-.228 (.145)	-.215 (.139)	-.051 (.147)	-.073 (.143)	-.085 (.148)	-.066 (.136)	-.226 (.145)	-.205 (.141)
Firm Size (FS)	.213 (.135)	.217 (.134)	.034 (.144)	.080 (.138)	.024 (.146)	.035 (.142)	-.129 (.147)	-.104 (.135)	.175 (.144)	.219 (.140)
Adjusted R^2	.529	.544	.461	.515	.447	.485	.438	.536	.464	.503
Maximum VIF	3.038	5.317	3.038	5.317	3.038	5.317	3.038	5.317	3.038	5.317

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

Table 13 provides the results of the OLS regression analysis of relationships among the antecedents of SOKO (top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus), the five dimensions of SOKO (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism), and the moderating role of learning culture as shown below.

Firstly, it was found from the results that top management leadership has a significant positive influence on business operation understanding focus ($\beta_{97} = 0.197$; $p < 0.05$; $\beta_{104} = 0.153$; $p < 0.10$), decision-making skills emphasis ($\beta_{137} = 0.179$; $p < 0.10$), and environmental education dynamism ($\beta_{177} = 0.239$; $p < 0.05$, $\beta_{184} = 0.169$; $p < 0.10$). Executives having a defined and creative awareness of the goals and vision of the organization will result in personnel that understand the processes within the organization to achieve the set goals of the organization. Also, the support that employees are provided improves their skills through training that affects their behavior and the adjustment to the environment which is changing constantly. These results are consistent with Schepers, Wetzels and De Ruyter (2005), who found that the executive's support in terms of data and information are positively related to the understanding of the purpose of the operations of the firm. Likewise, Patiar and Mia (2009) found that top management leadership must create an environment in the organization where employees are free to form new ideas to support strategic linkage to meet strategic goal achievement, and this also supports employees to apply existing or new knowledge to solve job-related problems and to create new products (Jung, Chow and Wu, 2003). Moreover, Shin and Zhou (2003) found that transformational leadership plays a part in the environment by generating knowledge for employees. Furthermore, transformational leadership has positive impacts on the knowledge management process and organizational performance (Birasnav, 2014). ***Therefore, Hypotheses 10a, 10c, and 10e are supported.*** Nevertheless, top management leadership has no significant positive relationship with managerial information awareness ($\beta_{117} = 0.058$, $\beta_{124} = -0.025$; $p > 0.10$), and organizational experience usefulness ($\beta_{157} = 0.030$, $\beta_{164} = -0.069$; $p > 0.10$). However, employees that receive too much support from the executives may result in efforts to decrease the exchange of experiences and information among them. In contrast, some studies have suggested that the executive

who has the ability of leadership will be able to effectively conduct a learning management system under the foundation of existing knowledge, previous experience and new knowledge for the benefit of the organization (Garcia-Morales, Llorens-Montes and Verdu-Jover, 2006). However, past research indicates that the leader is only a part of the planning, analysis, and directing of the operations (Sookaneknun and Ussahawanitchakit, 2012), but the businesses will achieve their goals and be able to take advantage of their corporate experience fully, if they have both a good system and the strong ability of the staff of the firm, as required. ***Thus, Hypotheses 10b and 10d are not supported.***

Secondly, the results reveal that entrepreneurial mindset has a significant positive impact on decision-making skills emphasis (β_{138} = 0.314, β_{145} = 0.340; p < 0.01). Organizations with an entrepreneurial concept to help encourage personnel improve behavior in making decisions can maximize the benefits for the firm. The findings conclude that employees with entrepreneurial behavior will have the ability to seek for solutions through analyzing the problems, with a specialization in making decisions effectively (Gurol and Atsan, 2006). ***Therefore, Hypothesis 11c is supported.*** In contrast, entrepreneurial mindset has no significant positive relationship with business operation understanding focus (β_{98} = -0.129, β_{105} = -0.090; p > 0.10), managerial information awareness (β_{118} = -0.062, β_{125} = 0.026; p > 0.10), organizational experience usefulness (β_{158} = -0.097, β_{165} = 0.002; p > 0.10), and environmental education dynamism (β_{178} = -0.173, β_{185} = -0.141; p > 0.10). However, an organization might focus on investment under high level risk aimed at creating innovation and forget to pay attention to key products that can be profitable for the organization. Moreover, the exposure to the too much information from the outside may result in staff that cannot adapt to change and may adversely affect the operations of the corporation. This is inconsistent with studies by Frese (2000), who found that the ability of a firm with changing situations has an impact on its ability to implement a mistake or advantage that occurred in the past in order to apply it for the maximum benefit. However, dynamic business vision and transformational mindset operation do not affect the firm's capability development (Pataraarechachai, Ussahawanichakit and Suwannarat, 2010). ***Hence, Hypotheses 11a, 11b, 11d, and 11e are not supported.***

Thirdly, results show that human resource practices effectiveness is positively related to business operation understanding focus (β_{99} = 0.180; p < 0.10), organizational

experience usefulness (β_{159} = 0.538, β_{166} = 0.461; p < 0.01), and environmental education dynamism (β_{179} = 0.213, β_{186} = 0.233; p < 0.05). Organizations are encouraged to have a process to select talented employees, which will result in increased knowledge assets. This is consistent with the study of Jirawuttinunt and Ussahawanitchakit (2011), who stated that the executive vision for HR work and excellent business operations have a positive influence on valuable organization development and sustainable business performances. Moreover, organizations with continuity and flexibility for human resource practices affect the employees' ability to understand and apply historical experience, which leads to improved learning behavior to meet the changing needs of the market (Martin and Salomon, 2003; Zacharatos, Barling and Iverson, 2005). Likewise, Kang, Morris and Snell (2007) and Raisch et al. (2009) argue that when employees can understand the responsibilities of each party clearly, together with analyzing the external environment, it helps to reduce the conflicts caused by the differences and diversity in knowledge of each individual who contributes to the creativity and to take advantage of what is available to deliver maximum benefits to the organization. ***Therefore, Hypotheses 12a, 12d, and 12e are supported.*** Nevertheless, human resource practices effectiveness has no significant positive relationship with managerial information awareness (β_{119} = 0.137, β_{126} = 0.102; p > 0.10), and decision-making skills emphasis (β_{139} = -0.068, β_{146} = -0.124; p > 0.10). However, organizations that focus on strict performance evaluation may result in both positive and negative behaviors in the work of employees. This is consistent with some studies that have suggested that the knowledge which is accumulated through organizational learning is an important resource for continual competitiveness of a firm. It is implied that these capabilities will enable the employee competency to make logical decisions that support the company's strategic plan based on the most knowledgeable management process possible (Nonaka, Takeuchi and Umemoto, 1996). However, the relationship between human capital practice and business performance is not directly associated and can be described as “nonlinear”, depending on the situation (Chadwick, 2007). Chen and Lin (2004) found that the achievement of HR investment is to clearly describe the changes that are expected to follow a given organizational activity. ***Thus, Hypotheses 12b and 12c are not supported.***

Fourthly, the results point out that organizational development continuity is positively associated with business operation understanding focus (β_{100} = 0.471,

β_{107} = 0.386; p < 0.01), and managerial information awareness (β_{120} = 0.242; p < 0.01). This result indicates that an organization being in support of the operating of firm based on change or improvement of existing schemes has an influence on employee behavior regarding basic business activities to meet the goals of the organization (Byington and Christensen, 2005; Balzac, 2011). In particular, a plan that has flexibility under conditions of uncertainty will lead to the realization of the importance of information within the organization (Burke and Litwin, 1992; Eikenberry, 2011). ***Hence, Hypotheses 13a and 13b are supported.*** On the other hand, organizational development continuity has no significant relationships with decision-making skills emphasis (β_{140} = 0.006, β_{147} = -0.082; p > 0.10), organizational experience usefulness (β_{160} = 0.067, β_{167} = -0.034; p > 0.10), and environmental education dynamism (β_{180} = 0.104, β_{187} = -0.025; p > 0.10). The firm which has developed the organization continues to make operational progress and achieve goals as well. This is in contrast with some studies that suggested that an excellent business operation needs to invest in, develop, retain, and utilize human resource capabilities in order to meet organizational goals (Jirawuttinunt and Ussahawanitchakit, 2011). Moreover, studies in the past showed that the major trend of large firms and robust operating systems is to have reduced dependence on specific resources of the organization (Boonstra and Vries, 2005). ***Thus, Hypotheses 13c, 13d, and 13e are not supported.***

Finally, the results explain that intra-organizational collaboration focus is positively related to managerial information awareness (β_{121} = 0.430; p < 0.01; β_{128} = 0.258; p < 0.05), decision-making skills emphasis (β_{141} = 0.347; p < 0.01), organizational experience usefulness (β_{161} = 0.222; p < 0.05), and environmental education dynamism (β_{181} = 0.404; p < 0.01, β_{188} = 0.288; p < 0.05). Organizations working as a team will result in the exchange of resources between personnel within the organization, and cause the emergence of both positive and negative experiences for them. Then, the firm will take the experiences found within the organization to use it to achieve the company's success. This result indicates that collaboration climate is useful for teams operating to work well together, leading to the achievement of performance goals and a competitive advantage (Tuntrabundit and Ussahawanitchakit, 2010). ***Hence, Hypotheses 14b, 14c, 14d, and 14e are supported.*** On the other hand, intra-organizational collaboration focus has no significant positive relationship with business

operation understanding focus (β_{101} = 0.133, β_{108} = 0.050; p > 0.10). However, in an organization that has coordinated and interdependent work, a lack of clear communication of the goals of the organization will not contribute to an understanding of how to work together to achieve the goals of the organization. These results are inconsistent with Sampattikorn and Ussahawanitchakit (2011), who found that the coordination ability of the firm and the willingness to work with others has a positive impact on understanding the purpose and goals of employees in an organization. Additionally, one possible reason may be caused by a collaboration climate which has set limitations on itself, and is based on elements of trust (honesty, consistency, respect). Firms cannot reach maximum performance by operating alone, but operations must be accompanied by the establishment of an organizational process from the strategic vision to organize the collaboration in order to ensure an efficient and optimal partnership (Boivin and Roch, 2005). ***Therefore, Hypothesis 14a is not supported.***

For the control variables, firm age has no significant positive influence on business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism (β_{102} = -0.035, β_{122} = -0.228, β_{142} = -0.051, β_{162} = -0.085, β_{182} = -0.226; p > 0.10, respectively). Therefore, relationships among the antecedent variables and business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism are not influenced by firm age. Furthermore, firm size has no significant positive effect on business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism (β_{103} = 0.213, β_{123} = 0.034, β_{143} = 0.024, β_{163} = -0.129, β_{183} = 0.175; p > 0.10, respectively). Therefore, relationships among the antecedent variables and business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism are not impacted by firm size.

In part of moderating, affects learning culture having an influence on relationships among antecedents of SOKO and each dimension of SOKO, results show that learning culture moderates the positive relationship between intra-organizational collaboration and environmental education dynamism (β_{194} = 0.235; p < 0.05). Organizations having

the notion of learning together all the time affect their ability to learn about the external environment due to the individual people in these organizations exchanging information, both related and unrelated to the ongoing work. This will result in the development of the ability of the organization as a whole. This result, according to prior research, suggests that the organizational culture is essential for the survival of the firm under the changed dynamic, and that it promotes or encourages knowledge and plays a role in the effective practices of employees (Khazanchi, Lewis and Boyer, 2007; Santos-Vijande and Alvarez-Gonzalez, 2007). Moreover, the moderating effect of learning culture on relationships among the three antecedent variables (top management leadership, entrepreneurial mindset, and human resource practices effectiveness) and all dimensions of SOKO is not positively significant. In contrast, some studies suggest that the creation and strengthening of incentives for the employee base of knowledge in organizations is stimulating to the learning culture with an impact on understanding of the operation of the organization and increases the ability of employees to work effectively (Garvin, 1993). ***Hence, Hypothesis 24e is supported.***

Nevertheless, results show that with learning culture as a moderator, top management leadership has no significant influence on each dimension of SOKO, including business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism ($\beta_{110} = 0.062$, $\beta_{130} = -0.142$, $\beta_{150} = -0.007$, $\beta_{170} = -0.126$, $\beta_{190} = -0.029$; $p > 0.10$, respectively). Besides this, with learning culture as a moderator, entrepreneurial mindset has no significant influence on each dimension of SOKO ($\beta_{111} = 0.058$, $\beta_{131} = 0.188$, $\beta_{151} = -0.146$, $\beta_{171} = 0.025$, $\beta_{191} = -0.025$; $p > 0.10$, respectively). Likewise, with learning culture as a moderator, human resource practices effectiveness has no significant influence on each dimension of SOKO ($\beta_{112} = -0.019$, $\beta_{132} = -0.159$, $\beta_{152} = 0.096$, $\beta_{172} = 0.004$, $\beta_{192} = -0.069$; $p > 0.10$, respectively). In addition, learning culture moderates the negative relationship between organizational development continuity and business operation understanding focus, managerial information awareness, and environmental education dynamism ($\beta_{113} = -0.178$; $p < 0.05$, $\beta_{133} = -0.148$; $p < 0.10$, $\beta_{193} = -0.205$; $p < 0.05$, respectively). Conversely, with learning culture as a moderator, organizational development continuity has no significant influence on decision-making skills emphasis, and organizational experience usefulness ($\beta_{153} = -0.003$, $\beta_{173} = 0.062$;

$p > 0.10$, respectively). In addition, with learning culture as a moderator, intra-organizational collaboration has no significant influence on business operation understanding focus, managerial information awareness, decision-making skills emphasis, and organizational experience usefulness ($\beta_{114} = 0.010$, $\beta_{134} = 0.087$, $\beta_{154} = -0.058$, $\beta_{174} = -0.039$; $p > 0.10$, respectively). In contrast, Song and Chermack (2008) found that developing the capacity of organizations in the application of knowledge, organizations must have a shared vision and it must be supported in learning by the manager. This has an impact on advocating communities to exchange data or information, which leads to an increase in the likelihood of innovation. Furthermore, learning culture moderates the positive relationship between intra-organizational collaboration focus and environmental education dynamism ($\beta_{194} = 0.235$, $p< 0.05$).

This result, according to Argyris and Schon (1978), suggests that organizations that promote participation and have a strong learning culture will ensure that employees have a great motivation to learn and this leads to the capabilities of a firm in the application of corporate experience to operate and maximize competitive advantage. In contrast, research in the past found that the type of communication has an influence on organizational learning capability, which is an informal effect more than a formal one (Dawes, Lee and Midgley, 2007), and organizational learning capability cannot have an effect in the short-term, but it has an effect in the long-term (Lenard, 2003). Moreover, when employees are encouraged by the executive in a business operation in a flexible manner, or have little control in an organization that is concerned with rules, culture, and values; it affects the feelings of the employees and results in an unsuccessful mission. Therefore, too much or too little employee support from the executive in terms of promoting a culture of organizational learning may cause them not to fulfill a successful corporate strategy. Likewise, Sookaneknun, Ussahawanitchakit and Boonlua (2013) found that organizational learning capability had no significant effect on management goal achievement. ***Therefore, Hypotheses 21a, 21b, 21c, 21d, 21e, 22a, 22b, 22c, 22d, 22e, 23a, 23b, 23c, 23d, 23e, 24a, 24b, 24c, and 24d are not supported.***

For the control variables, firm age has no significant positive influence on business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism ($\beta_{115} = -0.030$, $\beta_{135} = -0.215$, $\beta_{155} = -0.073$, $\beta_{175} = -0.066$,

β_{195} = -0.205; p > 0.10, respectively). Therefore, relationships among business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism are not impacted by firm age. Moreover, firm size has no significant effect on business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism (β_{116} = 0.217, β_{136} = 0.080, β_{156} = 0.035, β_{176} = -0.104, β_{196} = 0.219; p > 0.10, respectively). Thus, relationships among business operation understanding focus, managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism are not impacted by firm size.

Summary

This chapter presents the results of this research. The first part presents the respondent and sample characteristics. These characteristics are explained by using descriptive statistics (percentage). The next part presents the results and discussions of the hypothesis testing, which show the result of the descriptive statistics (mean and standard deviation), the correlation analysis, the ordinary least squares (OLS) regression analysis and the discussion of critical points. The results indicate the following:

Firstly, the characteristics of the beverage businesses in this research show that most of the businesses are a limited company and non-alcoholic type. Most are businesses that have been in operation for a period of time of more than 15 years. The number of full-time employees in most of the organizations is less than 50 persons, and the amount of current operational capital is mostly more than 15,000,000 baht. The majority of them have an average annual income of more than 15,000,000 baht. In addition, most firms have not been awarded for quality excellence in management and service quality, and most of the sample has Thai as their main customer group. Finally, the results of testing the twenty-four hypotheses showed four fully-supported hypotheses (Hypotheses 3, 7, 8, and 9), thirteen partially-supported hypotheses (Hypotheses 1, 2, 4, 5, 6, 10, 11, 12, 13, 14, 15, 17, and 24) and seven non-supported hypotheses (Hypotheses 16, 18, 19, 20, 21, 22, and 23). The results reveal that only one dimension of SOKO (decision-making skills emphasis) is positively related to all consequences (organizational creativity,

new idea generation, organizational innovation, and firm performance). In addition, some of the consequences, including organizational creativity, new idea generation, organizational innovation, and business competitiveness; are positively related to firm performance. Likewise, the majority of results show a positive relationship between five antecedent variables and each dimension of SOKO, such as intra-organizational collaboration focus is positively associated with managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism. In regard to the moderating role of technology support, results show that technology support moderates the positive relationship between the business operation understanding focus and new idea generation, and it moderates the positive relationship between the decision-making skills emphasis and organizational creativity. Moreover, learning culture moderates the positive relationship between intra-organizational collaboration focus and environmental education dynamism.

Table 14 summarizes the results of the hypotheses testing. The next chapter will discuss these research results, contributions, limitations, and useful suggestions for further research.

Table 14: Summary of Results in All Hypotheses Testing

Hypotheses	Description of the Hypothesized Relationships	Results
H1a	The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational creativity.	Supported
H1b	The higher the business operation understanding focus is, the more likely that firms will obtain greater new idea generation.	Not Supported
H1c	The higher the business operation understanding focus is, the more likely that firms will obtain greater organizational innovation.	Not Supported
H1d	The higher the business operation understanding focus is, the more likely that firms will obtain greater firm performance.	Not Supported
H2a	The higher the managerial information awareness is, the more likely that firms will obtain greater organizational creativity.	Supported
H2b	The higher the managerial information awareness is, the more likely that firms will obtain greater new idea generation.	Not Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H2c	The higher the managerial information awareness is, the more likely that firms will obtain greater organizational innovation.	Not Supported
H2d	The higher the managerial information awareness is, the more likely that firms will obtain greater firm performance.	Not Supported
H3a	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational creativity.	Supported
H3b	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater new idea generation.	Supported
H3c	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater organizational innovation.	Supported
H3d	The higher the decision-making skill emphasis is, the more likely that firms will obtain greater firm performance.	Supported
H4a	The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational creativity.	Supported
H4b	The higher the organizational experience usefulness is, the more likely that firms will obtain greater new idea generation.	Not Supported
H4c	The higher the organizational experience usefulness is, the more likely that firms will obtain greater organizational innovation.	Not Supported
H4d	The higher the organizational experience usefulness is, the more likely that firms will obtain greater firm performance.	Not Supported
H5a	The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational creativity.	Supported
H5b	The higher the environmental education dynamism is, the more likely that firms will obtain greater new idea generation.	Supported
H5c	The higher the environmental education dynamism is, the more likely that firms will obtain greater organizational innovation.	Not Supported
H5d	The higher the environmental education dynamism is, the more likely that firms will obtain greater firm performance.	Supported
H6a	Organizational creativity will have a positive influence on new idea generation.	Supported
H6b	Organizational creativity will have a positive influence on organizational innovation.	Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H6c	Organizational creativity will have a positive influence on business competitiveness.	Not Supported
H7a	New idea generation will have a positive influence on business competitiveness.	Supported
H7b	New idea generation will have a positive influence on firm performance.	Supported
H8a	Organizational innovation will have a positive influence on business competitiveness.	Supported
H8b	Organizational innovation will have a positive influence on firm performance.	Supported
H9	The business competitiveness will have a positive influence on firm performance.	Supported
H10a	The higher the top management leadership is, the more likely that firms will obtain greater business operation understanding focus.	Supported
H10b	The higher the top management leadership is, the more likely that firms will obtain greater managerial information awareness.	Not Supported
H10c	The higher the top management leadership is, the more likely that firms will obtain greater decision-making skill emphasis.	Supported
H10d	The higher the top management leadership is, the more likely that firms will obtain greater organizational experience usefulness.	Not Supported
H10e	The higher the top management leadership is, the more likely that firms will obtain greater environmental education dynamism.	Supported
H11a	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater business operation understanding focus.	Not Supported
H11b	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater managerial information awareness.	Not Supported
H11c	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater decision-making skill emphasis.	Supported
H11d	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater organizational experience usefulness.	Not Supported
H11e	The higher the entrepreneurial mindset is, the more likely that firms will obtain greater environmental education dynamism.	Not Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H12a	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater business operation understanding focus.	Supported
H12b	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater managerial information awareness.	Not Supported
H12c	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater decision-making skill emphasis.	Not Supported
H12d	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater organizational experience usefulness.	Supported
H12e	The higher the human resource practices effectiveness is, the more likely that firms will obtain greater environmental education dynamism.	Supported
H13a	The higher the organization development continuity is, the more likely that firms will obtain greater business operation understanding focus.	Supported
H13b	The higher the organization development continuity is, the more likely that firms will obtain greater managerial information awareness.	Supported
H13c	The higher the organization development continuity is, the more likely that firms will obtain greater decision-making skill emphasis.	Not Supported
H13d	The higher the organization development continuity is, the more likely that firms will obtain greater organizational experience usefulness.	Not Supported
H13e	The higher the organization development continuity is, the more likely that firms will obtain greater environmental education dynamism.	Not Supported
H14a	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater business operation understanding focus.	Not Supported
H14b	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater managerial information awareness.	Supported
H14c	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater decision-making skill emphasis.	Supported
H14d	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater organizational experience usefulness.	Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H14e	The higher the intra-organizational collaboration focus is, the more likely that firms will obtain greater environmental education dynamism.	Supported
H15a	The relationship between business operation understanding focus and organizational creativity will be positively moderated by technology support.	Not Supported
H15b	The relationship between business operation understanding focus and new idea generation will be positively moderated by technology support.	Supported
H15c	The relationship between business operation understanding focus and organizational innovation will be positively moderated by technology support.	Not Supported
H15d	The relationship between business operation understanding focus and firm performance will be positively moderated by technology support.	Not Supported
H16a	The relationship between managerial information awareness and organizational creativity will be positively moderated by technology support.	Not Supported
H16b	The relationship between managerial information awareness and new idea generation will be positively moderated by technology support.	Not Supported
H16c	The relationship between managerial information awareness and organizational innovation will be positively moderated by technology support.	Not Supported
H16d	The relationship between managerial information awareness and firm performance will be positively moderated by technology support.	Not Supported
H17a	The relationship between decision-making skill emphasis and organizational creativity will be positively moderated by technology support.	Supported
H17b	The relationship between decision-making skill emphasis and new idea generation will be positively moderated by technology support.	Not Supported
H17c	The relationship between decision-making skill emphasis and organizational innovation will be positively moderated by technology support.	Not Supported
H17d	The relationship between decision-making skill emphasis and firm performance will be positively moderated by technology support.	Not Supported
H18a	The relationship between organizational experience usefulness and organizational creativity will be positively moderated by technology support.	Not Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H18b	The relationship between organizational experience usefulness and new idea generation will be positively moderated by technology support.	Not Supported
H18c	The relationship between organizational experience usefulness and organizational innovation will be positively moderated by technology support.	Not Supported
H18d	The relationship between organizational experience usefulness and firm performance will be positively moderated by technology support.	Not Supported
H19a	The relationship between environmental education dynamism and organizational creativity will be positively moderated by technology support.	Not Supported
H19b	The relationship between environmental education dynamism and new idea generation will be positively moderated by technology support.	Not Supported
H19c	The relationship between environmental education dynamism and organizational innovation will be positively moderated by technology support.	Not Supported
H19d	The relationship between environmental education dynamism and firm performance will be positively moderated by technology support.	Not Supported
H20a	The relationship between top management leadership and business operation understanding focus will be positively moderated by learning culture.	Not Supported
H20b	The relationship between top management leadership and managerial information awareness will be positively moderated by learning culture.	Not Supported
H20c	The relationship between top management leadership and decision-making skill emphasis will be positively moderated by learning culture.	Not Supported
H20d	The relationship between top management leadership and organizational experience usefulness will be positively moderated by learning culture.	Not Supported
H20e	The relationship between top management leadership and environmental education dynamism will be positively moderated by learning culture.	Not Supported
H21a	The relationship between entrepreneurial mindset and business operation understanding focus will be positively moderated by learning culture.	Not Supported
H21b	The relationship between entrepreneurial mindset and managerial information awareness will be positively moderated by learning culture.	Not Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H21c	The relationship between entrepreneurial mindset and decision-making skill emphasis will be positively moderated by learning culture.	Not Supported
H21d	The relationship between entrepreneurial mindset and organizational experience usefulness will be positively moderated by learning culture.	Not Supported
H21e	The relationship between entrepreneurial mindset and environmental education dynamism will be positively moderated by learning culture.	Not Supported
H22a	The relationship between human resource practices effectiveness and business operation understanding focus will be positively moderated by learning culture.	Not Supported
H22b	The relationship between human resource practices effectiveness and managerial information awareness will be positively moderated by learning culture.	Not Supported
H22c	The relationship between human resource practices effectiveness and decision-making skill emphasis will be positively moderated by learning culture.	Not Supported
H22d	The relationship between human resource practices effectiveness and organizational experience usefulness will be positively moderated by learning culture.	Not Supported
H22e	The relationship between human resource practices effectiveness and environmental education dynamism will be positively moderated by learning culture.	Not Supported
H23a	The relationship between organization development continuity and business operation understanding focus will be positively moderated by learning culture.	Not Supported
H23b	The relationship between organization development continuity and managerial information awareness will be positively moderated by learning culture.	Not Supported
H23c	The relationship between organization development continuity and decision-making skill emphasis will be positively moderated by learning culture.	Not Supported
H23d	The relationship between organization development continuity and organizational experience usefulness will be positively moderated by learning culture.	Not Supported
H23e	The relationship between organization development continuity and environmental education dynamism will be positively moderated by learning culture.	Not Supported
H24a	The relationship between intra-organizational collaboration focus and business operation understanding focus will be positively moderated by learning culture.	Not Supported

Table 14: Summary of Results in All Hypotheses Testing (Continued)

Hypotheses	Description of the Hypothesized Relationships	Results
H24b	The relationship between intra-organizational collaboration focus and managerial information awareness will be positively moderated by learning culture.	Not Supported
H24c	The relationship between intra-organizational collaboration focus and decision-making skill emphasis will be positively moderated by learning culture.	Not Supported
H24d	The relationship between intra-organizational collaboration focus and organizational experience usefulness will be positively moderated by learning culture.	Not Supported
H24e	The relationship between intra-organizational collaboration focus and environmental education dynamism will be positively moderated by learning culture.	Supported

CHAPTER V

CONCLUSION

This chapter includes a summary of the results, contribution limitations and future research directions. It involves findings, hypothesis testing, theoretical and managerial contributions. It presents some carefulness due to the limitations of this research and shows prospective directions for future research.

Summary of Results

This research investigates the influences of strategic organizational knowledge orientation (SOKO) on firm performance for beverage businesses in Thailand. Thus, the specific research purposes are as follows: Firstly, the effects of SOKO and its consequences (organizational creativity, new idea generation, organizational innovation, and firm performance) are investigated. Secondly, relationships among organizational creativity, new idea generation, organizational innovation, business competitiveness, and firm performance are examined. Thirdly, the effects of the five antecedents of SOKO (top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus) on each dimension of SOKO (business operation understanding focus, managerial information awareness, decision-making skills emphasis, organization experience usefulness, and environmental education dynamism) are investigated. Fourthly, technology support is assumed as a moderator of relationships among the five dimensions of SOKO and their consequences. Finally, learning culture is assumed to be a moderating variable of relationships among five antecedents and all dimensions of SOKO.

The key research question of this research is, “How does each of the five dimensions of SOKO relate to firm performance?” Besides, the specific questions are as follows: (1) How does each dimension of SOKO have an influence on organizational creativity, new idea generation, organizational innovation, and firm performance? (2) How does organizational creativity relate to new idea generation, organizational innovation, and business competitiveness? (3) How does new idea generation relate to

business competitiveness and firm performance? (4) How does organizational innovation relate to business competitiveness and firm performance? (5) How does business competitiveness have an influence on firm performance? (6) How do top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus influence each dimension of SOKO? (7) How does technology support moderate relationships among each of the five dimensions of SOKO, new idea generation, organizational innovation, organizational creativity, and firm performance?, and (8) How does learning culture moderate relationships among top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, intra-organizational collaboration focus, and the five dimensions of SOKO?

This research implements a knowledge-based view of the firm to explain relationships among all of the variables in the conceptual model. The samples were from beverage businesses in Thailand chosen from an online database of Thailand's industrial directory at the Department of Industrial Works, Ministry of Industry of the Thai government, as of March 2015 (http://www.diw.go.th, accessed March 15, 2015). The selected key informant was the managing director or a manager-partner position for each selected beverage business in Thailand, with all tested for non-response bias. The instrument is developed from various literature reviews, and its validity and reliability was tested using a pre-test. The statistics employed were EFA and correlation analysis. Multiple regression analysis was used to improve all hypotheses testing. The questionnaires were distributed directly to 634 firms for data collection. The valid mailing was 557 surveys, from which 120 responses were returned. However, 77 surveys were undeliverable. Of the surveys completed and returned, only 117 were usable. The effective response rate was 21.01 percent. Hence, this research method obtained results with strong credibility and answers to all research questions.

For the first specific research question, the results exhibit that only one dimension of SOKO (decision-making skills emphasis) has significant positive influences on all consequences (organizational creativity, new idea generation, organizational innovation, and firm performance). Moreover, all dimensions of SOKO have significant positive effects on organizational creativity. Furthermore, environmental education

dynamism has a significant positive effect on organizational creativity, new idea generation, and firm performance.

For the second specific research question, the findings show that organizational creativity has positively significant influences on new idea generation, and organizational innovation. However, there is no significant effect on business competitiveness.

For the third and fourth specific research questions, the findings show that new idea generation and organizational innovation have a positively significant influence on business competitiveness and firm performance.

As to the fifth specific research question, the results exhibit that business competitiveness has significant positive influences on firm performance.

With regard to the sixth specific research question, the results demonstrate that top management leadership has positive relationships with business operation understanding focus, decision-making skills emphasis, and environmental education dynamism. Moreover, entrepreneurial mindset is positively related to decision-making skills emphasis. Besides, human resource practices effectiveness is positively related to organizational experience usefulness and environmental education dynamism. Likewise, organizational development continuity has positive relationships with business operation understanding focus and managerial information awareness. Furthermore, intra-organizational collaboration focus is positively associated with managerial information awareness, decision-making skills emphasis, organizational experience usefulness, and environmental education dynamism.

In reference to the seventh specific research question, the moderating effect of technology support on the relationship between the one dimensions of SOKO (decision-making skills emphasis) and one consequences of SOKO (organizational creativity) is positively significant.

Finally, for the eighth specific research question, the moderating effect of learning culture on the relationship between one antecedents of SOKO (intra-organizational collaboration focus) and one dimensions of SOKO (environmental education dynamism) is positively significant. Accordingly, decision-making skills emphasis is a key dimension of SOKO and becomes necessary to increase positive outcomes. Moreover, SOKO is encouraged by important factors. As described earlier,

a summary of all research questions and hypotheses testing is included in Table 15 and also in Figure 21 below.

Table 15: Summary of Results in the Relationships of Conceptual Model

Research Questions	Hypotheses	Results	Conclusion
(1) How does each dimension of SOKO have an influence on organizational creativity, new idea generation, organizational innovation, and firm performance?	H_{1a-d}	Business operation understanding focus has a positively significant impact on organizational creativity.	Partially Supported (H_{1a})
	H_{2a-d}	Managerial information awareness has a positive impact on organizational creativity.	Partially Supported (H_{2a})
	H_{3a-d}	Decision-making skills emphasis has a positively significant influence on all consequences.	Fully Supported (H_{3a}, H_{3b}, H_{3c}, H_{3d})
	H_{4a-d}	Organization experience usefulness has a positively significant influence on organizational creativity.	Partially Supported (H_{4a})
	H_{5a-d}	Environmental education dynamism has a positive influence on organizational creativity, new idea generation, and firm performance.	Partially Supported (H_{5a}, H_{5b},H_{5d})
(2) How does organizational creativity relate to new idea generation, organizational innovation, and business competitiveness?	H_{6a-c}	Organizational creativity has a positively significant impact on new idea generation, and organizational innovation.	Partially Supported (H_{6a}, H_{6b})
(3) How does new idea generation relate to business competitiveness and firm performance?	H_{7a-b}	New idea generation has a positive influence on business competitiveness, and firm performance.	Fully Supported (H_{7a}, H_{7b})

Table 15: Summary of Results in the Relationships of Conceptual Model (Continued)

Research Questions	Hypotheses	Results	Conclusion
(4) How does organizational innovation relate to business competitiveness and firm performance?	H_{8a-b}	Organizational innovation has a positively significant influence on business competitiveness and firm performance.	Fully Supported (H_{8a}, H_{8b})
(5) How does business competitiveness have an influence on firm performance?	H_9	Business competitiveness has a positive influence on firm performance.	Fully Supported (H_9)
(6) How do top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, and intra-organizational collaboration focus influence each dimension of SOKO?	H_{10a-e}	Top management leadership has a positively significant impact on business operation understanding focus, decision-making skills emphasis, and environmental education dynamism.	Partially Supported (H_{10a}, H_{10c}, H_{10e})
	H_{11a-e}	Entrepreneurial mindset has a positive influence on decision-making skills emphasis.	Partially Supported (H_{11c})
	H_{12a-e}	Human resource practices effectiveness has a positively significant impact on organization experience usefulness, and environmental education dynamism.	Partially Supported (H_{12d}, H_{12e})
	H_{13a-e}	Organizational development continuity has a positive influence on business operation understanding focus, and managerial information awareness.	Partially Supported (H_{13a}, H_{13b})

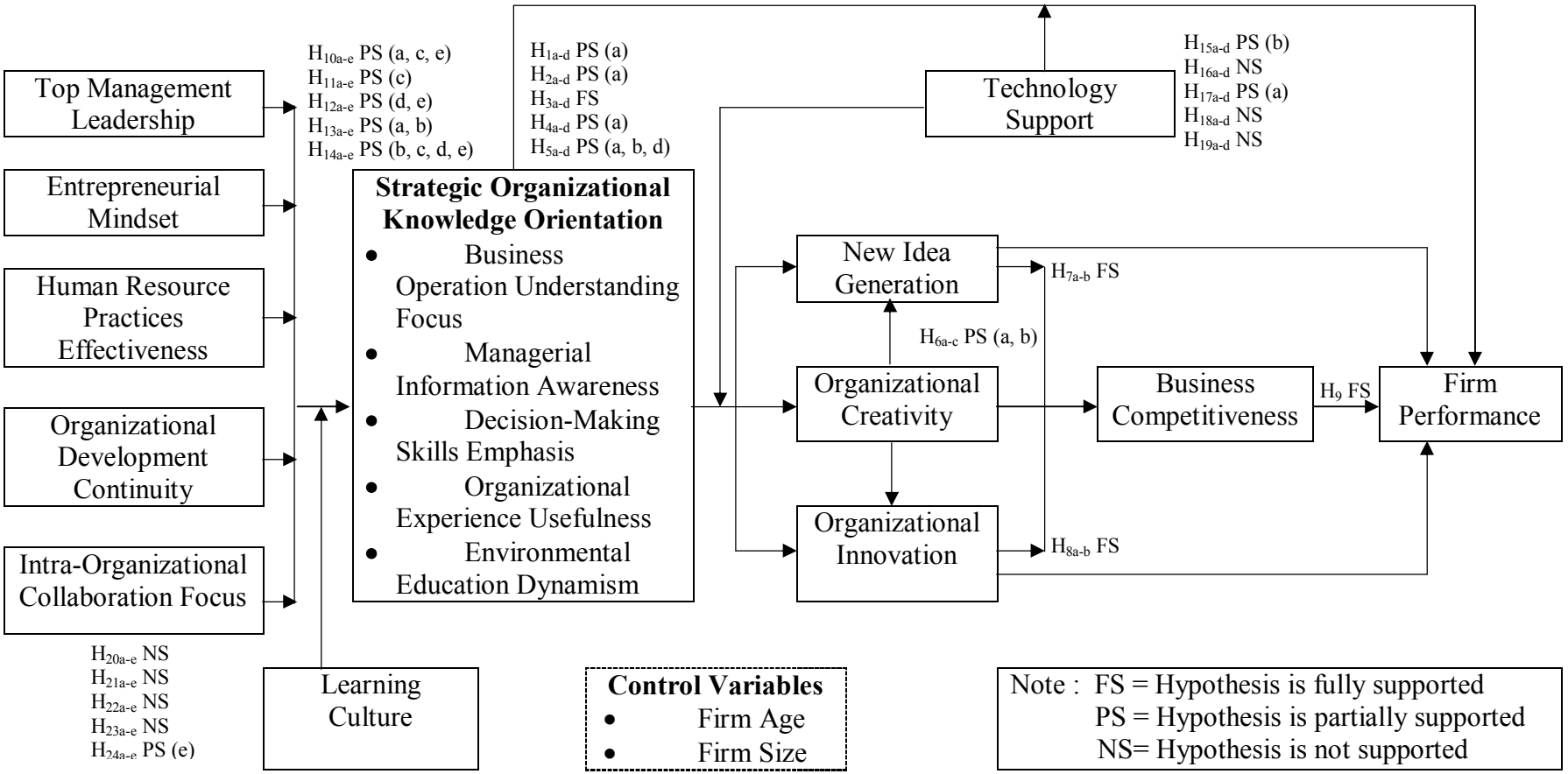
Table 15: Summary of Results in the Relationships of Conceptual Model (Continued)

Research Questions	Hypotheses	Results	Conclusion
	H_{14a-e}	Intra-organizational collaboration focus has a positively significant impact on managerial information awareness, decision-making skills emphasis, organization experience usefulness, and environmental education dynamism.	Partially Supported (H_{14b}, H_{14c}, H_{14d}, H_{14e})
(7) How does technology support moderate relationships among each of the five dimensions of SOKO, new idea generation, organizational innovation, organizational creativity, and firm performance?	H_{15a-d}	Technology support moderates the positive relationships between business operation understanding focus and new idea generation	Partially Supported (H_{15b})
	H_{16a-d}	Technology support does not moderate the positive relationships between managerial information awareness and all consequences.	Not Supported
	H_{17a-d}	Technology support moderates the positive relationships between decision-making skills emphasis and organizational creativity.	Partially Supported (H_{17a})
	H_{18a-d}	Technology support does not moderate the positive relationships between organization experience usefulness and all consequences.	Not Supported
	H_{19a-d}	Technology support does not moderate the positive relationships between environmental education dynamism and all consequences.	Not Supported

Table 15: Summary of Results in the Relationships of Conceptual Model (Continued)

Research Questions	Hypotheses	Results	Conclusion
(8) How does learning culture moderate relationships among top management leadership, entrepreneurial mindset, human resource practices effectiveness, organizational development continuity, intra-organizational collaboration focus, and the five dimensions of SOKO?	H_{20a-e}	Learning culture does not moderate the positive relationships between top management leadership and each dimension of SOKO.	Not Supported
	H_{21a-e}	Learning culture does not moderate the positive relationships between entrepreneurial mindset and each dimension of SOKO.	Not Supported
	H_{22a-e}	Learning culture does not moderate the positive relationships between human resource practices effectiveness and each dimension of SOKO.	Not Supported
	H_{23a-e}	Learning culture does not moderate the positive relationships between organizational development continuity and each dimension of SOKO.	Not Supported
	H_{24a-e}	Learning culture moderates the positive relationships between intra-organizational collaboration focus and environmental education dynamism.	Partially Supported (H_{24e})

Figure 21: Summary of Results in the Relationships of Conceptual Model



Contributions

Theoretical Contribution

The empirical analysis and results reported in this research make a theoretical contribution to managerial implications. This research proposes three theoretical contributions. Firstly, it proposes five dimensions of SOKO, namely, business operation understanding focus, managerial information awareness, decision-making skills emphasis, organization experience usefulness, and environmental education dynamism. Secondly, it is investigated for the first time in a Thai context, which results relate to the antecedent variables, each dimension of SOKO, and its consequence variables. In addition, this research investigates the moderating effects of technology support on relationships among each dimension of SOKO and the consequences of SOKO. Likewise, it investigates the moderating effects of learning culture on the relationships among antecedents of SOKO and each dimension of SOKO. However, the moderating effects of technology support and learning culture have less influence on this research. Finally, this research attempts to gain a better understanding of the relationship between antecedents and consequences of SOKO by applying a knowledge-based view (KBV) to explain the relationships. Theoretical development is based on KBV of the firm that concerns the concept of sustainability of competitive advantage, which continues to achieve firm performance. This research adopts KBV to explain this conceptual model. KBV describes the specific phenomenon as knowledge, because KBV is difficult, socially complex, imitated, has heterogeneous knowledge bases, and has capabilities among firms that are the major determinants of a sustained competitive advantage and superior firm performance. Likewise, the results of this research show that the ability and knowledge of personal impact on the performance of beverage business is different. Hence, KBV is able to explain relationships among all of the variables in the conceptual model.

Managerial Implication

The results of this research demonstrate practice guidelines for the executives of beverage businesses in Thailand for implementation in order to achieve their business goals and improve firm performance. There are three guidelines as follows: Firstly, executives should encourage personnel to have continuous coordination and

communication within the organization. This enables facilitation of exchange and sharing of knowledge and resources within the organization to respond to common goals efficiently. In addition, a firm must have clear visions and policies. Executives need to be good role models for subordinates in all aspects. This enables operations to achieve targets as well. From the above, the most important causal factor of this research contributes to strategic organizational knowledge orientation. Secondly, executives should focus on taking advantage of the knowledge created by the decision-making skills of personnel within the organization, such as encouraging staff to dare to face business problems and solve problems on their own, as well as support the continuous development of personnel decision-making skills effectively within the organization. This enables the creation of new ideas and innovations for the organization. It also generates the maximum benefit on the performance of the firm. Finally, executives should focus on understanding of the changing environment in order to adjust the plans or new products to respond to the changing demand of customers over time. For example, the invention of a new flavour, new ingredient or raw-material that is beneficial to the body to meet the current trend of customers who are health conscious. Similarly is searching channels to business operations by relying on the knowledge that arises from changes of laws or regulations in the public sector. For example, the firm may be opening new markets in the ASEAN region to meet business opportunities caused by preferential taxes under the ASEAN Free Trade Area (AFTA).

Limitations and Future Research Directions

Limitations

This research has some limitations that should be mentioned. Firstly, this research focuses on examining specific internal factors of the organization. However, the organization's operations will be highly effective and require both internal and external factors. For example, uncertainty in the political situation of Thailand may affect the accuracy of the findings in this research. This is because business owners are unsure of business decisions based on the environmental situation. Thus, the lack of these situations may affect the validity and reliable of results in this research. Secondly, some variables of this research are developed as new scale, based on the definition of

each construct and a new measurement. Consequently, the results may be impacted by inappropriate measures as the result of using these scales. Therefore, the results in this research may be inconsistent with previous literature reviews. Thirdly, the results of this research examined the specific context of non-alcoholic beverages business, which are most business types (78.63 percent). In addition, results are derived solely from data collected by beverage businesses, which may have a different learning culture and specialised business. Thus, the results of this research may be narrow and lack generalised concepts for use as descriptive in all contexts of beverage businesses in Thailand. It may also lack a generalised concept of other countries. Finally, the results should be only exploratory in nature since a cross-sectional survey might not sufficiently capture a longitudinal phenomenon such as measuring variables that are dynamic in nature (environmental education dynamism). Thus, an environmental education dynamism variable cannot be adequately assessed in a cross-sectional study.

Future Research Directions

This research proposes an important first step towards developing components for SOKO. It enhances better understanding of relationships among antecedent variables, new dimensions of SOKO, and its consequences. According to the results and limitations of this research, however, they indicate that the need for further research is obvious. Firstly, several hypotheses are not statistically significant. As a result, further research is recommended to re-investigate them. Preferably, further research may be required to develop and conceptualise the measurement of some dimensions of SOKO that are not significant. Secondly, this research focuses on specific investigated internal factors of the organization. Therefore, future research should investigate both internal and external factors of the organization to extend the academic aspect. Thirdly, this research shows that the relationships of all constructs are very large and complex, especially SOKO with its main constructs. Thus, further study should use alternative techniques, such as a structural equation model, to test each of the five dimensions for explicit explanation of the effects, both direct and indirect, on its consequences. Fourthly, the moderating effects of technology support relationships among each dimension of SOKO, organizational creativity, new idea generation, organizational innovation and firm performance are less-supported. Also, learning culture, relationships among each antecedent variable and

each dimension of SOKO are less supported. However, the study found that technology support resulted in positive new idea generation, organizational innovation, organizational creativity and firm performance, as well as learning culture. It also had a positive impact on each dimension of SOKO. Therefore, future studies should focus on learning culture and technology support as the antecedent variables and consequence variables, respectively, or seek other moderating variables. Fifthly, this research does not test the indirect effects of mediating variables. For example, the results of this research found that organizational creativity does not directly impact on business competitiveness, but has positive impact on organizational creativity, new idea generation, and organizational innovation, as well as business competitiveness. Hence, each dimension of SOKO, organizational creativity, new idea generation, organizational innovation, and firm performance should be tested as a fully or partially-mediating variable. Sixthly, this research used questionnaires to collect data and exploration through a cross-sectional survey. Future research may choose to develop longitudinal data designed to observe SOKO in new dimensions that have an effect on firm performance. Finally, this research suggests a new theoretical framework that investigates beverage businesses in Thailand. Thus, future studies should examine businesses other than beverage businesses in Thailand.

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APPENDICES

APPENDIX A

Test of Non-Response Bias

Table: 1A Test of Non-Response Bias

Comparison	N	Mean	S.D.	t	p-value
Type of Business:					
-First group	58	1.84	0.489	-0.239	0.142
-Second group	59	1.86	0.392		
Period of Time in Business Operation:					
-First group	58	2.62	1.089	-0.524	0.648
-Second group	59	2.73	1.142		
Number of Employees:					
-First group	58	2.53	1.287	0.548	0.524
-Second group	59	2.41	1.233		
Operational Capital of Firm:					
-First group	58	2.59	1.351	1.026	0.087
-Second group	59	2.34	1.254		
Average Annual Income:					
-First group	58	2.69	1.301	-0.978	0.112
-Second group	59	2.92	1.193		
Award of Quality:					
-First group	58	1.48	0.504	-1.195	0.176
-Second group	59	1.59	0.495		
Main Customer:					
-First group	58	1.28	0.451	-0.146	0.770
-Second group	59	1.29	0.457		

APPENDIX B

Respondent Characteristics

Table 1B: Demographic Characteristics of Respondents

Characteristics	Frequencies	Percent (%)
Gender		
1. Male	63	53.85
2. Female	54	46.15
Total	117	100
Age		
1. Less than 35 years old	21	17.95
2. 35-40 years old	17	14.53
3. 41-45 years old	18	15.38
4. More than 45 years old	61	52.14
Total	117	100
Marital Status		
1. Single	33	28.21
2. Married	79	67.52
3. Divorced	5	4.27
Total	117	100
Education Level		
1. Bachelor's degree or lower	75	64.10
2. Higher than bachelor's degree	42	35.90
Total	117	100
Working Experience		
1. Less than 5 years	11	9.40
2. 5-10 years	40	34.19
3. 11-15 years	20	17.09
4. More than 15 years	46	39.32
Total	117	100

Table 1B: Demographic Characteristics of Respondents (Continued)

Characteristics	Frequencies	Percent (%)
Monthly Salary		
1. Less than 30,000 baht	18	15.38
2. 30,000 – 45,000 baht	43	36.75
3. 45,001 - 60,000 baht	16	13.68
4. More than 60,000 baht	40	34.19
Total	117	100
Current Position		
1. Managing director	47	40.17
2. Managing partner	46	39.32
3. Other	24	20.51
Total	117	100

Table 2B: Demographic Characteristics of Beverages Businesses

Characteristics	Frequencies	Percent (%)
Business Owner Type		
1. Limited company	76	64.96
2. Partnership	41	35.04
Total	117	100
Type of Business		
1. Alcoholic beverages business	21	17.95
2. Non-alcoholic beverages business	92	78.63
3. Alcoholic and Non-alcoholic beverages business	4	3.42
Total	117	100
Period of Time in Business Operation		
1. Less than 5 years	20	17.09
2. 5-10 years	37	31.63
3. 11-15 years	21	17.95
4. More than 15 years	39	33.33
Total	117	100

Table 2B: Demographic Characteristics of Beverages Businesses

Characteristics	Frequencies	Percent (%)
Number of Employee		
1. Less than 50 persons	42	35.90
2. 50-100 persons	13	11.11
3. 101-150 persons	27	23.08
4. More than 150 persons	35	29.91
Total	117	100
Operational Capital of the Firm		
1. Less than 5,000,000 baht	41	35.05
2. 5,000,000-10,000,000 baht	24	20.51
3. 10,000,001-15,000,000 baht	9	7.69
4. More than 15,000,000 baht	43	36.75
Total	117	100
Average Annual Income		
1. Less than 5,000,000 baht	28	23.93
2. 5,000,000-10,000,000 baht	20	17.09
3. 10,000,001-15,000,000 baht	16	13.68
4. More than 15,000,000 baht	53	45.30
Total	117	100
A Firm's Award Regarding Distinctive and Qualified Management		
1. Rewarded	54	46.15
2. Never	63	53.85
Total	117	100
Main Customer		
1. Thai	84	71.79
2. Foreigner	33	28.21
Total	117	100

APPENDIX C

The Original Items

Table 1C: Original Items in Scales

Constructs	Items
Business Operation Understanding Focus (BOU)	
BOU1	The firm believes that when has knowledge and understanding regarding of operational business can help the firm achieve its set goals effectively
BOU2	The firm focuses on has established guidelines in operational are linked to target clearly can help the firm run administration more effectively
BOU3	The firm encourages to analyzing and checking the environment in business operation which can help firm has more effective operation planning
BOU4	The firm emphasizes on integrating operational processes can help the firm has application resources to effectively
BOU5	The firm concentrates on improving operational processes can help the firm can respond to the change of environment as well
Managerial Information Awareness (MIA)	
MIA1	The firm believes that having good information in management can be able led to business operations more efficiency and effectiveness
MIA2	The firm is aware of a variety of information in manageable with caused by the network between the departments which can help firm operation achieve goals as well
MIA3	The firm pays attention to the database development and data mining explicitly can help the firm manage itself successfully even more.
MIA4	The firm promotes information system development in potential management, which can help operation of firm able achieves business goals as well
MIA5	The firm encourages has the full application of information of administration which helps organization's operations to more efficiency and effectiveness
Decision-Making Skills Emphasis (DMS)	
DMS1	The firm believes when has employees has the skills to make good decisions will be as the basis for support the administration in the organization more efficiency and effectiveness
DMS2	The firm promotes employees has potential to confront and resolve complex business problems by themselves, which allow the administration achieve goal even better
DMS3	The firm pays attention to developing decision-making skills continuously which will help to solve the problems in the firm shall be in accordance principle and the target set as well
DMS4	The firm encourages has the build of criteria for determining about the benefits to be derived from various alternatives, which will help maximize efficiency decision-making
DMS5	The firm is aware of effectiveness on decisions-making skills which leads to get maximum benefits

Table 1C: Original Items in Scales (Continued)

Constructs	Items
Organizational Experience Usefulness (OEU)	
OEU1	The firm believes that experience to good operation in the past will help the management of the present and the future are even more effective
OEU2	The firm emphasizes on analysis, both advantages and disadvantages of past experience which will allow current and future operational success even better
OEU3	The firm focuses on bringing good experience in the past of the firm for use is a guideline on operation current which will helps administration more success
OEU4	The firm encourages the bringing defects that arose from the operation in the past to use to determine the direction and as an example working to improve the present and the future which will help achieve the goals as well
Environmental Education Dynamism (EED)	
EED1	The firm believes that education and understand about the dynamics of the environment which will help the operation more successful
EED2	The firm encourages the checking the requirements of customers regularly, which will make firm has information, to improve on planning to can respond to customers' needs which has a dynamically changing effectively
EED3	The firm emphasizes on analysis of the situation is a systematic and concrete, which will help make the operations of firm efficient and effective fully
EED4	The firm focuses on continuous learning and understanding in rules and regulations can help the firm respond to the change in operation as well
EED5	The firm pays attention to research and development about environment in operation with a concrete system, which will help the firm has data for use planning and development operations more efficiently
Organizational Creativity (OC)	
OC1	The firm has initiatives to develop the concept about products or services and methods of operation is always a novelty
OC2	The firm has invention of products or services and methods of operation with, different from the original concept based on research and development of the firm
OC3	The firm has the concept in the develop products or services and methods of operation a unique
OC4	The firm has the new concept which can extend the original concept more complete

Table 1C: Original Items in Scales (Continued)

Constructs	Items
New Idea Generation (NI)	
NI1	The firm has management methods of organization that new and fashionable
NI2	The firm has new production processes that reduce production costs and expand capacity more efficiently
NI3	The firm has a new logistics system for managing delivered the goods to customers as well
NI4	The firm has a new marketing concept and method in building excellent relationships after the sale
Organizational Innovation (OI)	
OI1	The firm has offered new products or services quickly over rivals
OI2	The firm has the application of modern technology combined with products or services for adding value even more
OI3	The firm has new goods or services a diverse and unique which difficult to imitate
OI4	The firm has goods or services which can lead application combined with the original products as well
Business Competitiveness (BC)	
BC1	The firm has managed superiority competitors in terms cost and price
BC2	The firm can maintain continuous efficiency in business operations
BC3	The firm has delivered value continuous in formats of outstanding innovation
BC4	The firm can maintain better image toward customers in all aspects
Firm Performance (FP)	
FP1	The firm has sales growth and profitability excellent compared to the past or compared to competitors
FP2	The firm has the operating results, increasing continued compared with outcomes in recent years
FP3	The firm has a financial position and performance of firm are stable and can perform continuously in the long run
FP4	The firm can maintain market share or has the growth rate of market share with enhanced steadily in the long run
FP1	The firm has been recognized and well-known of the customer and the business community about the ability to operate and achieve goals effectively

Table 1C: Original Items in Scales (Continued)

Constructs	Items
Top Management Leadership (TL)	
TL1	Firm's executives believe that when has a clear vision and policy to work will help with the administration more effective
TL2	Firm's executives focus the application of greater modern management in organization will help the administration more efficiency and effectiveness
TL3	Firm's executives, promotes a continuous on improvement and development process of work in accordance with a current situation will allows operations achieve goals as well
TL4	Firm's executives encourage the employee to join continuous the training and development will help employee has the potential and the ability to work fully
TL5	Firm's executives encourage investment and development of advanced technologies continuously will help firm can be managed business very well under the circumstances that change constantly
Entrepreneurial Mindset (EM)	
EM1	The firm believes that the mindset in entrepreneurial style will help the administration succeeded very well
EM2	The firm encourages the creative continuous innovation, which will enable the dynamic competitive advantage
EM3	The firm focuses on investment under acceptable risk which will help the administration achieve goals even better
EM4	The firm is aware that under the fierce competition there will be opportunities and channels for potential and ability firm to which will allow the firm can of planning operations more efficient
EM5	The firm encourages that a decision about an operation under cause and effect, which will help the administration achieve goals as well
Human Resource Practices Effectiveness (HR)	
HR1	The firm believes that good human resource management will help to achieve the operational targets set effectively
HR2	The firm promotes a good process in recruitment will allow the firm has a knowledgeable staff joint perform work inside of the organization continued
HR3	The firm emphasizes on job design in accordance with the ability of the employee which will helps firm administration more effective
HR4	The firm encourages the provide training and skills development in the ongoing work which allows employees with basic knowledge in practical applications as well
HR5	The firm concentrates on performance appraisal based on knowledge and ability which will be an incentive for employees to birth learn about best practices more than ever

Table 1C: Original Items in Scales (Continued)

Constructs	Items
Organizational Development Continuity (OD)	
OD1	The firm believes that organization development continues will help organizations successful even more
OD2	The firm concentrates on formulating plans to improve and development organizations a systematic and concrete, which will help the operation the goal even better
OD3	The firm focuses on analysis of the organization environment which can be used to design a better more organization administration
OD4	The firm encourages the application of new technologies in operation which will enable to the administration to achieve target better
Intra-Organizational Collaboration Focus (IC)	
IC1	The firm believes that collaboration is well within the organization will help firm can achieve that goal very well
IC2	The firm emphasizes on the integration the principles, methods, processes of work together will enables firm operation with consistent and achieve goal better
IC3	The firm encourages the coordination and communication within the organization continued which will enable birth the exchange and sharing of resources together effectively
IC4	The firm focuses the teamwork on within and between departments of the organization which will can lead to potential operation even more
IC5	The firm concentrates on creating relationships within the organization which will help a more effective administration
Learning Culture (LC)	
LC1	The firm believes that continuous learning will help the administration achieve goal even better
LC2	The firm promotes employees has the development of knowledge and ability to constantly keep pace with changes which will allow the management according to objectives planned
LC3	The firm focuses the work experience analysis in the past which will serve as a guideline in setting operations both in current and future
LC4	The firm pays attention to the creation of knowledge, skills and development, information systems continues which will help make the organization development more effective

Table 1C: Original Items in Scales (Continued)

Constructs	Items
Technology Support (TS)	
TS1	The firm believes when have the technology is fully equipped will help achieve that goal even better
TS2	The firm emphasizes on continuous investment in technology will allow the administration more successful
TS3	The firm promotes research and development about technology continues which will can be applied to the management of the enterprise more effectively
TS4	The firm encourages employee has training and learning about advanced technologies continuously which will help with the application of more efficient technology
TS5	The firm has a budget allocation for investment in technology fully which will enable organizations to choose the technologies used in firm at full capacity

APPENDIX D

Item Factor Loadings and Reliability Analyses in Pre-Test

Table 1D: Item Factor Loadings and Reliability Analyses in Pre-Test

Constructs	N of Items	Factor Loadings	Reliability (Alpha)
Business Operation Understanding Focus (BOU)	5		
BOU1		.728	
BOU2		.790	
BOU3		.678	.754
BOU4		.656	
BOU5		.702	
Managerial Information Awareness (MIA)	5		
MIA1		.610	
MIA2		.505	
MIA3		.712	.730
MIA4		.812	
MIA5		.807	
Decision-Making Skills Emphasis (DMS)	5		
DMS1		.704	
DMS2		.770	
DMS3		.792	.750
DMS4		.716	
DMS5		.557	
Organizational Experience Usefulness (OEU)	4		
OEU1		.738	
OEU2		.662	.802
OEU3		.912	
OEU 4		.901	

Table 1D: Item Factor Loadings and Reliability Analyses in Pre-Test (Continued)

Constructs	N of Items	Factor Loadings	Reliability (Alpha)
Environmental Education Dynamism (EED)	5		
EED1		.614	
EED2		.709	
EED3		.840	.808
EED4		.846	
EED5		.748	
Organizational Creativity (OC)	4		
OC1		.745	
OC2		.796	.785
OC 3		.805	
OC4		.780	
New Idea Generation (NI)	4		
NI1		.692	
NI2		.852	.749
NI3		.695	
NI4		.775	
Organizational Innovation (OI)	4		
OI1		.618	
OI2		.578	.756
OI3		.907	
OI4		.883	
Business Competitiveness (BC)	4		
BC1		.801	
BC2		.773	.823
BC3		.796	
BC4		.878	

Table 1D: Item Factor Loadings and Reliability Analyses in Pre-Test (Continued)

Constructs	N of Items	Factor Loadings	Reliability (Alpha)
Firm Performance (FP)	5		
FP1		.874	
FP2		.717	
FP3		.774	.850
FP4		.775	
FP5		.824	
Top Management Leadership (TL)	5		
TL1		.846	
TL2		.838	
TL3		.806	.876
TL4		.849	
TL5		.753	
Entrepreneurial Mindset (EM)	5		
EM1		.706	
EM2		.745	
EM3		.664	.776
EM4		.843	
EM5		.718	
Human Resource Practices Effectiveness (HR)	5		
HR1		.821	
HR2		.716	
HR3		.520	.728
HR4		.602	
HR5		.774	

Table 1D: Item Factor Loadings and Reliability Analyses in Pre-Test (Continued)

Constructs	N of Items	Factor Loadings	Reliability (Alpha)
Organization Development Continuity (OD)	4		
OD1		.785	
OD2		.843	.716
OD3		.815	
OD4		.557	
Intra-Organizational Collaboration Focus (IC)	5		
IC1		.519	
IC2		.855	
IC3		.775	.816
IC4		.799	
IC5		.832	
Technology Support (TS)	5		
TS1		.817	
TS2		.414	
TS3		.820	.707
TS4		.915	
TS5		.412	
Learning Culture (LC)	4		
LC1		.859	
LC2		.679	.787
LC3		.759	
LC4		.828	

APPENDIX E

Test the Assumption of Regression Analysis

Equation 1: $OC = \alpha_1 + \beta_1 BOU + \beta_2 MIA + \beta_3 DMS + \beta_4 OEU + \beta_5 EEO + \beta_6 FA + \beta_7 FS + \varepsilon_1$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.777[a]	.604	.578	.64943940	1.611

a. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

b. Dependent Variable: F_OC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.027	7	10.004	23.719	.000[b]
	Residual	45.973	109	.422		
	Total	116.000	116			

a. Dependent Variable: F_OC

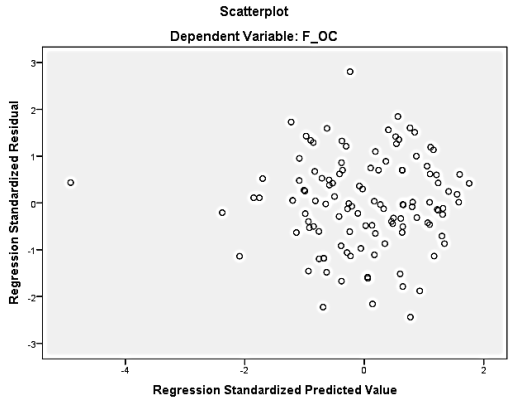
b. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.019	.103		.184	.854		
	F_BOU	.207	.087	.207	2.383	.019	.483	2.071
	F_MIA	.181	.095	.181	1.909	.059	.405	2.469
	F_DMS	.196	.087	.196	2.254	.026	.483	2.070
	F_OEU	.183	.087	.183	2.110	.037	.482	2.074
	F_EED	.155	.097	.155	1.602	.112	.388	2.578
	FA	-.146	.126	-.073	-1.161	.248	.907	1.102
	FS	.106	.129	.053	.820	.414	.865	1.156

a. Dependent Variable: F_OC

Homoscedasticity



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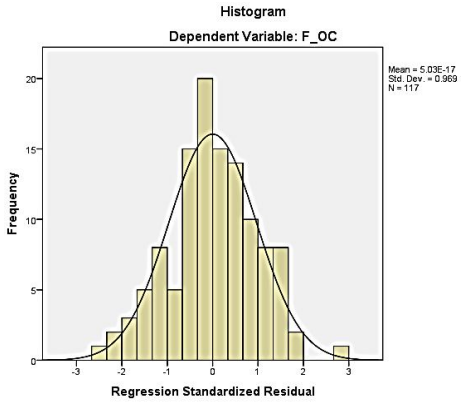
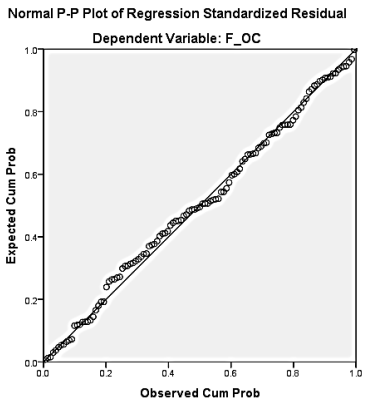




$$\textit{Equation 2: } OC = \alpha_2 + \beta_8 BOU + \beta_9 MIA + \beta_{10} DMS + \beta_{11} OEU + \beta_{12} EEO + \beta_{13} TS + \beta_{14}(BOU*TS) + \beta_{15}(MIA*TS) + \beta_{16}(DMS*TS) + \beta_{17}(OEU*TS) + \beta_{18}(EEO*TS) + \beta_{19} FA + \beta_{20} FS + \varepsilon_2$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.794[a]	.631	.584	.64500818	1.809

a. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

b. Dependent Variable: F_OC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.148	13	5.627	13.525	.000[b]
	Residual	42.852	103	.416		
	Total	116.000	116			

a. Dependent Variable: F_OC

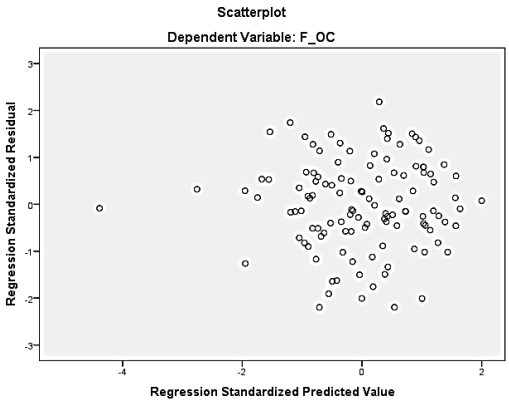
b. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

Coefficients[a]

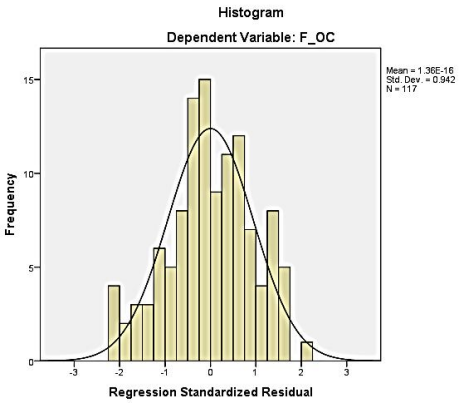
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.009	.110		-.083	.934		
	F_BOU	.174	.092	.174	1.894	.061	.423	2.364
	F_MIA	.163	.096	.163	1.700	.092	.390	2.562
	F_DMS	.237	.095	.237	2.506	.014	.400	2.500
	F_OEU	.092	.095	.092	.972	.334	.401	2.495
	F_EED	.178	.098	.178	1.818	.072	.375	2.669
	F_TS	.154	.081	.154	1.900	.060	.544	1.838
	BOUxTS	.082	.080	.139	1.026	.307	.196	5.092
	MIAxTS	-.168	.106	-.271	-1.586	.116	.122	8.163
	DMSxTS	.193	.105	.306	1.831	.070	.129	7.778
	OEUxTS	-.010	.090	-.012	-.107	.915	.288	3.477
	EEDxTS	-.053	.106	-.084	-.505	.615	.128	7.785
	FA	-.106	.127	-.053	-.835	.405	.884	1.131
	FS	.066	.132	.033	.504	.616	.821	1.218

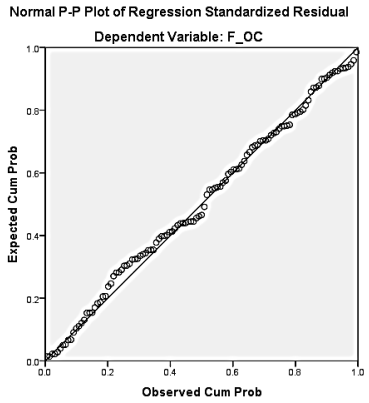
a. Dependent Variable: F_OC

Homoscedasticity



Normality





Equation 3: NI = α_3 + β_{21}BOU + β_{22}MIA + β_{23}DMS + β_{24}OEU + β_{25}EEO + β_{26}FA + β_{27}FS+ ε_3

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.670[a]	.448	.413	.76618547	1.599

a. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

b. Dependent Variable: F_NI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.013	7	7.430	12.657	.000[b]
	Residual	63.987	109	.587		
	Total	116.000	116			

a. Dependent Variable: F_NI

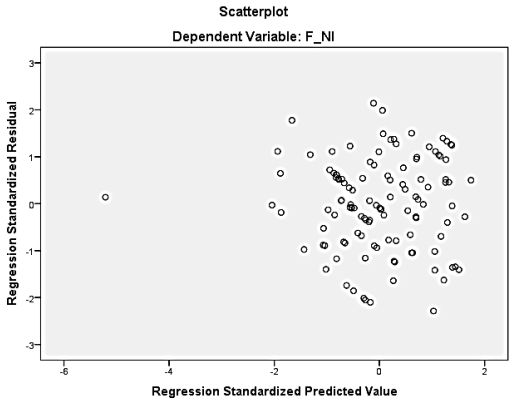
b. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

Coefficients[a]

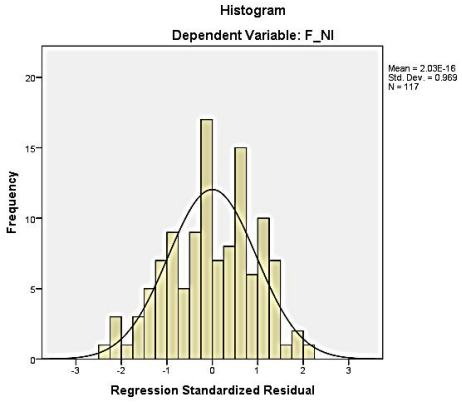
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.026	.121		.214	.831		
	F_BOU	.073	.102	.073	.716	.476	.483	2.071
	F_MIA	.127	.112	.127	1.135	.259	.405	2.469
	F_DMS	.264	.102	.264	2.583	.011	.483	2.070
	F_OEU	-.062	.102	-.062	-.609	.544	.482	2.074
	F_EED	.354	.114	.354	3.103	.002	.388	2.578
	FA	-.060	.149	-.030	-.406	.686	.907	1.102
	FS	.010	.153	.005	.063	.950	.865	1.156

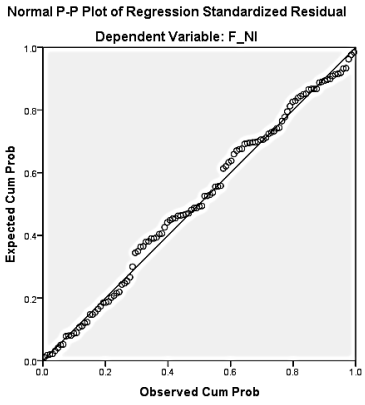
a. Dependent Variable: F_NI

Homoscedasticity



Normality





$$\textit{Equation 4: } NI = \alpha_4 + \beta_{28}BOU + \beta_{29}MIA + \beta_{30}DMS + \beta_{31}OEU + \beta_{32}EEO + \beta_{33}TS + \beta_{34}(BOU*TS) + \beta_{35}(MIA*TS) + \beta_{36}(DMS*TS) + \beta_{37}(OEU*TS) + \beta_{38}(EEO*TS) + \beta_{39}FA + \beta_{40}FS + \varepsilon_4$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.731[a]	.535	.476	.72384603	1.808

a. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

b. Dependent Variable: F_NI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.033	13	4.772	9.107	.000[b]
	Residual	53.967	103	.524		
	Total	116.000	116			

a. Dependent Variable: F_NI

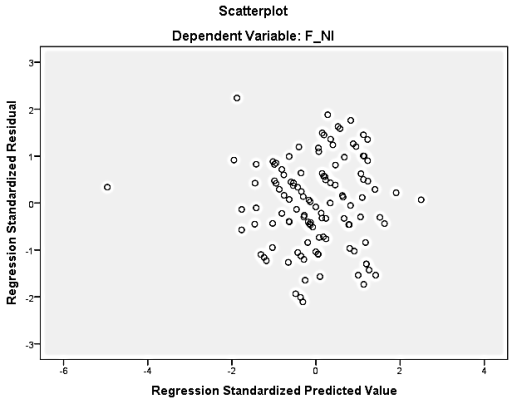
b. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.027	.124		-.222	.825		
	F_BOU	.092	.103	.092	.886	.378	.423	2.364
	F_MIA	.139	.108	.139	1.294	.199	.390	2.562
	F_DMS	.154	.106	.154	1.445	.151	.400	2.500
	F_OEU	-.201	.106	-.201	-1.892	.061	.401	2.495
	F_EED	.387	.110	.387	3.525	.001	.375	2.669
	F_TS	.305	.091	.305	3.349	.001	.544	1.838
	BOUxTS	.210	.089	.356	2.344	.021	.196	5.092
	MIAxTS	-.138	.119	-.223	-1.162	.248	.122	8.163
	DMSxTS	-.128	.118	-.203	-1.085	.280	.129	7.778
	OEUxTS	-.038	.101	-.047	-.371	.711	.288	3.477
	EEDxTS	.115	.119	.182	.971	.334	.128	7.785
	FA	-.025	.142	-.013	-.175	.861	.884	1.131
	FS	.080	.148	.040	.544	.588	.821	1.218

a. Dependent Variable: F_NI

Homoscedasticity



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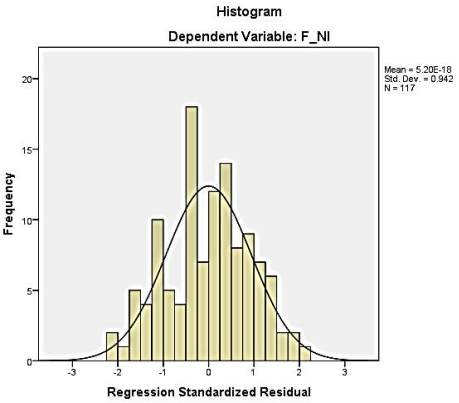
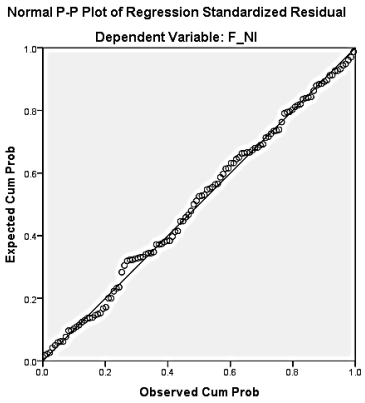




Equation 5: $NI = \alpha_5 + \beta_{41}OC + \beta_{42}FA + \beta_{43}FS + \varepsilon_5$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.629[a]	.395	.379	.78797815	1.589

a. Predictors: (Constant), FS, F_OC, FA

b. Dependent Variable: F_NI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	45.837	3	15.279	24.608	.000[b]
	Residual	70.163	113	.621		
	Total	116.000	116			

a. Dependent Variable: F_NI

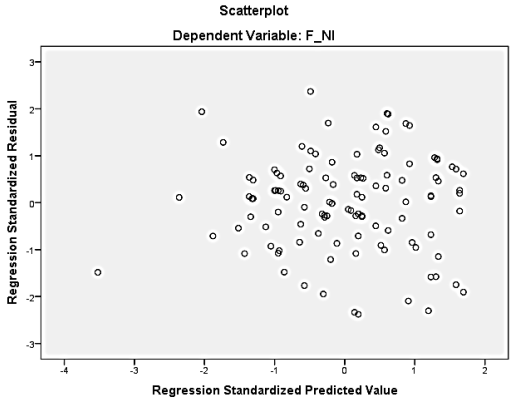
b. Predictors: (Constant), FS, F_OC, FA

Coefficients[a]

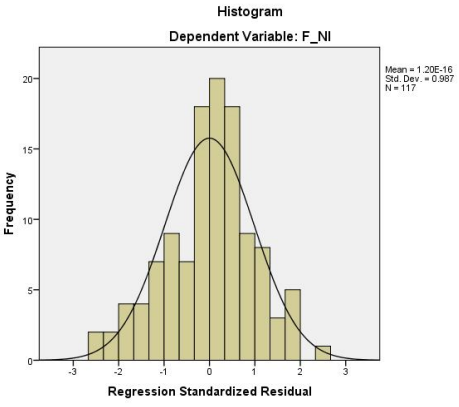
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.018	.122		-.150	.881		
	F_OC	.621	.075	.621	8.300	.000	.957	1.045
	FA	-.033	.150	-.017	-.221	.825	.940	1.064
	FS	.067	.152	.033	.439	.662	.921	1.086

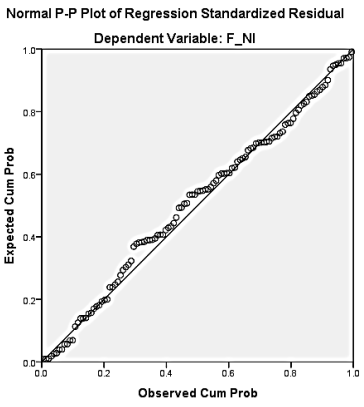
a. Dependent Variable: F_NI

Homoscedasticity



Normality





Equation 6: OI = α_6 + β_{44}BOU + β_{45}MIA + β_{46}DMS + β_{47}OEU + β_{48}EEO + β_{49}FA + β_{50}FS+ ε_6

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.534[a]	.285	.239	.87217884	1.671

a. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

b. Dependent Variable: F_OI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.084	7	4.726	6.213	.000[b]
	Residual	82.916	109	.761		
	Total	116.000	116			

a. Dependent Variable: F_OI

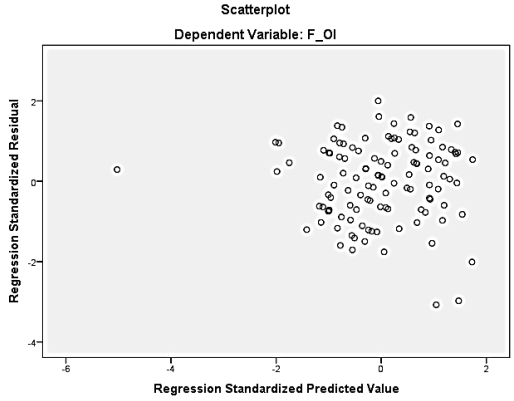
b. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

Coefficients[a]

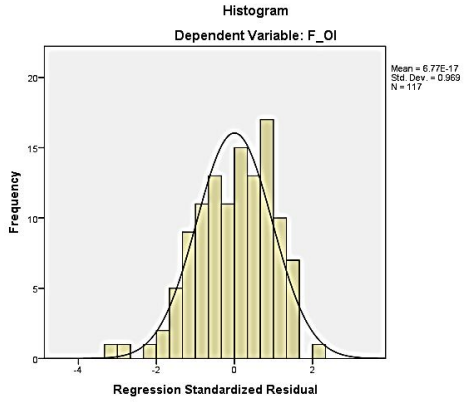
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.035	.138		-.252	.801		
	F_BOU	-.040	.117	-.040	-.340	.735	.483	2.071
	F_MIA	.171	.127	.171	1.348	.181	.405	2.469
	F_DMS	.205	.117	.205	1.756	.082	.483	2.070
	F_OEU	.071	.117	.071	.609	.544	.482	2.074
	F_EED	.198	.130	.198	1.520	.131	.388	2.578
	FA	-.017	.169	-.009	-.103	.918	.907	1.102
	FS	.083	.174	.041	.475	.636	.865	1.156

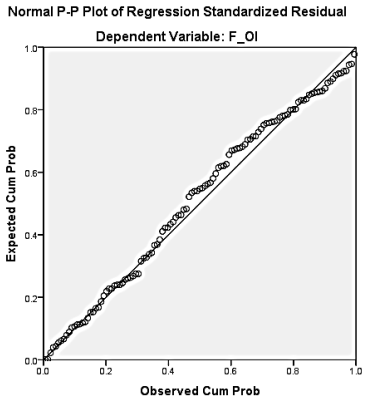
a. Dependent Variable: F_OI

Homoscedasticity



Normality





$$\textit{Equation 7: } OI = \alpha_7 + \beta_{51}BOU + \beta_{52}MIA + \beta_{53}DMS + \beta_{54}OEU + \beta_{55}EEO + \beta_{56}TS + \beta_{57}(BOU*TS) + \beta_{58}(MIA*TS) + \beta_{59}(DMS*TS) + \beta_{60}(OEU*TS) + \beta_{61}(EEO*TS) + \beta_{62}FA + \beta_{63}FS + \varepsilon_7$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.600[a]	.360	.279	.84900248	1.883

a. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

b. Dependent Variable: F_OI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.757	13	3.212	4.456	.000[b]
	Residual	74.243	103	.721		
	Total	116.000	116			

a. Dependent Variable: F_OI

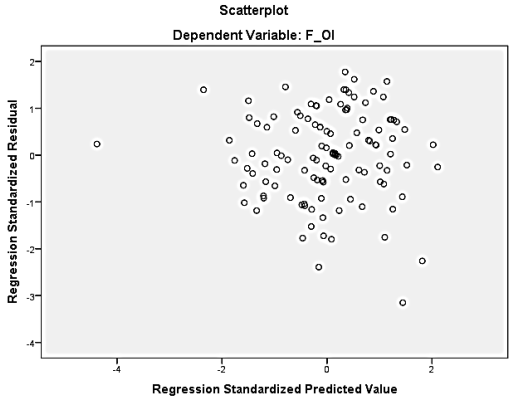
b. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

Coefficients[a]

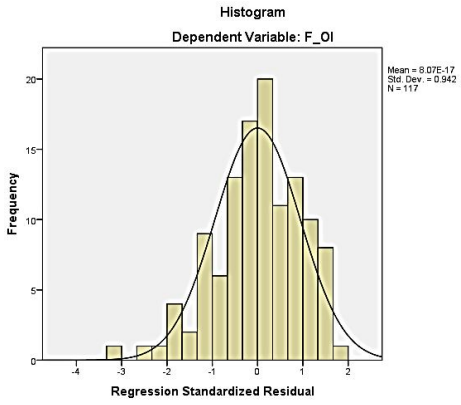
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.059	.145		-.410	.683		
	F_BOU	-.061	.121	-.061	-.503	.616	.423	2.364
	F_MIA	.157	.126	.157	1.244	.216	.390	2.562
	F_DMS	.129	.125	.129	1.038	.302	.400	2.500
	F_OEU	-.072	.125	-.072	-.576	.566	.401	2.495
	F_EED	.211	.129	.211	1.641	.104	.375	2.669
	F_TS	.354	.107	.354	3.316	.001	.544	1.838
	BOUxTS	.078	.105	.132	.741	.460	.196	5.092
	MIAxTS	-.092	.140	-.148	-.655	.514	.122	8.163
	DMSxTS	-.023	.139	-.036	-.162	.871	.129	7.778
	OEUxTS	-.060	.119	-.075	-.509	.612	.288	3.477
	EEDxTS	.106	.139	.168	.762	.448	.128	7.785
	FA	.005	.167	.003	.032	.975	.884	1.131
	FS	.119	.174	.060	.686	.494	.821	1.218

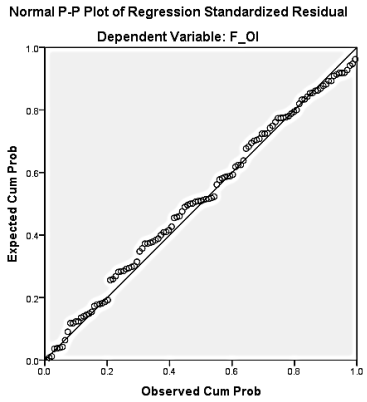
a. Dependent Variable: F_OI

Homoscedasticity



Normality





Equation 8: OI = $\alpha_8 + \beta_{64}OC + \beta_{65}FA + \beta_{66}FS + \varepsilon_8$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.554[a]	.307	.289	.84348075	1.868

a. Predictors: (Constant), FS, F_OC, FA
b. Dependent Variable: F_OI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.605	3	11.868	16.682	.000[b]
	Residual	80.395	113	.711		
	Total	116.000	116			

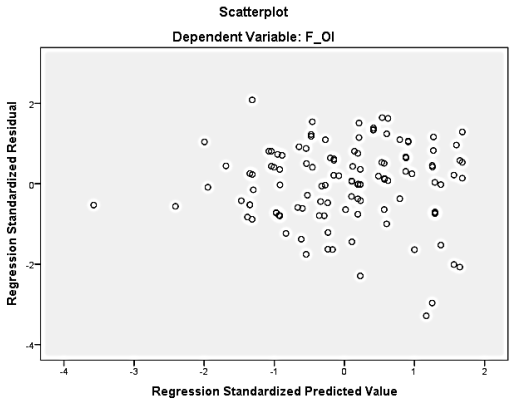
a. Dependent Variable: F_OI
b. Predictors: (Constant), FS, F_OC, FA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.035	.131		-.266	.790		
	F_OC	.550	.080	.550	6.874	.000	.957	1.045
	FA	.020	.161	.010	.121	.904	.940	1.064
	FS	.047	.163	.023	.287	.775	.921	1.086

a. Dependent Variable: F_OI

Homoscedasticity



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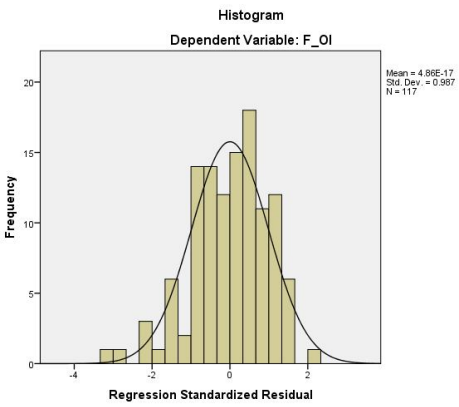
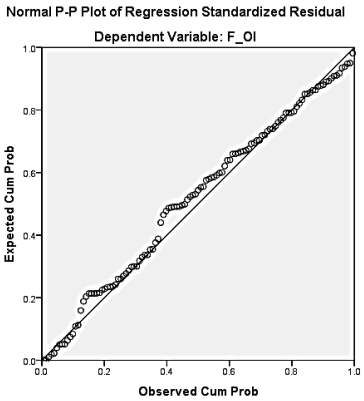




Equation 9: BC = $\alpha_9 + \beta_{67}OC + \beta_{68}NI + \beta_{69}OI + \beta_{70}FA + \beta_{71}FS + \varepsilon_9$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.812[a]	.660	.644	.59635797	1.885

a. Predictors: (Constant), FS, F_OI, FA, F_OC, F_NI

b. Dependent Variable: F_BC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.524	5	15.305	43.034	.000[b]
	Residual	39.476	111	.356		
	Total	116.000	116			

a. Dependent Variable: F_BC

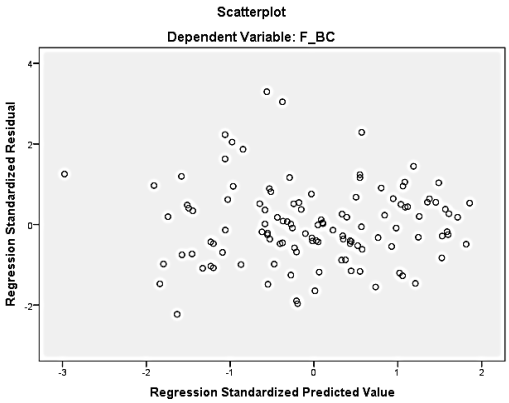
b. Predictors: (Constant), FS, F_OI, FA, F_OC, F_NI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.090	.092		.971	.334		
	F_OC	.091	.072	.091	1.251	.213	.585	1.710
	F_NI	.261	.096	.261	2.716	.008	.331	3.021
	F_OI	.536	.090	.536	5.958	.000	.379	2.636
	FA	-.049	.114	-.025	-.432	.667	.938	1.066
	FS	-.122	.115	-.061	-1.055	.294	.919	1.088

a. Dependent Variable: F_BC

Homoscedasticity



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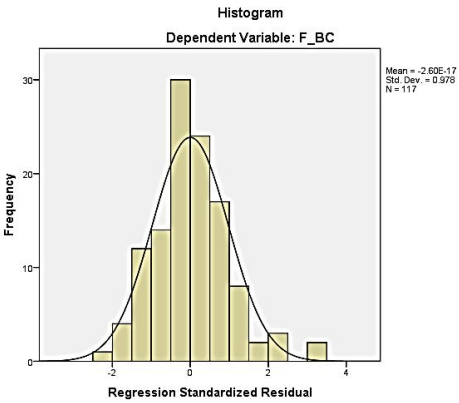
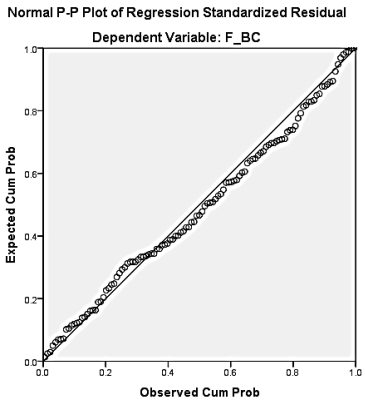




Equation 10: FP = α_{10} +β_{72}BOU + β_{73}MIA + β_{74}DMS + β_{75}OEU + β_{76}EEO + β_{77}FA + β_{78}FS+ ε_{10}

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.561[a]	.315	.271	.85393991	1.610

a. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

b. Dependent Variable: F_FP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.516	7	5.217	7.154	.000[b]
	Residual	79.484	109	.729		
	Total	116.000	116			

a. Dependent Variable: F_FP

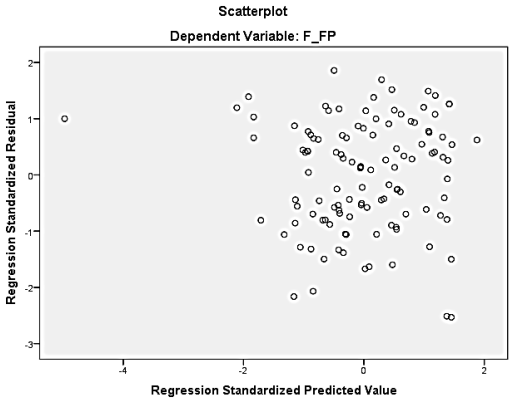
b. Predictors: (Constant), FS, F_OEU, FA, F_BOU, F_DMS, F_MIA, F_EED

Coefficients[a]

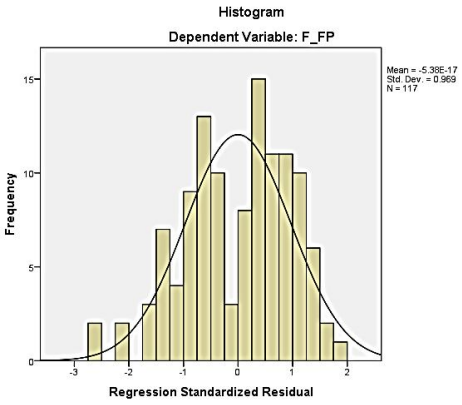
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.051	.135		.377	.707		
	F_BOU	.067	.114	.067	.591	.556	.483	2.071
	F_MIA	.063	.125	.063	.504	.615	.405	2.469
	F_DMS	.254	.114	.254	2.225	.028	.483	2.070
	F_OEU	.014	.114	.014	.121	.904	.482	2.074
	F_EED	.235	.127	.235	1.849	.067	.388	2.578
	FA	-.176	.166	-.088	-1.061	.291	.907	1.102
	FS	.074	.170	.037	.436	.664	.865	1.156

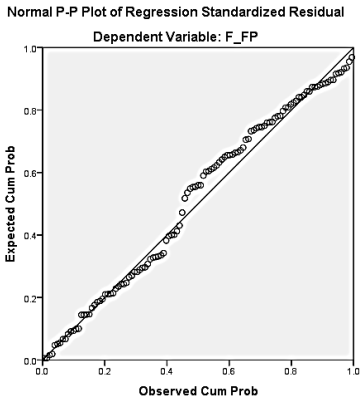
a. Dependent Variable: F_FP

Homoscedasticity



Normality





$$\textit{Equation 11: } FP = \alpha_{11} + \beta_{79}BOU + \beta_{80}MIA + \beta_{81}DMS + \beta_{82}OEU + \beta_{83}EEO + \beta_{84}TS + \beta_{85}(BOU*TS) + \beta_{86}(MIA*TS) + \beta_{87}(DMS*TS) + \beta_{88}(OEU*TS) + \beta_{89}(EEO*TS) + \beta_{90}FA + \beta_{91}FS + \varepsilon_{11}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.659[a]	.434	.362	.79847294	1.820

a. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

b. Dependent Variable: F_FP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.331	13	3.872	6.073	.000[b]
	Residual	65.669	103	.638		
	Total	116.000	116			

a. Dependent Variable: F_FP

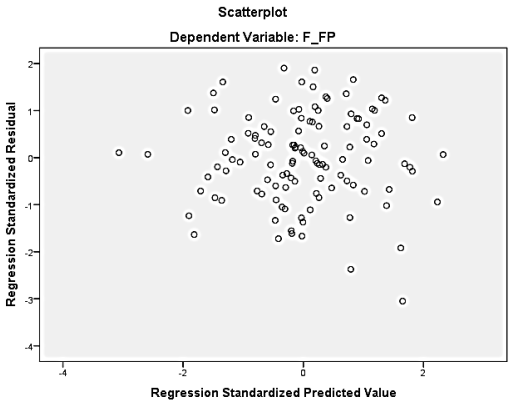
b. Predictors: (Constant), FS, DMSxTS, FA, F_OEU, F_BOU, F_TS, F_DMS, F_MIA, F_EED, OEUxTS, BOUxTS, EEDxTS, MIAxTS

Coefficients[a]

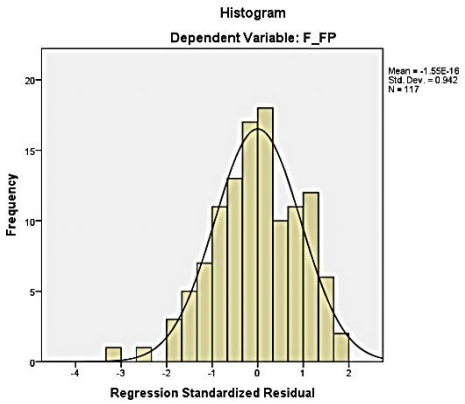
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.040	.136		.291	.771		
	F_BOU	.042	.114	.042	.371	.712	.423	2.364
	F_MIA	.039	.119	.039	.325	.746	.390	2.562
	F_DMS	.202	.117	.202	1.724	.088	.400	2.500
	F_OEU	-.158	.117	-.158	-1.353	.179	.401	2.495
	F_EED	.231	.121	.231	1.905	.060	.375	2.669
	F_TS	.439	.101	.439	4.365	.000	.544	1.838
	BOUxTS	-.039	.099	-.066	-.396	.693	.196	5.092
	MIAxTS	.077	.131	.124	.585	.560	.122	8.163
	DMSxTS	.059	.130	.094	.455	.650	.129	7.778
	OEUxTS	-.138	.112	-.171	-1.238	.218	.288	3.477
	EEDxTS	.072	.131	.114	.553	.582	.128	7.785
	FA	-.158	.157	-.079	-1.005	.317	.884	1.131
	FS	.080	.163	.040	.491	.625	.821	1.218

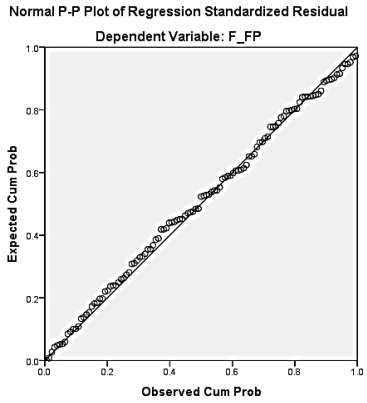
a. Dependent Variable: F_FP

Homoscedasticity



Normality





Equation 12: FP = α_{12} + β_{92}NI+ β_{93}OI + β_{94}BC + β_{95}FA + β_{96}FS+ ε_{12}

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.793[a]	.629	.613	.62248432	2.048

a. Predictors: (Constant), FS, F_BC, FA, F_NI, F_OI

b. Dependent Variable: F_FP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	72.989	5	14.598	37.673	.000[b]
	Residual	43.011	111	.387		
	Total	116.000	116			

a. Dependent Variable: F_FP

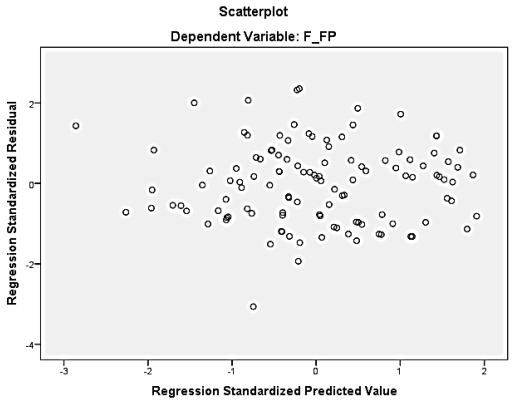
b. Predictors: (Constant), FS, F_BC, FA, F_NI, F_OI

Coefficients[a]

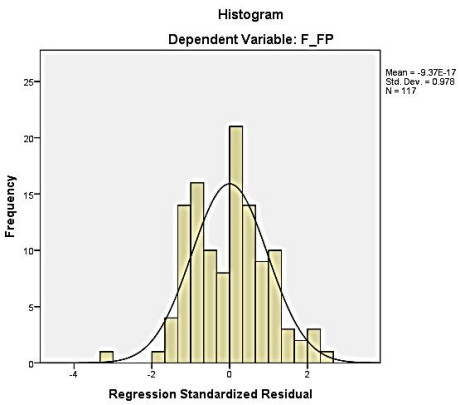
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.045	.097		-.468	.641		
	F_NI	.213	.098	.213	2.166	.032	.346	2.888
	F_OI	-.205	.108	-.205	-1.901	.060	.288	3.470
	F_BC	.771	.098	.771	7.839	.000	.345	2.898
	FA	-.100	.119	-.050	-.846	.399	.943	1.060
	FS	.183	.120	.091	1.524	.130	.926	1.080

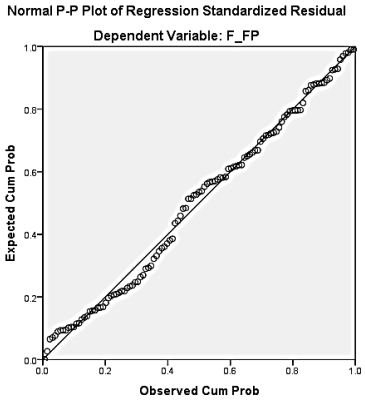
a. Dependent Variable: F_FP

Homoscedasticity



Normality





Equation 13: BOU = α_{13} + β_{97}TL + β_{98}EM + β_{99}HR + β_{100}OD + β_{101}IC + β_{102}FA + β_{103}FS+ ε_{13}

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.747[a]	.557	.529	.68625018	1.843

a. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

b. Dependent Variable: F_BOU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.668	7	9.238	19.617	.000[b]
	Residual	51.332	109	.471		
	Total	116.000	116			

a. Dependent Variable: F_BOU

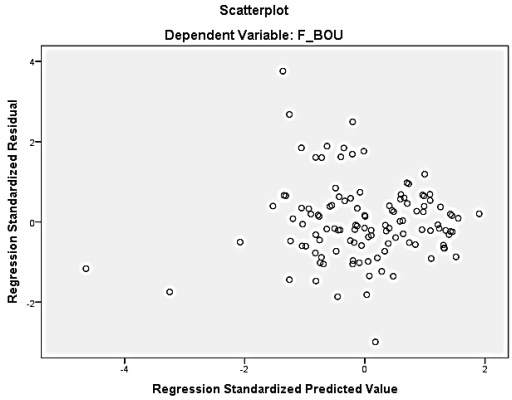
b. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

Coefficients[a]

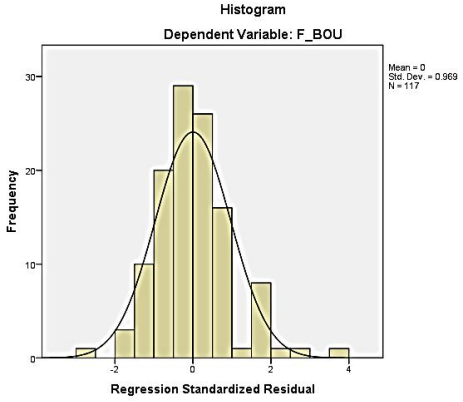
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.095	.108		-.878	.382		
	F_TL	.197	.088	.197	2.248	.027	.526	1.900
	F_EM	-.129	.111	-.129	-1.159	.249	.329	3.038
	F_HR	.180	.097	.180	1.860	.066	.436	2.294
	F_OD	.471	.084	.471	5.631	.000	.580	1.723
	F_IC	.133	.102	.133	1.313	.192	.394	2.541
	FA	-.035	.136	-.018	-.260	.795	.877	1.141
	FS	.213	.135	.107	1.579	.117	.892	1.121

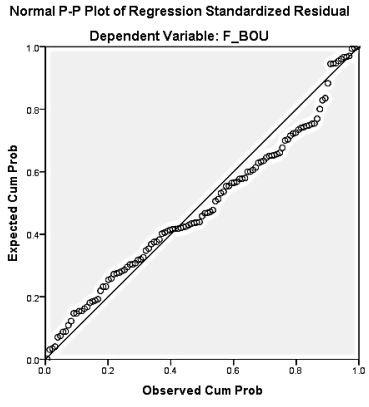
a. Dependent Variable: F_BOU

Homoscedasticity



Normality





$$\textit{Equation 14: } BOU = \alpha_{14} + \beta_{104}TL + \beta_{105}EM + \beta_{106}HR + \beta_{107}OD + \beta_{108}IC + \beta_{109}LC + \beta_{110}(TL*LC) + \beta_{111}(EM*LC) + \beta_{112}(HR*LC) + \beta_{113}(OD*LC) + \beta_{114}(IC*LC) + \beta_{115}FA + \beta_{116}FS + \varepsilon_{14}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.771[a]	.595	.544	.67535487	1.887

a. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

b. Dependent Variable: F_BOU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.021	13	5.309	11.641	.000[b]
	Residual	46.979	103	.456		
	Total	116.000	116			

a. Dependent Variable: F_BOU

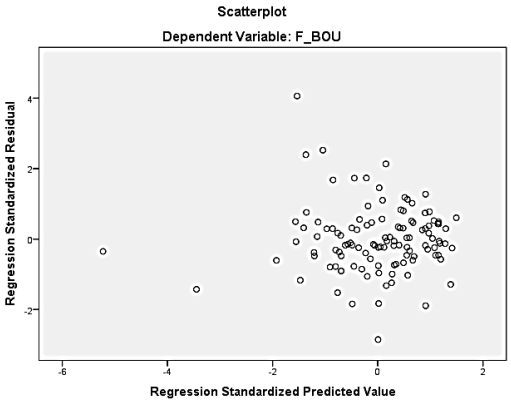
b. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

Coefficients[a]

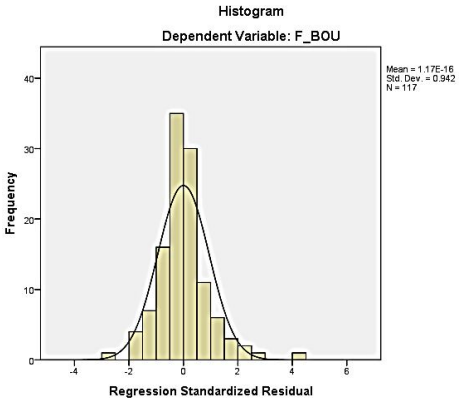
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.063	.118		-.538	.592		
	F_TL	.153	.090	.153	1.704	.091	.486	2.058
	F_EM	-.090	.114	-.090	-.796	.428	.305	3.277
	F_HR	.165	.100	.165	1.655	.101	.396	2.527
	F_OD	.386	.091	.386	4.267	.000	.480	2.084
	F_IC	.050	.115	.050	.430	.668	.296	3.377
	F_LC	.170	.097	.170	1.748	.083	.417	2.400
	TLxLC	.062	.095	.066	.658	.512	.391	2.557
	EMxLC	.058	.117	.072	.497	.620	.188	5.317
	HRxLC	-.019	.100	-.023	-.188	.851	.263	3.806
	ODxLC	-.178	.085	-.234	-2.086	.039	.314	3.187
	ICxLC	.010	.107	.013	.096	.924	.226	4.416
	FA	-.030	.135	-.015	-.221	.826	.855	1.170
	FS	.217	.134	.109	1.622	.108	.871	1.148

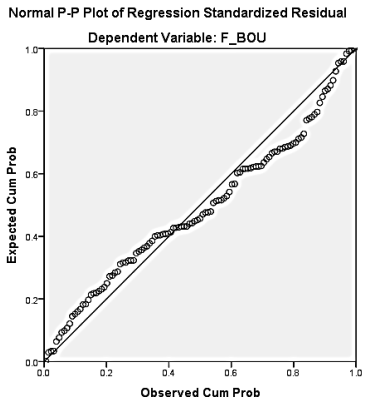
a. Dependent Variable: F_BOU

Homoscedasticity



Normality





Equation 15: MIA = α_{15} + β_{117}TL + β_{118}EM + β_{119}HR + β_{120}OD + β_{121}IC + β_{122}FA + β_{123}FS+ ε_{15}

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.702[a]	.493	.461	.73433691	1.830

a. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

b. Dependent Variable: F_MIA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.222	7	8.175	15.159	.000[b]
	Residual	58.778	109	.539		
	Total	116.000	116			

a. Dependent Variable: F_MIA

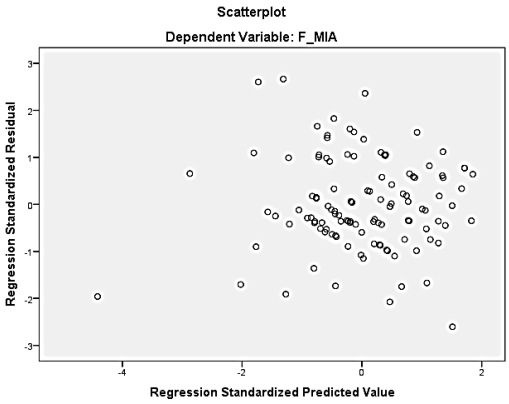
b. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

Coefficients[a]

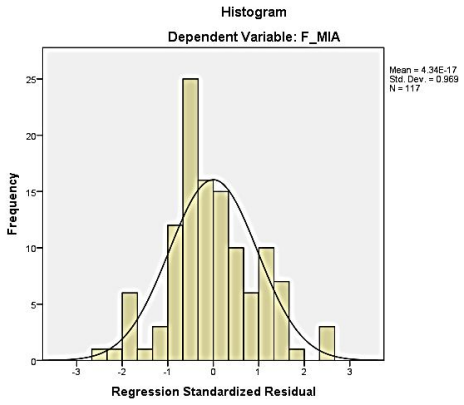
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.099	.115		.857	.394		
	F_TL	.058	.094	.058	.614	.541	.526	1.900
	F_EM	-.062	.119	-.062	-.525	.601	.329	3.038
	F_HR	.137	.103	.137	1.326	.188	.436	2.294
	F_OD	.242	.089	.242	2.700	.008	.580	1.723
	F_IC	.430	.109	.430	3.960	.000	.394	2.541
	FA	-.228	.145	-.114	-1.571	.119	.877	1.141
	FS	.034	.144	.017	.238	.812	.892	1.121

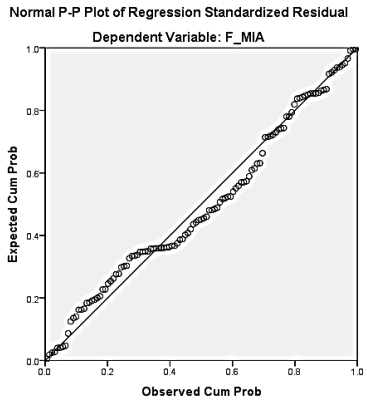
a. Dependent Variable: F_MIA

Homoscedasticity



Normality





Equation 16: MIA = α_{16} +β_{124}TL + β_{125}EM + β_{126}HR + β_{127}OD + β_{128}IC +β_{129}LC +β_{130}(TL*LC) + β_{131}(EM*LC) + β_{132}(HR*LC) +β_{133}(OD*LC) + β_{134}(IC*LC) + β_{135}FA + β_{136}FS+ ε_{16}

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.754[a]	.569	.515	.69673272	1.916

a. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

b. Dependent Variable: F_MIA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.000	13	5.077	10.458	.000[b]
	Residual	50.000	103	.485		
	Total	116.000	116			

a. Dependent Variable: F_MIA

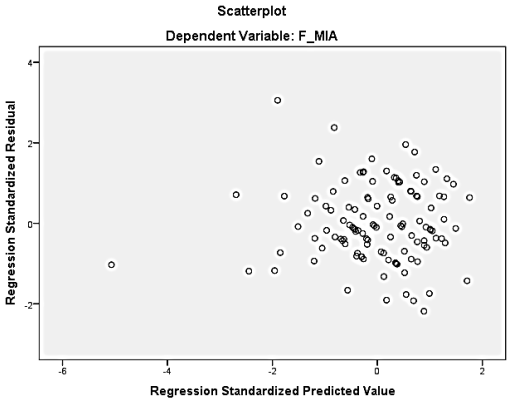
b. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

Coefficients[a]

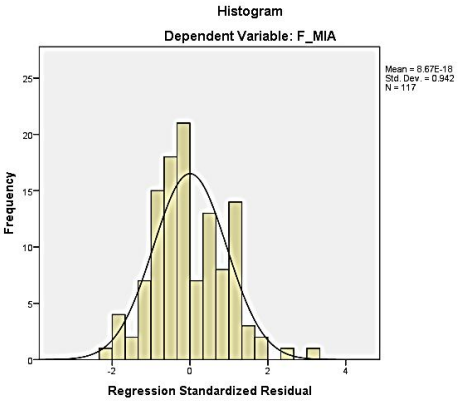
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.154	.122		1.265	.209		
	F_TL	-.025	.093	-.025	-.271	.787	.486	2.058
	F_EM	.026	.117	.026	.221	.826	.305	3.277
	F_HR	.102	.103	.102	.990	.324	.396	2.527
	F_OD	.119	.093	.119	1.270	.207	.480	2.084
	F_IC	.258	.119	.258	2.169	.032	.296	3.377
	F_LC	.281	.100	.281	2.805	.006	.417	2.400
	TLxLC	-.142	.098	-.150	-1.453	.149	.391	2.557
	EMxLC	.188	.121	.232	1.557	.123	.188	5.317
	HRxLC	-.159	.103	-.195	-1.545	.125	.263	3.806
	ODxLC	-.148	.088	-.195	-1.688	.094	.314	3.187
	ICxLC	.087	.110	.108	.793	.430	.226	4.416
	FA	-.215	.139	-.108	-1.542	.126	.855	1.170
	FS	.080	.138	.040	.575	.567	.871	1.148

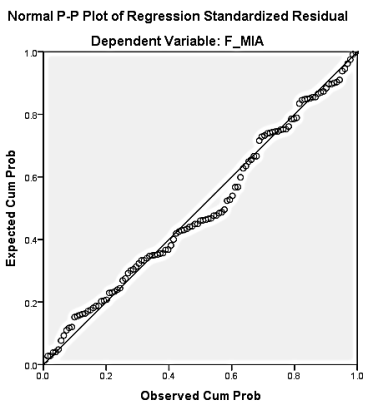
a. Dependent Variable: F_MIA

Homoscedasticity



Normality





$$\textit{Equation 17: DMS} = \alpha_{17} + \beta_{137}TL + \beta_{138}EM + \beta_{139}HR + \beta_{140}OD + \beta_{141}IC + \beta_{142}FA + \beta_{143}FS + \varepsilon_{17}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.693[a]	.481	.447	.74350290	1.773

a. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

b. Dependent Variable: F_DMS

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	55.745	7	7.964	14.406	.000[b]
	Residual	60.255	109	.553		
	Total	116.000	116			

a. Dependent Variable: F_DMS

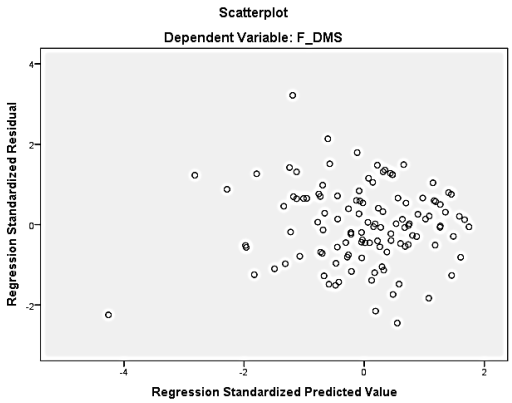
b. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

Coefficients[a]

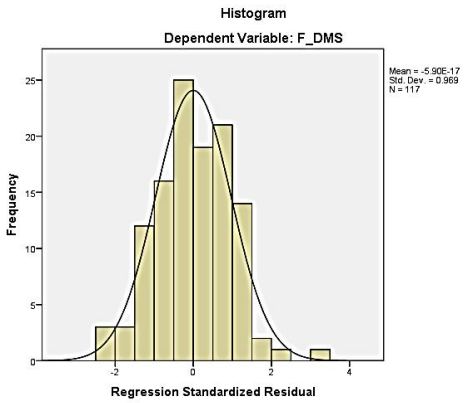
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.014	.117		.117	.907		
	F_TL	.179	.095	.179	1.882	.062	.526	1.900
	F_EM	.314	.120	.314	2.607	.010	.329	3.038
	F_HR	-.068	.105	-.068	-.652	.516	.436	2.294
	F_OD	.006	.091	.006	.069	.945	.580	1.723
	F_IC	.347	.110	.347	3.150	.002	.394	2.541
	FA	-.051	.147	-.026	-.350	.727	.877	1.141
	FS	.024	.146	.012	.166	.869	.892	1.121

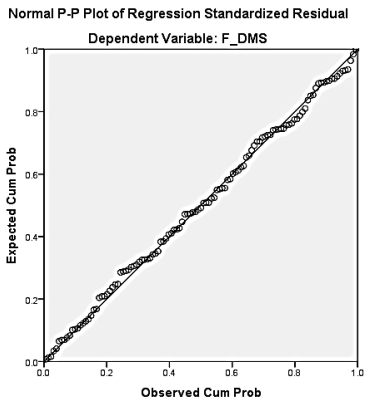
a. Dependent Variable: F_DMS

Homoscedasticity



Normality





$$\textit{Equation 18: DMS} = \alpha_{18} + \beta_{144}TL + \beta_{145}EM + \beta_{146}HR + \beta_{147}OD + \beta_{148}IC + \beta_{149}LC + \beta_{150}(TL*LC) + \beta_{151}(EM*LC) + \beta_{152}(HR*LC) + \beta_{153}(OD*LC) + \beta_{154}(IC*LC) + \beta_{155}FA + \beta_{156}FS + \varepsilon_{18}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.737[a]	.543	.485	.71729209	1.809

a. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

b. Dependent Variable: F_DMS

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63.006	13	4.847	9.420	.000[b]
	Residual	52.994	103	.515		
	Total	116.000	116			

a. Dependent Variable: F_DMS

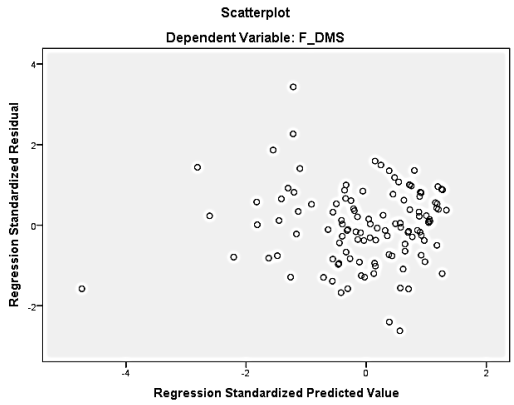
b. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

Coefficients[a]

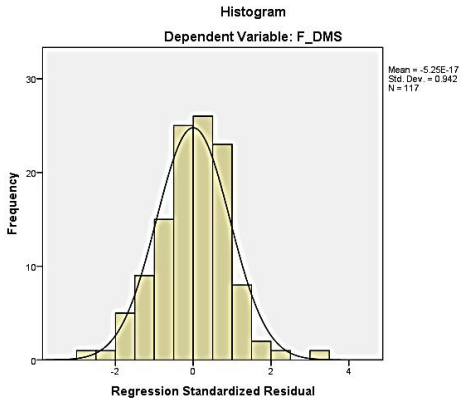
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.086	.125		.685	.495		
	F_TL	.123	.096	.123	1.286	.201	.486	2.058
	F_EM	.340	.121	.340	2.817	.006	.305	3.277
	F_HR	-.124	.106	-.124	-1.169	.245	.396	2.527
	F_OD	-.082	.096	-.082	-.854	.395	.480	2.084
	F_IC	.165	.122	.165	1.349	.180	.296	3.377
	F_LC	.343	.103	.343	3.327	.001	.417	2.400
	TLxLC	-.007	.101	-.008	-.073	.942	.391	2.557
	EMxLC	-.146	.125	-.180	-1.174	.243	.188	5.317
	HRxLC	.096	.106	.118	.910	.365	.263	3.806
	ODxLC	-.003	.090	-.004	-.030	.976	.314	3.187
	ICxLC	-.058	.113	-.071	-.511	.611	.226	4.416
	FA	-.073	.143	-.037	-.509	.612	.855	1.170
	FS	.035	.142	.017	.242	.809	.871	1.148

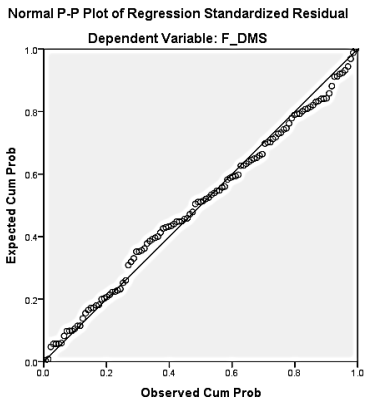
a. Dependent Variable: F_DMS

Homoscedasticity



Normality





$$\textit{Equation 19: } OEU = \alpha_{19} + \beta_{157}TL + \beta_{158}EM + \beta_{159}HR + \beta_{160}OD + \beta_{161}IC + \beta_{162}FA + \beta_{163}FS + \varepsilon_{19}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.687[a]	.472	.438	.74981850	1.619

a. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

b. Dependent Variable: F_OEU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.717	7	7.817	13.903	.000[b]
	Residual	61.283	109	.562		
	Total	116.000	116			

a. Dependent Variable: F_OEU

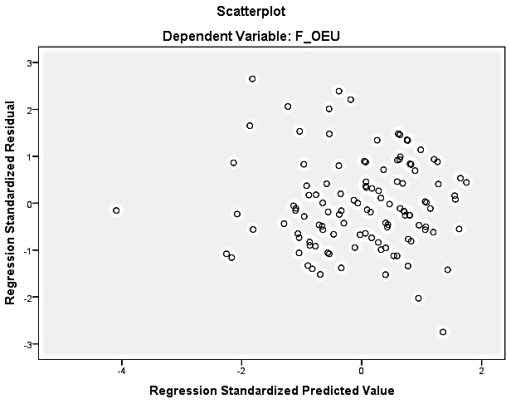
b. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

Coefficients[a]

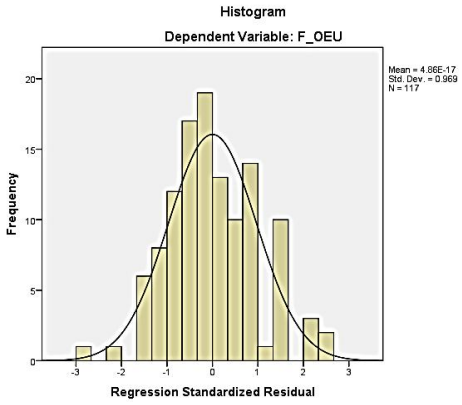
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.112	.118		.950	.344		
	F_TL	.030	.096	.030	.308	.759	.526	1.900
	F_EM	-.097	.121	-.097	-.799	.426	.329	3.038
	F_HR	.538	.105	.538	5.107	.000	.436	2.294
	F_OD	.067	.091	.067	.731	.466	.580	1.723
	F_IC	.222	.111	.222	2.001	.048	.394	2.541
	FA	-.085	.148	-.043	-.574	.567	.877	1.141
	FS	-.129	.147	-.064	-.874	.384	.892	1.121

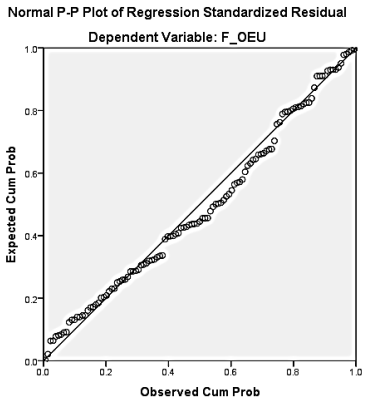
a. Dependent Variable: F_OEU

Homoscedasticity



Normality





$$\textit{Equation 20: } OEU = \alpha_{20} + \beta_{164}TL + \beta_{165}EM + \beta_{166}HR + \beta_{167}OD + \beta_{168}IC + \beta_{169}LC + \beta_{170}(TL*LC) + \beta_{171}(EM*LC) + \beta_{172}(HR*LC) + \beta_{173}(OD*LC) + \beta_{174}(IC*LC) + \beta_{175}FA + \beta_{176}FS + \varepsilon_{20}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.767[a]	.588	.536	.68138988	1.777

a. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

b. Dependent Variable: F_OEU

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.178	13	5.244	11.296	.000[b]
	Residual	47.822	103	.464		
	Total	116.000	116			

a. Dependent Variable: F_OEU

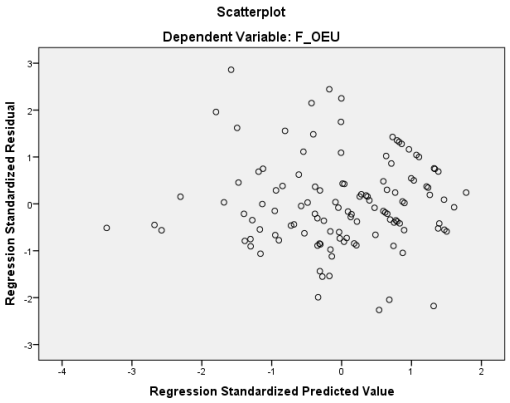
b. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

Coefficients[a]

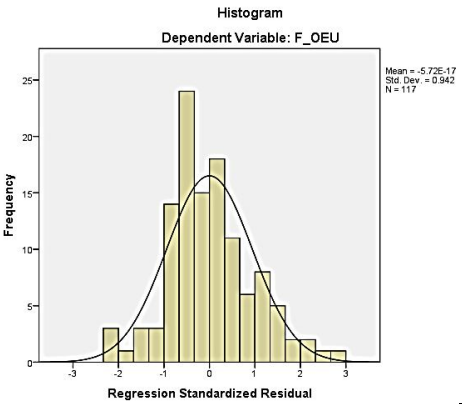
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.135	.119		1.136	.259		
	F_TL	-.069	.091	-.069	-.760	.449	.486	2.058
	F_EM	.002	.115	.002	.019	.985	.305	3.277
	F_HR	.461	.101	.461	4.581	.000	.396	2.527
	F_OD	-.034	.091	-.034	-.374	.709	.480	2.084
	F_IC	-.061	.116	-.061	-.522	.603	.296	3.377
	F_LC	.508	.098	.508	5.179	.000	.417	2.400
	TLxLC	-.126	.096	-.134	-1.322	.189	.391	2.557
	EMxLC	.025	.118	.030	.208	.836	.188	5.317
	HRxLC	.004	.100	.004	.036	.971	.263	3.806
	ODxLC	.062	.086	.082	.723	.471	.314	3.187
	ICxLC	-.039	.108	-.048	-.365	.716	.226	4.416
	FA	-.066	.136	-.033	-.481	.631	.855	1.170
	FS	-.104	.135	-.052	-.767	.445	.871	1.148

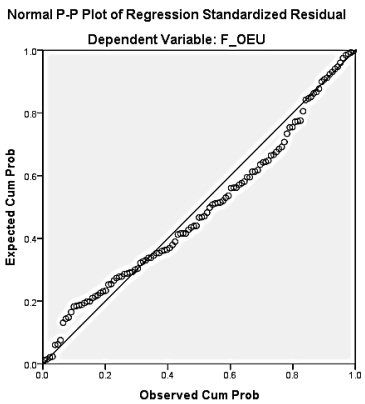
a. Dependent Variable: F_OEU

Homoscedasticity



Normality





Equation 21: EED = $\alpha_{21} + \beta_{177}TL + \beta_{178}EM + \beta_{179}HR + \beta_{180}OD + \beta_{181}IC + \beta_{182}FA + \beta_{183}FS + \varepsilon_{21}$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.705[a]	.497	.464	.73188265	1.779

a. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

b. Dependent Variable: F_EED

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.614	7	8.231	15.365	.000[b]
	Residual	58.386	109	.536		
	Total	116.000	116			

a. Dependent Variable: F_EED

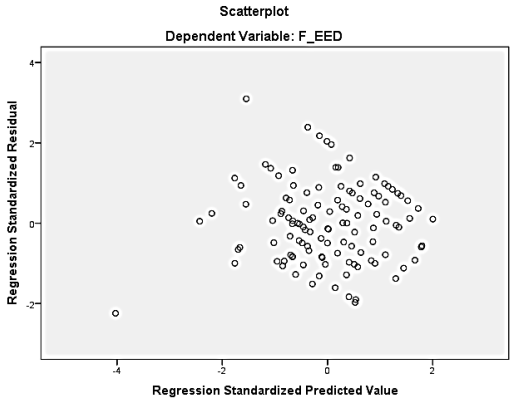
b. Predictors: (Constant), FS, F_HR, FA, F_OD, F_TL, F_IC, F_EM

Coefficients[a]

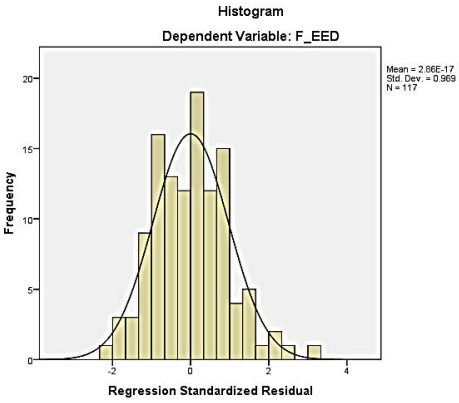
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.023	.115		.199	.842		
	F_TL	.239	.094	.239	2.554	.012	.526	1.900
	F_EM	-.173	.118	-.173	-1.459	.148	.329	3.038
	F_HR	.213	.103	.213	2.069	.041	.436	2.294
	F_OD	.104	.089	.104	1.168	.245	.580	1.723
	F_IC	.404	.108	.404	3.731	.000	.394	2.541
	FA	-.226	.145	-.113	-1.561	.121	.877	1.141
	FS	.175	.144	.088	1.220	.225	.892	1.121

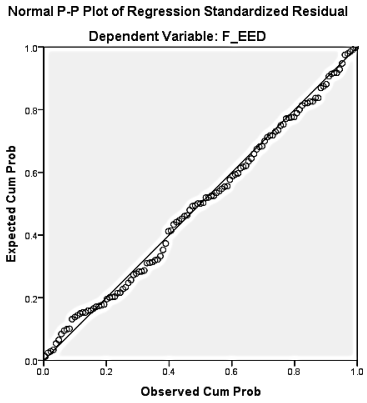
a. Dependent Variable: F_EED

Homoscedasticity



Normality





$$\textit{Equation 22: } EED = \alpha_{22} + \beta_{184}TL + \beta_{185}EM + \beta_{186}HR + \beta_{187}OD + \beta_{188}IC + \beta_{189}LC + \beta_{190}(TL*LC) + \beta_{191}(EM*LC) + \beta_{192}(HR*LC) + \beta_{193}(OD*LC) + \beta_{194}(IC*LC) + \beta_{195}FA + \beta_{196}FS + \varepsilon_{22}$$

Interdependence of error term

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.748[a]	.559	.503	.70484050	1.832

a. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

b. Dependent Variable: F_EED

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.830	13	4.987	10.038	.000[b]
	Residual	51.170	103	.497		
	Total	116.000	116			

a. Dependent Variable: F_EED

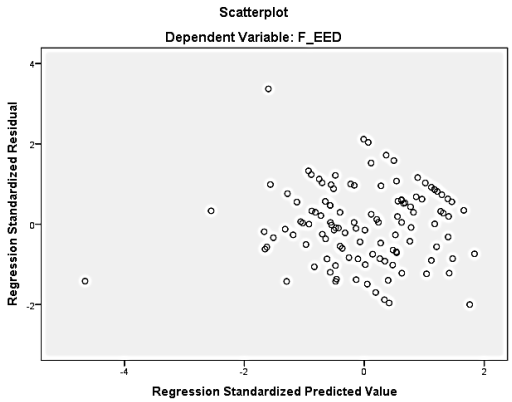
b. Predictors: (Constant), FS, HRxLC, FA, F_LC, F_OD, F_TL, TLxLC, F_HR, ODxLC, F_EM, F_IC, ICxLC, EMxLC

Coefficients[a]

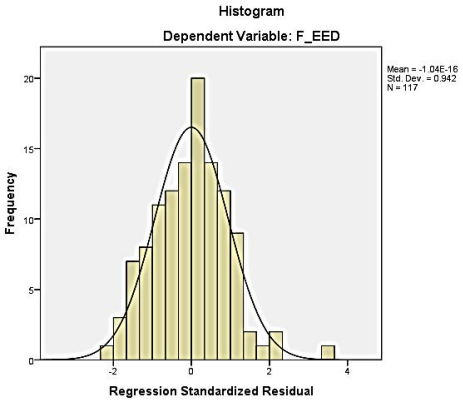
Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.001	.123		.008	.994		
	F_TL	.169	.094	.169	1.801	.075	.486	2.058
	F_EM	-.141	.118	-.141	-1.191	.236	.305	3.277
	F_HR	.233	.104	.233	2.237	.027	.396	2.527
	F_OD	-.025	.094	-.025	-.259	.796	.480	2.084
	F_IC	.288	.120	.288	2.394	.018	.296	3.377
	F_LC	.242	.101	.242	2.385	.019	.417	2.400
	TLxLC	-.029	.099	-.031	-.297	.767	.391	2.557
	EMxLC	-.025	.122	-.031	-.203	.839	.188	5.317
	HRxLC	-.069	.104	-.085	-.666	.507	.263	3.806
	ODxLC	-.205	.089	-.270	-2.312	.023	.314	3.187
	ICxLC	.235	.111	.290	2.111	.037	.226	4.416
	FA	-.205	.141	-.103	-1.453	.149	.855	1.170
	FS	.219	.140	.110	1.563	.121	.871	1.148

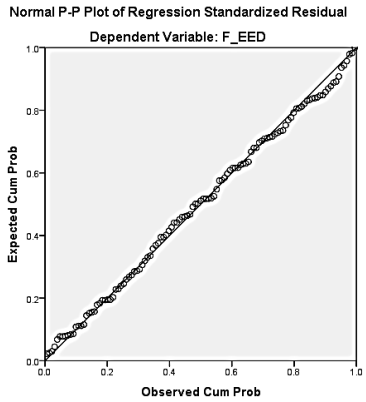
a. Dependent Variable: F_EED

Homoscedasticity



Normality





APPENDIX F

Cover Letter and Questionnaire (English Version)

Questionnaire for the Ph. D. Dissertation Research,
"Strategic Organizational Knowledge Orientation and Firm Performance:
An Empirical Research of Beverage Businesses in Thailand"

Dear Sir/Madam,

This research is a part of the doctoral dissertation of Miss Chutikorn Prungkiat at the Mahasarakham Business School, Mahasarakham University, Thailand. The objective of this research is to investigate the relationships among strategic organizational knowledge orientation and firm performance of beverage businesses in Thailand. The questionnaire is divided into 6 sections:

Section 1: Personal information of beverage businesses executives in Thailand,
Section 2: General information of beverage businesses in Thailand,
Section 3: Opinion on strategic organizational knowledge orientation of beverage businesses in Thailand,
Section 4: Opinion on business outcomes of beverage businesses in Thailand,
Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand,
Section 6: Recommendations and suggestions regarding business administration of beverage businesses in Thailand.

Your answer will be kept as confidential 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 in 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,

(Chutikorn Prungkiat)
Ph. D. Student
Mahasarakham Business School
Mahasarakham University, Thailand

Contact Info:
Office No: 043 – 754333 ext. 3431
Fax No: 043 – 754422
Cell phone: 085-766-3-775
E-mail: lipolipo2010@yahoo.com

Section 1: Personal information of beverages businesses executives in Thailand

1. Gender
   - ☐ Male
   - ☐ Female

2. Age
   - ☐ Less than 35 years old
   - ☐ 35 – 40 years old
   - ☐ 41-45 years old
   - ☐ More than 45 years old

3. Marital status
   - ☐ Single
   - ☐ Married
   - ☐ Divorced

4. Education level
   - ☐ Bachelor's degree
   - ☐ Higher than Bachelor's degree

5. Working experiences
   - ☐ Less than 5 years
   - ☐ 5- 10 years
   - ☐ 11 – 15 years
   - ☐ More than 15 years

6. Monthly salary
   - ☐ Less than 30,000 Baht
   - ☐ 30,000 – 45,000 Baht
   - ☐ 45,001 - 60,000 Baht
   - ☐ More than 60,000 Baht

7. Current position
   - ☐ Managing director
   - ☐ Managing partner
   - ☐ Other (Please Specify)……..…

Section 2: General information of beverages businesses in Thailand

1. Business owner type
   - □ Limited company
   - □ Partnership

2. Type of business
   - □ Alcoholic beverages business
   - □ Non-alcoholic beverages business
   - □ Alcoholic and Non-alcoholic beverages business

3. Period of time in business operation
   - □ Less than 5 years
   - □ 5-10 years
   - □ 11-15 years
   - □ More than 15 years

4. Number of full time employees
   - □ Less than 50 persons
   - □ 50 - 100 persons
   - □ 101 – 150 persons
   - □ More than 150 persons

5. Operating capital
   - □ Less than 5,000,000 Baht
   - □ 5,000,000 – 10,000,000 Baht
   - □ 10,000,001 – 15,000,000 Baht
   - □ More than 15,000,000 Baht

6. Average annual income
   - □ Less than 5,000,000 Baht
   - □ 5,000,000 – 10,000,000 Baht
   - □ 10,000,001 – 15,000,000 Baht
   - □ More than 15,000,000 Baht

7. Has a firm ever rewarded a prize regarding distinctive and qualified management
   - □ Rewarded
   - □ Never

8. Main customer
   - □ Thai
   - □ Foreigner

Section 3: Opinion on strategic organizational knowledge orientation of beverage businesses in Thailand

Strategic Organizational Knowledge Orientation	Levels of Agreement				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
Business Operation Understanding Focus 1. The firm believes that knowledge and understanding regard business operations can help the firm achieve its set goals effectively.	5	4	3	2	1
2. The firm focuses on having established operational guidelines clearly linked to targets which can help the firm run its administration more effectively.	5	4	3	2	1
3. The firm encourages analysis and checking of the business operation environment which can help the firm to have more effective operational planning.	5	4	3	2	1
4. The firm emphasizes that integrating operational processes can help the firm to apply resources effectively.	5	4	3	2	1
5. The firm concentrates on improving operational processes to help it to respond to changes in the environment as well.	5	4	3	2	1
Managerial Information Awareness 6. The firm believes that having good information in management can enable business operations to be more efficient and effective.	5	4	3	2	1
7. The firm is aware of a variety of information which is managed via the network among departments which can help the firm achieve its operational goals as well.	5	4	3	2	1
8. The firm pays attention to database development and data mining explicitly which can help the firm to manage itself even more successfully.	5	4	3	2	1
9. The firm promotes information system development in potential management, which can help the operation of firm to achieve its business goals as well.	5	4	3	2	1
10. The firm encourages the full application of information of administration which helps the organizational operations to be more efficient and effective.	5	4	3	2	1

Section 3: Opinion on strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Strategic Organizational Knowledge Orientation	Levels of Agreement				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
Decision-Making Skills Emphasis 11. The firm believes that having employees with the skills to make good decisions will be the basis for supporting the administration of the organization more efficiently and effectively.	5	4	3	2	1
12. The firm promotes employees who have the potential to confront and resolve complex business problems by themselves, which allows the administration to achieve its goals even more effectively.	5	4	3	2	1
13. The firm pays attention to developing decision-making skills continuously which will help to solve the problems in the firm in accordance with the principles and the targets set.	5	4	3	2	1
14. The firm encourages the building of criteria for determining the benefits to be derived from various alternatives, which will help maximize efficiency in decision-making.	5	4	3	2	1
15. The firm is aware of the effectiveness of decision-making skills which lead to maximum benefits.	5	4	3	2	1
Organizational Experience Usefulness 16. The firm believes that experience of good operations in the past will help the management of the present and the future to be even more effective.	5	4	3	2	1
17. The firm emphasizes that analysis of both advantages and disadvantages of past experience will allow current and future operational success to be even better.	5	4	3	2	1
18. The firm focuses on bringing good experiences in the past of the firm to use as a guideline for current operations which will help to bring the administration more success.	5	4	3	2	1

Section 3: Opinion on strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Strategic Organizational Knowledge Orientation	Levels of Agreement				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
19. The firm encourages the examination of defects that arose from the operation in the past to use to determine the direction and as an example of working to improve the present and the future which will help to achieve the goals.	5	4	3	2	1
Environmental Education Dynamism 20. The firm believes that education and understanding about the dynamics of the environment will help the operation to be more successful.	5	4	3	2	1
21. The firm encourages the checking of the requirements of customers regularly, which will give the firm information to improve planning to respond to customers' needs, which has a dynamically changing effect.	5	4	3	2	1
22. The firm emphasizes that the analysis of the situation is systematic and concrete, which will help make the operations of the firm fully efficient and effective.	5	4	3	2	1
23. The firm focuses on continuous learning and understanding of rules and regulations which can help the firm respond to the changes in operation as well.	5	4	3	2	1
24. The firm pays attention to research and development about the operating environment with a concrete system, which will help the firm to gain data for use in planning and developing operations more efficiently.	5	4	3	2	1

Section 4: Opinion on business outcomes of beverage businesses in Thailand

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
Organizational Creativity 1. The firm has initiatives to develop the concept about products or services and methods of operation which are always novel.	5	4	3	2	1
2. The firm invents products or services and methods of operation which differ from the original concept based on the research and development of the firm.	5	4	3	2	1
3. The firm has the unique concept of the development of products or services and methods of operation.	5	4	3	2	1
4. The firm has the new concept which can extend the original concept more completely.	5	4	3	2	1
New Idea Generation 5. The firm has management methods of organization that are new and fashionable.	5	4	3	2	1
6. The firm has new production processes that reduce production costs and expand capacity more efficiently.	5	4	3	2	1
7. The firm has a new logistics system for managing delivery of the goods to customers.	5	4	3	2	1
8. The firm has a new marketing concept and method in building excellent relationships after the sale.	5	4	3	2	1
Organizational Innovation 9. The firm has offered new products or services more quickly than its rivals.	5	4	3	2	1
10. The firm applies modern technology combined with products or services for adding value to an even greater extent.	5	4	3	2	1
11. The firm has new goods or services which are diverse and unique which make them difficult to imitate.	5	4	3	2	1
12. The firm has goods or services which can lead to application in combination with the original products as well.	5	4	3	2	1
Business Competitiveness 13. The firm has managed superiority over competitors in terms of cost and price.	5	4	3	2	1
14. The firm can maintain continuous efficiency in business operations.	5	4	3	2	1

Section 4: Opinion on business outcomes of beverage businesses in Thailand (Continued)

Business Outcomes	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
15. The firm has delivered value continuously in formats of outstanding innovation.	5	4	3	2	1
16. The firm can maintain a better image towards customers in all aspects.	5	4	3	2	1
Firm Performance 17. The firm has excellent sales growth and profitability compared to the past or compared to its competitors.	5	4	3	2	1
18. The firm has continually increasing operating results compared with outcomes in recent years.	5	4	3	2	1
19. The firm has a stable financial position and performance which can be maintained continuously in the long run.	5	4	3	2	1
20. The firm can maintain market share or have the growth rate of market share which improves steadily in the long run.	5	4	3	2	1
21. The firm is recognized and well-known by customers and the business community for its ability to operate and achieve its goals effectively.	5	4	3	2	1

Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand

Internal factor affecting strategic organizational knowledge orientation	**Levels of Agreement**				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
Top Management Leadership 1. The firm's executives believe that a clear vision and policy to work will help the administration to be more effective.	5	4	3	2	1
2. The firm's executives focus on the application of greater modern management in the organization to help the administration to be more efficient and effective.	5	4	3	2	1

Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Internal factor affecting strategic organizational knowledge orientation	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
3. The firm's executives promote a continuous improvement and development process of work in accordance with the current situation which allows operations to achieve goals.	5	4	3	2	1
4. The firm's executives encourage the employee to join continuous training and development which will give the employee the potential and the ability to work fully.	5	4	3	2	1
5. The firm's executives encourage investment and development of advanced technologies continuously that will help firm to manage its business very well under circumstances that are changing constantly.	5	4	3	2	1
Entrepreneurial Mindset 6. The firm believes that an entrepreneurial style mindset will help the administration succeed.	5	4	3	2	1
7. The firm encourages creative continuous innovation, which will lead to a dynamic competitive advantage.	5	4	3	2	1
8. The firm focuses on investment under acceptable risk which will help the administration to achieve its goals more easily.	5	4	3	2	1
9. The firm is aware that under fierce competition there will be opportunities and channels for the potential and ability of the firm which will allow the firm to plan operations more efficiently.	5	4	3	2	1
10. The firm encourages decisions about operations under cause and effect, which will help the administration to achieve its goals.	5	4	3	2	1
Human Resource Practices Effectiveness 11. The firm believes that good human resources management will help to achieve the operational targets set effectively.	5	4	3	2	1
12. The firm promotes a good process in recruitment which will allow the firm to have a knowledgable staff jointly performing work inside the organization.	5	4	3	2	1

Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Internal factor affecting strategic organizational knowledge orientation	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
13. The firm emphasizes job design in accordance with the ability of the employee which will help the firm's administration to be more effective.	5	4	3	2	1
14. The firm encourages the provision of training and skills development in the ongoing work which allows employees to gain basic knowledge in practical applications as well.	5	4	3	2	1
15. The firm concentrates on performance appraisal based on knowledge and ability which will be an incentive for employees to learn more about best practices.	5	4	3	2	1
Organizational Development Continuity 16. The firm believes that continual organizational development will help the organization to be more successful.	5	4	3	2	1
17. The firm concentrates on formulating plans to improve and develop the organization in a systematic and concrete manner, which will help the operations to achieve the goals even more effectively.	5	4	3	2	1
18. The firm focuses on analysis of the organizational environment which can be used to design better organizational administration.	5	4	3	2	1
19. The firm encourages the application of new technologies in operations which will enable the administration to achieve its targets better.	5	4	3	2	1
Intra-Organizational Collaboration Focus 20. The firm believes that collaboration is good within the organization to help the firm achieve its goals.	5	4	3	2	1
21. The firm emphasizes the integration of the principles, methods, and processes of work which will enable the firm to operate with consistency and achieve its goal.	5	4	3	2	1

Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Internal factor affecting strategic organizational knowledge orientation	Levels of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
22. The firm encourages coordination and communication within the organization which will enable the exchange and sharing of resources together effectively.	5	4	3	2	1
23. The firm focuses on teamwork within and between departments of the organization which will lead to better potential operations.	5	4	3	2	1
24. The firm concentrates on creating relationships within the organization which will help to create more effective administration.	5	4	3	2	1
Learning Culture 25. The firm believes that continuous learning will help the administration achieve its goals even more effectively.	5	4	3	2	1
26. The firm promotes employees who have developed their knowledge and ability to constantly keep pace with changes which will allow the management of operations according to the objectives planned.	5	4	3	2	1
27. The firm focuses on the work experience analysis in the past which will serve as a guideline in setting operations both at present and in the future.	5	4	3	2	1
28. The firm pays continuous attention to the creation of knowledge, skills and development, and information systems which will help make the organization development more effective.	5	4	3	2	1
Technology Support 29. The firm believes that having fully equipped technology will help achieve that goal even more effectively.	5	4	3	2	1
30. The firm emphasizes continuous investment in technology to allow the administration to be more successful.	5	4	3	2	1
31. The firm promotes continuous research and development about technology which can be applied to the management of the enterprise more effectively.	5	4	3	2	1

Section 5: Opinion on the effect of internal factor affecting strategic organizational knowledge orientation of beverage businesses in Thailand (Continued)

Internal factor affecting strategic organizational knowledge orientation	Levels of Agreement				
	Strongly Agree 5	**Agree 4**	**Neutral 3**	**Disagree 2**	**Strongly Disagree 1**
32. The firm encourages employee training and learning about advanced technologies continuously which will help with the application of more efficient technology.	5	4	3	2	1
33. The firm has a budget allocation for full investment in technology which will enable the organization to choose the technologies used in the firm at full capacity.	5	4	3	2	1

Section 6: Recommendations and suggestions regarding business administration of beverage businesses in Thailand

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Thank you for your time and attention to this matter.

APPENDIX G

Cover Letter and Questionnaire (Thai Version)

แบบสอบถามเพื่อการวิจัย
เรื่อง การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์และผลการดำเนินงาน:
วิจัยเชิงประจักษ์ของธุรกิจเครื่องดื่มในประเทศไทย

คำชี้แจง:

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาเรื่อง “การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์และผลการดำเนินงานในการวิจัยเชิงประจักษ์ของธุรกิจเครื่องดื่มในประเทศไทย” เพื่อเป็นข้อมูลในการจัดทำวิทยานิพนธ์ในระดับปริญญาเอกของดิฉันในหลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333

ดิฉันใคร่ขอความอนุเคราะห์จากท่านผู้ตอบแบบสอบถาม ได้โปรดตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนคำถาม 6 ตอน ดังนี้

ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารธุรกิจเครื่องดื่มในประเทศไทย

ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจเครื่องดื่มในประเทศไทย

ตอนที่ 3 ความคิดเห็นเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย

ตอนที่ 6 ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใดๆ ที่เปิดเผยเกี่ยวกับตัวท่าน ในการรายงานข้อมูล รวมทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าวกับบุคคลภายนอกอื่นใดโดยไม่ได้รับอนุญาตจากท่าน

ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่

( ) ต้องการ E – mail: _____ ( ) ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่าน หรือแนบนามบัตรของท่านมากับแบบสอบถามชุดนี้

ดิฉันขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้อย่างถูกต้องครบถ้วน และหวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อดิฉัน นางสาวชุติกร ปรุงเกียรติ โทรศัพท์เคลื่อนที่ 085-766-3-775 หรือ E – mail : lipolipo2010@yahoo.com

ขอแสดงความนับถืออย่างสูง

(นางสาวชุติกร ปรุงเกียรติ)
นิสิตระดับปริญญาเอก สาขาการจัดการ
คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

ตอนที่ 1: ข้อมูลทั่วไปเกี่ยวกับผู้บริหารธุรกิจเครื่องดื่มในประเทศไทย

คำชี้แจง: กรุณาทำเครื่องหมาย ✓ลงในช่องหน้าข้อความที่ตรงกับข้อมูลของท่าน

1. เพศ

☐ ชาย ☐ หญิง

2. อายุ

☐ น้อยกว่า 35 ปี ☐ 35 – 40 ปี

☐ 41-45 ปี ☐ มากกว่า 45 ปี

3. สถานภาพ

☐ โสด ☐ สมรส

☐ หม้าย/หย่าร้าง

4. ระดับการศึกษา

☐ ปริญญาตรีหรือเทียบเท่า ☐ สูงกว่าปริญญาตรี

5. ประสบการณ์ในการทำงาน

☐ น้อยกว่า 5 ปี ☐ 5- 10 ปี

☐ 11 – 15 ปี ☐ มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือน

☐ ต่ำกว่า 30,000 บาท ☐ 30,000 – 45,000 บาท

☐ 45,001-60,000 บาท ☐ มากกว่า 60,000 บาท

7. ตำแหน่งงานในปัจจุบัน

☐ กรรมการผู้จัดการ ☐ หุ้นส่วนผู้จัดการ

☐ อื่นๆ (โปรดระบุ) .....

ตอนที่ 2: ข้อมูลทั่วไปเกี่ยวกับธุรกิจเครื่องดื่มในประเทศไทย

1. รูปแบบธุรกิจ

☐ บริษัทจำกัด ☐ ห้างหุ้นส่วน

2. ประเภทธุรกิจ (ตอบได้มากกว่า 1 ข้อ)

☐ ธุรกิจเครื่องดื่มมีแอลกอฮอล์ ☐ ธุรกิจเครื่องดื่มไม่มีแอลกอฮอล์

3. ระยะเวลาในการดำเนินธุรกิจ

☐ น้อยกว่า 5 ปี ☐ 5-10 ปี

☐ 11-15 ปี ☐ มากกว่า 15 ปี

4. จำนวนพนักงานในปัจจุบัน

☐ น้อยกว่า 50 คน ☐ 50-100 คน

☐ 101-150 คน ☐ มากกว่า 150 คน

5. ทุนในการดำเนินงาน

☐ ต่ำกว่า 5,000,000 บาท ☐ 5,000,000-10,000,000 บาท

☐ 10,000,001-15,000,000 บาท ☐ มากกว่า 15,000,000 บาท

6. รายได้ของธุรกิจเฉลี่ยต่อปี

☐ ต่ำกว่า 5,000,000 บาท ☐ 5,000,000-10,000,000 บาท

☐ 10,000,001-15,000,000 บาท ☐ มากกว่า 15,000,000 บาท

7. ธุรกิจเคยได้รับรางวัลเกี่ยวกับการบริหารจัดการที่โดดเด่นและมีคุณภาพ

☐ เคย ☐ ไม่เคย

8. ลูกค้าหลักที่ใช้บริการ

☐ ลูกค้าในประเทศ ☐ ลูกค้าต่างประเทศ

ตอนที่ 3: ความคิดเห็นเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย

การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
Business Operation Understanding Focus 1. กิจการเชื่อมั่นว่าการมีความรู้และความเข้าใจในการดำเนินงานเป็นอย่างดี จะส่งผลให้การดำเนินงานบรรลุความสำเร็จตามเป้าหมายที่ตั้งไว้ได้อย่างมีประสิทธิภาพ	5	4	3	2	1
2. กิจการมุ่งเน้นให้มีการกำหนดแนวทางการปฏิบัติงานที่เชื่อมโยงกับเป้าหมายได้อย่างชัดเจน ซึ่งจะช่วยให้การบริหารงานมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
3. กิจการสนับสนุนให้มีการวิเคราะห์และตรวจสอบสภาพแวดล้อมในการดำเนินธุรกิจ ซึ่งจะช่วยให้มีการวางแผนการดำเนินงานมีประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
4. กิจการให้ความสำคัญกับการบูรณาการกระบวนการดำเนินงานต่างๆเข้าด้วยกัน ซึ่งจะช่วยให้มีการประยุกต์ใช้ทรัพยากรได้อย่างมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
5. กิจการให้ความสนใจกับการปรับปรุงกระบวนการดำเนินงานอยู่เสมอ ซึ่งจะช่วยให้กิจการสามารถตอบสนองต่อการเปลี่ยนแปลงได้ดียิ่งขึ้น	5	4	3	2	1
Managerial Information Awareness 6. กิจการเชื่อมั่นว่าการมีข้อสนเทศทางการบริหารที่ดีจะทำให้สามารถดำเนินธุรกิจได้อย่างมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
7. กิจการตระหนักเสมอว่าความหลากหลายของข้อสนเทศทางการบริหารที่เกิดจากการเชื่อมโยงระหว่างหน่วยงานเข้าด้วยกัน จะช่วยทำให้การบริหารงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
8. กิจการให้ความสำคัญกับการพัฒนาระบบฐานข้อมูลและเหมืองข้อมูลที่เป็นรูปธรรม ซึ่งจะช่วยให้การดำเนินงานประสบความสำเร็จได้มากยิ่งขึ้น	5	4	3	2	1

ตอนที่ 3: ความคิดเห็นเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
9. กิจการส่งเสริมให้มีการพัฒนาระบบสารสนเทศในการบริหารงานที่มีศักยภาพ ซึ่งจะช่วยให้การดำเนินงานขององค์กรสามารถบรรลุเป้าหมายได้เป็นอย่างดี	5	4	3	2	1
10. กิจการสนับสนุนให้มีการประยุกต์ใช้ข้อสนเทศทางการบริหารงานอย่างเต็มที่ ซึ่งจะช่วยทำให้การดำเนินงานขององค์กรมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
Decision Making Skills Emphasis 11. กิจการเชื่อมั่นว่าการที่บุคลากรมีทักษะการตัดสินใจที่ดีจะเป็นพื้นฐานในการสนับสนุนการบริหารจัดการให้มีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
12. กิจการส่งเสริมให้บุคลากรมีศักยภาพในการเผชิญหน้าและแก้ไขปัญหาทางธุรกิจที่ซับซ้อนได้ด้วยตนเอง ซึ่งจะช่วยทำให้การบริหารงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
13. กิจการให้ความสำคัญกับการพัฒนาทักษะการตัดสินใจอย่างต่อเนื่อง ซึ่งจะช่วยทำให้การแก้ปัญหาต่างๆ ขององค์กรเป็นไปตามหลักการและเป้าหมายที่วางไว้ได้เป็นอย่างดี	5	4	3	2	1
14. กิจการสนับสนุนให้มีการสร้างหลักเกณฑ์ในการกำหนดผลประโยชน์ที่ได้รับมาจากทางเลือกต่างๆ ซึ่งจะช่วยทำให้การตัดสินใจเกิดประสิทธิภาพสูงสุด	5	4	3	2	1
15. กิจการตระหนักเสมอว่าทักษะการตัดสินใจที่ดีและมีประสิทธิผล ซึ่งจะทำให้กิจการได้รับประโยชน์สูงสุด	5	4	3	2	1
Organizational Experience Usefulness 16. กิจการเชื่อมั่นว่าประสบการณ์ในการดำเนินงานที่ดีในอดีต จะช่วยให้การบริหารงานในปัจจุบันและอนาคตมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1

ตอนที่ 3: ความคิดเห็นเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
17. กิจการให้ความสำคัญกับการวิเคราะห์ข้อดี ข้อเสียของประสบการณ์การทำงานในอดีต ซึ่งจะช่วยให้การดำเนินงานในปัจจุบันและอนาคตประสบความสำเร็จได้ดียิ่งขึ้น	5	4	3	2	1
18. กิจการมุ่งเน้นให้มีการนำเอาประสบการณ์ที่ดีในอดีตมาใช้ในการกำหนดแนวทางในปัจจุบัน ซึ่งจะช่วยทำให้การบริหารงานประสบความสำเร็จมากยิ่งขึ้น	5	4	3	2	1
18. กิจการมุ่งเน้นให้มีการนำเอาประสบการณ์ที่ดีในอดีตมาใช้ในการกำหนดแนวทางในปัจจุบัน ซึ่งจะช่วยทำให้การบริหารงานประสบความสำเร็จมากยิ่งขึ้น	5	4	3	2	1
19. กิจการสนับสนุนให้นำเอาข้อบกพร่องที่เกิดขึ้นจากการทำงานในอดีตมาใช้ในการกำหนดทิศทางและเป็นตัวอย่างในการปรับปรุงการทำงานในปัจจุบันและอนาคต ซึ่งจะช่วยให้การดำเนินงานบรรลุเป้าหมายตามที่กำหนดไว้ได้เป็นอย่างดี	5	4	3	2	1
Environmental Education Dynamism 20. กิจการเชื่อมั่นว่าการศึกษาและทำความเข้าใจในการเปลี่ยนแปลงของสภาพแวดล้อม จะช่วยทำให้การดำเนินงานประสบความสำเร็จได้มากยิ่งขึ้น	5	4	3	2	1
21. กิจการสนับสนุนให้มีการตรวจสอบความต้องการของลูกค้าอย่างสม่ำเสมอ ซึ่งจะทำกิจการมีข้อมูลเพื่อการปรับแผนงานให้สามารถตอบสนองต่อการเปลี่ยนแปลงความต้องการของลูกค้าได้เป็นอย่างดี	5	4	3	2	1
22. กิจการให้ความสำคัญกับการวิเคราะห์สถานการณ์ในการดำเนินงานอย่างเป็นระบบและเป็นรูปธรรม ซึ่งจะช่วยทำให้การดำเนินงานเกิดประสิทธิภาพและประสิทธิผลอย่างเต็มที่	5	4	3	2	1

ตอนที่ 3: ความคิดเห็นเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
23. กิจการมุ่งมั่นในการเรียนรู้และทำความเข้าใจกฎ ระเบียบและข้อบังคับอย่างต่อเนื่อง ซึ่งจะช่วยให้กิจการสามารถตอบสนองต่อการเปลี่ยนแปลงการดำเนินงานได้ดียิ่งขึ้น	5	4	3	2	1
24. กิจการให้ความสำคัญกับการวิจัยและพัฒนาสภาพแวดล้อมการดำเนินงานอย่างเป็นระบบและเป็นรูปธรรม ซึ่งจะช่วยให้กิจการมีข้อมูลในการวางแผนและพัฒนาการดำเนินงานได้อย่างมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1

ตอนที่ 4: ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
Organizational Creativity 1. กิจการมีการริเริ่มในการพัฒนาแนวคิดเกี่ยวกับการผลิตสินค้าหรือบริการและวิธีการดำเนินงานที่มีความแปลกใหม่อยู่เสมอ	5	4	3	2	1
2. กิจการมีการคิดค้นสินค้าหรือบริการและวิธีการดำเนินงานที่แตกต่างจากแนวคิดเดิมผ่านกระบวนการวิจัยและพัฒนา	5	4	3	2	1
3. กิจการมีแนวคิดในการพัฒนาสินค้าหรือบริการและวิธีการดำเนินงานที่มีเอกลักษณ์ไม่ซ้ำใคร	5	4	3	2	1
4. กิจการมีแนวคิดใหม่ๆที่สามารถนำไปต่อยอดแนวคิดเดิมให้มีความสมบูรณ์มากยิ่งขึ้น	5	4	3	2	1

ตอนที่ 4: ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
New Idea Generation 5. กิจการมีวิธีการบริหารจัดการองค์กรที่ใหม่และทันสมัย	5	4	3	2	1
6. กิจการมีกระบวนการผลิตใหม่ๆที่ช่วยลดต้นทุนการผลิตและขยายกำลังการผลิตได้อย่างมีประสิทธิภาพ	5	4	3	2	1
7. กิจการมีระบบใหม่ๆในการจัดการส่งสินค้าให้ถึงมือลูกค้าได้เป็นอย่างดี	5	4	3	2	1
8. กิจการมีแนวคิดทางการตลาดใหม่ๆและวิธีการสร้างสัมพันธภาพหลังการขายที่เป็นเลิศ	5	4	3	2	1
Organizational Innovation 9. กิจการมีการนำเสนอสินค้าหรือบริการใหม่อย่างรวดเร็วเหนือกว่าคู่แข่ง	5	4	3	2	1
10. กิจการมีการประยุกต์ใช้เทคโนโลยีที่ทันสมัยร่วมกับสินค้าหรือบริการเพื่อเพิ่มคุณค่าให้มากขึ้น	5	4	3	2	1
11. กิจการมีสินค้าหรือบริการใหม่ๆที่มีความหลากหลายและมีเอกลักษณ์เฉพาะตัวยากต่อการเลียนแบบ	5	4	3	2	1
12. กิจการมีสินค้าหรือบริการที่สามารถนำไปประยุกต์ใช้ร่วมกับผลิตภัณฑ์เดิมได้เป็นอย่างดี	5	4	3	2	1
Business Competitiveness 13. กิจการมีการบริหารจัดการต้นทุนและราคาได้เหนือกว่าคู่แข่งขัน	5	4	3	2	1
14. กิจการสามารถรักษาประสิทธิภาพในการดำเนินธุรกิจอย่างต่อเนื่อง	5	4	3	2	1
15. กิจการมีการส่งมอบคุณค่าในรูปของนวัตกรรมที่โดดเด่นอยู่เสมอ	5	4	3	2	1

ตอนที่ 4: ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
16. กิจการสามารถรักษาภาพลักษณ์ที่ดีในทุกๆด้าน	5	4	3	2	1
Firm Performance 17. กิจการมียอดขายเจริญเติบโตและสามารถทำกำไรได้อย่างดีเยี่ยมเมื่อเปรียบเทียบกับในอดีตหรือเมื่อเปรียบเทียบกับคู่แข่งขัน	5	4	3	2	1
18. กิจการมีผลการดำเนินงานที่เพิ่มขึ้นอย่างต่อเนื่องเมื่อเทียบกับผลการดำเนินงานในปีที่ผ่านมา	5	4	3	2	1
19. กิจการมีฐานะทางการเงินและผลการดำเนินงานที่มั่นคงและมีเสถียรภาพ สามารถดำเนินกิจการต่อไปได้อย่างต่อเนื่องในระยะยาว	5	4	3	2	1
20. กิจการสามารถรักษาส่วนแบ่งทางการตลาดได้อย่างมั่นคงหรือมีอัตราการเจริญเติบโตของส่วนแบ่งตลาดเพิ่มสูงขึ้นเรื่อยๆ ในระยะยาว	5	4	3	2	1
21. กิจการได้รับการยอมรับและเป็นที่รู้จักของลูกค้าและแวดวงการดำเนินธุรกิจถึงความสามารถในการดำเนินงานกิจการที่มีประสิทธิภาพและบรรลุผลตามเป้าหมายที่ตั้งไว้	5	4	3	2	1

ตอนที่ 5: ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
Top Management Leadership 1. ผู้บริหารระดับสูงเชื่อมั่นว่าการมีวิสัยทัศน์และนโยบายในการทำงานที่ชัดเจน จะช่วยทำให้การบริหารงานมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
2. ผู้บริหารระดับสูงมุ่งเน้นให้มีการประยุกต์ใช้วิธีการบริหารจัดการสมัยใหม่ในองค์กรมากขึ้น ซึ่งจะช่วยให้การบริหารงานมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1
3. ผู้บริหารระดับสูงส่งเสริมให้มีการปรับปรุงและพัฒนากระบวนการทำงานอย่างต่อเนื่องและให้สอดคล้องกับสถานการณ์ จะช่วยให้การดำเนินงานสามารถบรรลุเป้าหมายได้เป็นอย่างดี	5	4	3	2	1
4. ผู้บริหารระดับสูงสนับสนุนให้บุคลากรเข้าร่วมการฝึกอบรมและพัฒนาอย่างต่อเนื่อง จะช่วยทำให้บุคลากรมีศักยภาพและความสามารถในการทำงานอย่างเต็มที่	5	4	3	2	1
5. ผู้บริหารระดับสูงให้ความสำคัญกับการลงทุนและพัฒนาเทคโนโลยีที่ทันสมัยอย่างต่อเนื่อง ซึ่งจะช่วยทำให้กิจการสามารถบริหารงานได้เป็นอย่างดีภายใต้สถานการณ์ที่มีการเปลี่ยนแปลงอย่างต่อเนื่อง	5	4	3	2	1
Entrepreneurial Mindset 6. กิจการเชื่อมั่นว่าการมีแนวความคิดเยี่ยงผู้ประกอบการจะช่วยทำให้การบริหารงานประสบความสำเร็จได้เป็นอย่างดี	5	4	3	2	1
7. กิจการสนับสนุนให้มีการสร้างสรรค์นวัตกรรมใหม่อย่างต่อเนื่อง ซึ่งจะช่วยให้การทำงานได้เปรียบทางการแข่งขันอย่างต่อเนื่อง	5	4	3	2	1
8. กิจการมุ่งเน้นให้มีการลงทุนภายใต้ความเสี่ยงที่ยอมรับได้ ซึ่งจะช่วยทำให้การบริหารงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1

ตอนที่ 5: ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
9. กิจการตระหนักเสมอว่าภายใต้สถานการณ์การแข่งขันที่รุนแรง จะมีโอกาสและช่องทางสำหรับกิจการที่มีศักยภาพและความสามารถเสมอ ซึ่งจะช่วยให้กิจการมีการวางแผนการดำเนินงานที่มีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
10. กิจการมุ่งเน้นให้มีการตัดสินใจในการดำเนินงานต่างๆ ตามเหตุและผล ซึ่งจะช่วยให้การบริหารงานบรรลุเป้าหมายได้เป็นอย่างดี	5	4	3	2	1
Human Resource Practices Effectiveness 11. กิจการเชื่อมั่นว่าการบริหารทรัพยากรมนุษย์ที่ดีจะช่วยให้การดำเนินงานบรรลุความสำเร็จตามเป้าหมายที่ตั้งไว้ได้อย่างมีประสิทธิภาพ	5	4	3	2	1
12. กิจการส่งเสริมให้มีกระบวนการในการคัดเลือกบุคลากรที่ดี ซึ่งจะช่วยให้กิจการมีบุคลากรที่มีความรู้ ความสามารถเข้ามาปฏิบัติงานภายในองค์กรอย่างต่อเนื่อง	5	4	3	2	1
13. กิจการให้ความสำคัญกับการออกแบบงานให้สอดคล้องกับลักษณะความสามารถของบุคลากร ซึ่งจะช่วยทำให้การบริหารงานเกิดประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
14. กิจการสนับสนุนให้มีการฝึกอบรมและพัฒนาทักษะในการทำงานอย่างต่อเนื่อง ซึ่งจะช่วยทำให้บุคลากรมีความรู้พื้นฐานในการปฏิบัติงานได้เป็นอย่างดี	5	4	3	2	1
15. กิจการให้ความสำคัญกับการประเมินผลการปฏิบัติงานตามความรู้ ความสามารถ ซึ่งจะเป็นแรงจูงใจให้บุคลากรเกิดการเรียนรู้ในการปฏิบัติงานมากยิ่งขึ้น	5	4	3	2	1
Organizational Development Continuity 16. กิจการเชื่อมั่นว่าการพัฒนาองค์กรอย่างต่อเนื่องจะทำให้องค์กรประสบความสำเร็จได้มากขึ้น	5	4	3	2	1

ตอนที่ 5: ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
17. กิจการให้ความสำคัญกับการกำหนดแผนในการปรับปรุงและพัฒนาองค์กรอย่างเป็นระบบและเป็นรูปธรรม ซึ่งจะช่วยทำให้การดำเนินงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
18. กิจการมุ่งเน้นให้มีการวิเคราะห์สภาพแวดล้อมขององค์กร ซึ่งสามารถนำมาใช้เป็นข้อมูลในการออกแบบการบริหารองค์กรได้ดียิ่งขึ้น	5	4	3	2	1
19. กิจการสนับสนุนให้การประยุกต์ใช้เทคโนโลยีใหม่ๆ ในการดำเนินงาน ซึ่งจะช่วยให้การบริหารองค์กรสามารถบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
Intra-Organizational Collaboration Focus 20. กิจการเชื่อมั่นว่าการทำงานร่วมกันเป็นอย่างดีภายในองค์กร จะช่วยทำให้การทำงานบรรลุเป้าหมายได้เป็นอย่างดี	5	4	3	2	1
21. กิจการให้ความสำคัญกับการบูรณาการหลักการ วิธีการ กระบวนการทำงานเข้าด้วยกัน ซึ่งจะช่วยให้การทำงานสอดคล้องและบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
22. กิจการสนับสนุนให้มีการประสานงานและการสื่อสารภายในองค์กรอย่างต่อเนื่อง ซึ่งจะช่วยให้เกิดการแลกเปลี่ยนและแบ่งปันทรัพยากรร่วมกันอย่างมีประสิทธิภาพ	5	4	3	2	1
23. กิจการมุ่งเน้นให้มีการทำงานเป็นทีมภายในหน่วยงานและระหว่างหน่วยงานในองค์กรเดียวกัน ซึ่งจะทำให้เกิดศักยภาพในการดำเนินงานมากยิ่งขึ้น	5	4	3	2	1
24. กิจการให้ความสำคัญกับการสร้างสรรค์ความสัมพันธ์ระหว่างกันภายในองค์กร ซึ่งจะช่วยให้การบริหารงานมีประสิทธิผลมากยิ่งขึ้น	5	4	3	2	1

ตอนที่ 5: ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจเครื่องดื่มในประเทศไทย (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
Learning Culture 25. กิจการเชื่อมั่นว่าการเรียนรู้อย่างต่อเนื่อง จะช่วยทำให้การบริหารงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
26. กิจการส่งเสริมให้บุคลากรมีการพัฒนาความรู้ความสามารถอย่างต่อเนื่องให้ทันต่อการเปลี่ยนแปลงที่เกิดขึ้น ซึ่งจะช่วยให้การบริหารงานเป็นไปตามวัตถุประสงค์ที่วางแผนไว้	5	4	3	2	1
27. กิจการมุ่งเน้นให้มีการวิเคราะห์ประสบการณ์การทำงานในอดีต ซึ่งจะใช้เป็นแนวทางในการกำหนดการดำเนินงานทั้งในปัจจุบันและอนาคต	5	4	3	2	1
28. กิจการให้ความสำคัญกับการสร้างสรรค์ความรู้ความสามารถ และพัฒนาระบบข้อมูลอย่างต่อเนื่อง ซึ่งจะช่วยทำให้การพัฒนาองค์กรมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
Technology Support 29. กิจการเชื่อมั่นว่าการมีเทคโนโลยีที่เพียบพร้อม จะช่วยทำให้การดำเนินงานบรรลุเป้าหมายได้ดียิ่งขึ้น	5	4	3	2	1
30. กิจการให้ความสำคัญกับการลงทุนในเทคโนโลยีอย่างต่อเนื่อง ซึ่งจะช่วยให้การบริหารงานประสบความสำเร็จได้มากยิ่งขึ้น	5	4	3	2	1
31. กิจการส่งเสริมให้มีการวิจัยและพัฒนาเทคโนโลยีอย่างต่อเนื่อง ซึ่งจะทำให้สามารถประยุกต์ใช้กับการบริหาร ขององค์กรอย่างมีประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
32. กิจการส่งเสริมให้บุคลากรได้เรียนรู้และฝึกอบรมทางด้านเทคโนโลยีที่ทันสมัยอย่างต่อเนื่อง ซึ่งจะช่วยให้มีการประยุกต์ใช้เทคโนโลยีให้ประสิทธิภาพมากยิ่งขึ้น	5	4	3	2	1
33. กิจการมีการจัดสรรงบประมาณ เพื่อการลงทุนด้านเทคโนโลยีอย่างเต็มที่ ซึ่งจะทำให้องค์กรเลือกสรรเทคโนโลยีที่นำมาใช้ในองค์กรได้อย่างเต็มประสิทธิภาพ	5	4	3	2	1

ตอนที่ 6: ข้อคิดเห็นและข้อเสนอแนะเกี่ยวกับการมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์ของธุรกิจเครื่องดื่มในประเทศไทย

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ขอขอบพระคุณเป็นอย่างสูงที่ท่านกรุณาสละเวลาตอบแบบสอบถามทุกข้อ

APPENDIX H
Letters to the Experts

บันทึกข้อความ

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

ที่ ศธ.0530.10/ **วันที่** พฤษภาคม 2558

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน รองศาสตราจารย์ ดร.ปพฤกษ์บารมี อุตสาหะวาณิชกิจ

ด้วย นางสาวชุฑิกร ปรุงเกียรติ นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์และผลการดำเนินงานวิจัยเชิงประจักษ์ของธุรกิจเครื่องดื่มในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.การุณย์ ประทุม)
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(รองศาสตราจารย์ ดร.ปพฤกษ์บารมี อุตสาหะวาณิชกิจ)
คณบดีคณะการบัญชีและการจัดการ
มหาวิทยาลัยมหาสารคาม

บันทึกข้อความ

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ที่ ศธ.0530.10/ วันที่ พฤษภาคม 2558

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.สุธนา บุญเหลือ

ด้วย นางสาวขุติกร ปรุงเกียรติ นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "การมุ่งเน้นความรู้ขององค์กรเชิงกลยุทธ์และผลการดำเนินงานวิจัยเชิงประจักษ์ของธุรกิจเครื่องดื่มในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์จากท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

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Prungkiat, C. and Ussahawanitchakit, P. (2014). Dynamic learning capability and firm sustainability: Evidence from foods businesses in Thailand. *Journal of International Business and Economics*, 14(2), 55-76.