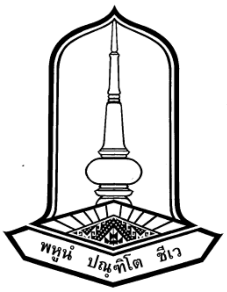

EFFECTS OF HUMAN RESOURCE DEVELOPMENT CAPABILITY ON FIRM SUCCESS OF AUTO PARTS BUSINESSES IN THAILAND

BY

APHI KHAMPHROH

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

January 2018

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ABSTRACT

The sources of competitive advantage of the business firm are largely derived from a firm's human resources. In this research, human resource development capability is proposed as a characteristic of an efficiently human resource development system in an organization that can effectively effect the behavior and operational performance of an organization and gain to sustainable competitive advantage. The research objective is to provide some theoretical contributions as well as managerial implication. The central theoretical contribution associates with conceptualizing human resource development capability as a multi-dimension construct. The human capital and contingency theories are applied to explain the relationship among human resource development capability, consequences, antecedent, and moderator.

The population and sample are the auto parts businesses in Thailand, totaling 128 firms and the response rate was approximately 21.59 percent. The data were collected by a questionnaires were sent to the HR directors or managers of each firm. Regression analysis was used for hypothesis testing. The finding indicates that strategic-development connectivity and innovation creativity focus have an influence on all of the consequences both behavioral outcome, operational outcome, and firm success. In addition, employee commitment and operational development have effects on business productivity, and all these have influences on firm competitiveness and firm success.

Likewise, all of the antecedents have a positive influence on human resource development capability. Particularly, information technology capability has a strong, significant, positive effect on all of human resource development capability's dimensions. However, transformational leadership orientation, human capital policy, organizational resource readiness, and environmental complexity force just have a

certain partial influence on human resource development capability's dimension. Regarding the moderating effects, survival culture plays a significant moderating role mainly in the relationships among organizational resource readiness, information technology capability with employee competency analysis, and individual ability support. As well, survival culture has been found to moderate the relationship between environmental complexity force and innovation creativity focus.

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CHAPTER I

INTRODUCTION

Overview

Currently, the world's people are collected into a single society by the joint influences of economy, technology, social culture and politics in the name of globalization. Consequently, a business organization is confronted with the radical environmental change in competition (Schmitt & Klarmer, 2015). To survive and succeed in competition, a business organization finds it necessary to achieve a sustained competitive advantage by fulfilling a value-enhancing strategy that differentiates it from its competitors, and is difficult for competitors to imitate (App, Merk, & Buttgen, 2012; Barney, 2000). The competitive advantage of the firm can be achieved by its supply and effective use of resources. If resources are valuable, rare, non-substitutable and inimitable, they are considered as important and strategic and enable the organization to gain a sustainable competitive advantage (App et al., 2012; Barney, 2000).

Toward to the success of a business firm in present, brutally competitive markets depends less on advantages associated with economies of scale, technology, patents and access to capital, and more on innovation, speed and adaptability. Rather, sources of competitive advantage are mainly derived from a firm's human resources (Datta, Guthrie, & Wright, 2005; Pfeffer, 1994, 2000). Because technology, manufacturing processes, products, service and strategy of the firm can be imitated, the intangible asset of human resources is difficult to copy and they represent a unique competitive advantage (Pfeffer, 1994, 2000). Henry Ford (Radhakrishna & Raja, 2015, p. 29) stated, "Take out my building, take out my machines and all capital but leave my men with me and I will become Henry Ford again." Human resource management (HRM) as the design and management of a human resource system, is based on employment policy, comprising a set of policies designed to maximize organizational integration, employee commitment, flexibility and work quality (Alagaraja, 2012). Strategic human resource management is the pattern of planned human resource developments and activities that are related to operational performance and on purpose

has led to achieve the organization's goals (Wright & McMahan, 1992). Effectively HRM has impacted on organization ability and operational performance that has led the organization to achieve the goal (Kazlauskaite & Buciuniene, 2008).

Human resource management as a system of an organizational setting, and human resource development (HRD) as a sub-set of human resource management (Jain & Gulati, 2016) emphasizes fuller integration of macro-level analysis linking human resources with organizational-level performance (Alagaraja, 2012). HRD is a process of developing and unleashing expertise for purposes of enhancing an individual, team, work process and organizational performance (Swanson, 2001). It can contribute to gaining sustainable competitive advantage through facilitating the development of competencies of employees and team work in an organization (Jain & Gulati, 2016). Previous research shows that HRD system, processes and practice are positively associated with operational performance such as reduction of turnover intention of employees (Batt, 2002; Singh, 2000), increments in productivity (Singh, 2000), producing a payoff in a team of bottom-line financial performance (Huselid, 1995), greater organizational commitment (Agrawal, 2003; Allen, Shore, & Griffeth, 2003; Gong, Law, Chang, & Xin, 2009; Meyer & Smith, 2000; Zacharatos, Sandy Hershcovis, Turner, & Barling, 2007), higher safety performance (Zacharatos, Barling, & Iverson, 2005), and better service performance (Chuang & Liao, 2010).

According to previous studies, the importance of the HRD process is: training and development, job enrichment, employee empowerment and productive organizational climate (Jain & Gulati, 2016; Jain & Kamble, 2013; Kandula, 2001). From the above, there is much research that studies about HRD in various dimensions, but those research perspective views of HRD are by using only elements of HRD perspective. It has less research that views human resource development in the perspective of characteristics of effective human resource development. In the definitions of HRD, there is some research that demonstrates the best characteristics of HRD system (Jain & Gulati, 2016; Radhakrishna & Raja, 2015; Sheehan, Garavan, & Carbery, 2013; Van Praag & Cramer, 2001). However, these characteristics have been rarely studied and measured the empirical research. In this research, the terms of "human resource development capability (HRDC)" has a broad focus in the best characteristics of human resource development system that can effectively influence the

operational performance of an organization by a combination from HRD literature and a collection of characteristics of best HRD system from concepts of competency-based needs analysis (Price, Lee, & Kozman, 2010), connatural management approach (Ambrozova, Kolenak, & Pokorny, 2016), learning organization (Armstrong & Foley, 2003), strategic human resource development (Alagaraja & Egan, 2013) and knowledge creativity (Ehlen, van der Klink, Roentgen, Curfs, & Boshuizen 2013), and suggests human resource development capability.

In this research, the successful implementation of human resource development capability has been regarded as a coactive orientation toward five new purposely dimensions which are: 1) employee competency analysis, 2) individual ability support, 3) continuous learning enhancement, 4) strategic-development connectivity and 5) innovation creativity focus. Moreover, the consequences of human resource development capability as employee commitment, operational development, business productivity, firm competitiveness and firm success have also been studied. Also this research focused on internal and external factors from human resource development literature as the antecedents of human resource development capability. They included transformational leadership orientation, human capital policy, organizational resource readiness, information technology capability and environmental complexity force. Survival culture has also been studied as the moderator of this study. Further, auto parts businesses in Thailand has been chosen to study as population frame of this research.

Automotive industry is one of leading industries that has driven the economic growth of Thailand (National Science and Technology Development Agency, 2016). One section of the automotive industry is the auto parts industry (NSTDA, 2016) that represents an extremely competitive business environment in Thailand (Sriboonlue & Ussahawanitchakit, 2014). Thailand is the top one number of automobile and auto part manufacturer in the Association of South East Asian Nations (ASEAN), and the ninth in the world with the total value in export of more 16.5 billion U.S. dollars in 2015, even though the growth has declined in 2016 (NSTDA, 2016). The auto parts businesses in Thailand have an important role in increasing and expanding the economics of Thailand on the part of economic growth and stability (Panya & Ussahawanitchakit, 2013). This research chooses the auto parts industry as a population because requirements of the international standard organization (ISO) of the automotive manufacturer or ISO 9001

and ISO/TS 16949 are an ISO technical specification aimed at the development of a quality management system that provides for continual improvement, emphasizing defect prevention and the reduction of variation and waste in the automotive industry supply chain. ISO/TS 16949 in conjunction with ISO 9001:2008, defines the quality management system requirements for the design and development, production and, when relevant, installation and service of automotive-related products (International Organization for Standardization, 2017). In the part of regarding human resources are necessary to: determine the essential competence for individual performing work moving quality of a product, provide training or take other activities to satisfaction these needs, appraise the effectiveness of the activities taken, ensure that its individuals are conscious of the relevance and importance of their actions and contribute to the achievement of the quality objectives and maintain appropriate records of education, training, skill, and experience (Hekelova & Srdosova, 2009). This standard illustrate that the auto parts industry in Thailand has to place importance on human resource development capability to response the standard regulation, and to achieve its goals in an extremely competitive environment.

Based on the literature reviewed, the human capital theory suggests that an individual level of human resource development can increase their investment motivation, decrease failure in the labor market, and accrue productivity at the organizational level (Bae & Patterson, 2014). It is necessary to place importance on the characteristics of human resource development system to enhance the human resources in their organization, and to increase the operations of an organization (Sheehan, Garavan, and Carbery, 2013). Moreover, the contingency theory suggests that higher organizational performance is an output of the best configuration of internal organizational design and structure with external context and environmental change (Lawrence & Lorsch, 1967). Also, organizational effectiveness depends on the competency of an organization to develop and adapt to the environment (Thorgren, Wincent, & Ortqvist, 2009). Therefore, in this research, the human capital theory has been adopted to demonstrate human resource development capability and its consequences. The contingency theory has also been utilized to interpret the antecedents of human resource development capability and the moderating effect of the

relationships among human resource development capability antecedents and consequences.

According to previous discussion, the new purposed dimensions of human resource development capability in this research are expected to directly effect firm success through the relationships of employee commitment, operational development, business productivity and firm competitiveness. The positive relationship of human resource development capability antecedents expected are: transformational leadership orientation, human capital policy, organizational resource readiness, information technology capability and environmental complexity force. Moreover, these are proposed to be moderated by survival culture.

This research investigate some theoretical contributions as well as managerial implications. The central theoretical contribution associates with conceptualizing human resource development capability as a multi-dimension construct, which is a new perspective of developed dimensions. It differentiates from prior human resource development literature. As a result, it clarifies the nature of human resource development capability for future research. This research also attempts to incorporate several theories to propose logical connects in a conceptual model, including human capital theory (Becker, 1962) and contingency theory (Drazin & Van de Ven, 1985). Furthermore, the results of this research may contribute to managerial practices focusing on human resource development capability implementation and usefulness of human resource development capability that stimulate and enhance the competitiveness and success of the auto parts businesses in Thailand.

Purpose of the Research

The main purpose of this research is to investigate the relationship between human resource development capability and firm success. The specific research purposes are as follows:

1. To investigate the relationships among the five dimensions of human resource development capability (employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity, innovation creativity focus) and employee commitment, business productivity, operational development, firm competitiveness and firm success,

2. To examine the influences of employee commitment and operational development on business productivity,

3. To test the impacts of employee commitment, operational development and business productivity on firm competitiveness,

4. To investigate the relationship between firm competitiveness and firm success,

5. To determine the relationship among transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force and each of the five dimensions of human resource development capability, and,

6. To test the moderating effect of survival culture that has influenced the relationships among transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force and each of the five dimensions of human resource development capability.

Research Questions

The key research question is how human resource development capability (employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity, innovation creativity focus) influences firm success. Also, specific research questions are presented as follows:

1. How does each dimension of the five dimensions of human resource development capability have an effect on employee commitment, business productivity, operational development, firm competitiveness and firm success?

2. How do employee commitment and operational development have an influence on business productivity?

3. How do employee commitment, operational development and business productivity relate to firm competitiveness?

4. How does firm competitiveness have an influence on firm success?

5. How do transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force have

an impact on each of the five dimensions of human resource development capability? and,

6. How does survival culture moderate the influence of leadership orientation, human capital policy, organizational resource readiness, IT capability, and environmental complexity force on each of the five dimensions of human resource development capability?

Scope of the Research

Regarding this research, the human capital and contingency theories are used to draw a conceptual framework and develop a set of hypotheses. All theorizations illustrate the relationships among the dimensions of human resource development capability, its antecedents and its consequences constructs. This research offers the theory of integration to demonstrate the relationship of each variable that focuses on investigation in order to fulfill the research question and objectives. Firstly, human capital is an employee skill acquisition and that skill acquisition can be achieved through education and training (Becker, 1962). The implication of human capital concepts is not only to gain employee skills, but also to enhance employee behavior and operational performance (Jiang, Lepak, Hu, & Baer, 2012). The basement for human capital is used to demonstrate how human resource development capability effect employee commitment, operational development, business productivity, firm competitiveness and firm success. Therefore, a firm with human capital such as human resource development capability, in this research, would be able to gain and archive its sustainable competitive advantage and best performance.

Secondly, the contingency theory suggests that a better understanding of the nature of organizational strategies is gained by examining its antecedents in forms of both internal and external environmental factors (Atuahene-Gima & Murray, 2004; Venkrataman & Camillus, 1984). It predicts that the nature of organizational strategy and organizational performance is better-understood, requiring an investigation of interaction between internal factors and external factors (Drazin & Van de Ven, 1985). On the other hand, no perfect determinant can explain the overall variation of its outcomes. The contingency theory in this research explains the relationships among

human resource development capability antecedents comprising transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. Moreover, the contingency theory is also operated to demonstrate the role of the moderating variable. It assumes that the influences and relationship of human resource development capability and its antecedents are contingent on survival culture.

In the important point to the research question and research objective, strategic human resource management is a strategic capability of an organization (Becker & Huselid, 2006). Thus, human resource development system is a sub-system of human resource management (Jain & Gulati, 2016) and a strategic capability of the organization as well. Human resource development capability has characteristics of best human resource development systems. In more detail, the ability of human resource development is a combination of human resource development and a capability of the organization that allows companies and firms to put their capability in the development of human resources by promoting systematic competency personnel and having the ability to work effectively. Thus, human resource development capability is the conceptual framework for developing human resources with excellence.

Human resource development capability comprises five critical dimensions; namely, employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. The consequences of human resource development capability in this research consists of employee commitment, operational development, business productivity, firm competitiveness and firm success. This research also investigates the antecedents of human resource development capability, while various antecedent factors affect human resource development capability. These are transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. Finally, to complete the relationship, moderators influence the relationship of the conceptualization model based on internal factors of survival culture. Figure 1 shows the relationships between human resource development capability and consequences that include antecedents of human resource development capability. (see Chapter two).

Furthermore, the auto parts businesses in Thailand are selected as a sample group for investigation. A list of 618 auto parts organization in Thailand are provided by the Thai Auto Parts Manufacturers Association (www.thaiautoparts.or.th, accessed December 2, 2016). This chosen industry represents a highly competitive business environment. Particularly, the principles of Automotive Manufacturer ISO 9001 and ISO/TS 16949 regarding human resources raise human resource development in the auto parts industry organization (Hekelova & Srdosova, 2009) and in the Thailand as the best auto parts manufacturer in ASIAN (NSTDA, 2016). It raises competitive intensity in the auto parts industry in Thailand. Therefore, auto parts businesses in Thailand have played a significant role in helping to increase and expand the Thai economy in terms of economic growth and stability (Ussahawanitchakit, 2012). In this research, a valid and reliable self-administered questionnaire is used as the main research instrument for data collection, and both descriptive and inferential statistical techniques consist of factor analysis, correlation analysis, and the Ordinary Least Squares (OLS) regression analyses which are processed to test all postulated hypotheses. In addition, the test of non-response bias is used to prevent possible response bias problems between early and late respondents.

Organization of the Dissertation

This research is structured in five chapters as follows: chapter one provides an overview of the research, the purposes of the research, the research question, the scope of the research, and the organization of the dissertation. Then, chapter two reviews previous research and relevant literature on best human resource development systems, explains the theoretical framework to describe the conceptual model and the relationship among the different variables, and develops the related hypotheses for testing. Chapter three discusses the empirical examination of the of the research methods, including sample selection and data collection procedure, the development and verification of the survey instrument by testing the reliability and validity, the statistics and equations used to test the hypotheses and the table summarizing the definitions and operational variables of the constructs. Chapter four demonstrates the results of statistical testing and discussion. Finally, chapter five details the conclusion,

the theoretical and managerial contributions, the limitations and the suggestions for future research directions.

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The previous chapter focuses on the overview of human resource development capability comprising the purposes of the research, research questions, research objective and scope of the research. This chapter demonstrates more precisely the understanding of human resource development capability, theoretical foundations, relevant literature review and research hypotheses, conceptual model of human resource development capability and firm success, and hypotheses development. Therefore, this chapter is organized into three sections. The first section represents the discussion of principal theoretical perspectives employed to explain the research phenomenon. These principal theories include the human capital theory and contingency theory. The second section provides the relevant literature of all constructs in the conceptual framework, definitions and previous studies on the subject that are relevant to human resource development capability. Also, a conceptual model is presented with the definition of all constructs and relevant previous literature. Finally, the final section illustrates the summary of hypotheses relationships among human resource development capability and its antecedents and consequences that are discussed in this chapter.

Theoretical Foundations

Based on literature reviewed, there is little empirical research on human resource development capability integrating theory to describe the complete phenomena. To clearly understand the relationships among human resource development capability, its antecedents, consequences and moderators; the human capital and contingency theories were elaborated to explain the aforementioned relationships. These theories have synergy to describe, explain and predict all variables and relationships purposed in this research. Each of the applied theories is detailed as follows.

Human Capital Theory

The concept of human capital is based on the resource-based view (RBV) theory of Barney (1991). The RBV of the firm has been often used in the management research for over twenty years in order to understand the relationship of resources and competency of firms in the area of the working efficiency creation of profitability (Barney, 1991; Lippman & Rumelt, 1982; Rumelt, 1984; Wernerfelt, 1984). The RBV is the theory used to explain about interesting resources and the competitive advantage of the firms. The resources and capabilities of firms have led firms to competitive advantage, not only in consideration of cost and product differentiation, but that firms should consider resource planning development for responsive external environmental change (Wernerfelf, 1984).

For the viewpoint of the RBV of the firm, Barney (1991) argued that the importance of resources led to competitive advantage that can be classified into four factors such as: 1) Valuable: these resources must have value for the business operation and real competition. Therefore, it can imply the effective resources for strategic creation leading to efficiency and effectiveness, such as well-known firms, business relations, as to technology capability. Moreover, a valuable resource is the resource of opportunity creation and decreases obstacles for the firms (Dess, Lumpkin, & Eisner, 2007). 2) Rare: these resources give the firms advantage. Also, the firms will have advantage from rare resources which do not have other competitors in the industry. Hence, the firms with rare resources have the advantage. 3) Inimitable: These resources are inimitable if any firms need to imitative. They have to use high cost as well as these resource to have identity, cannot be copied by each other, be ambiguous about production, and hardly imitate society such as in culture and creditability (Dess et al., 2007). 4) Non-substitutable: Resources cannot be substituted. Therefore, the resources of the four factors have led the competitor to face obstacles and increase the possibility for higher profit in the future.

The RBV of the firm explains the resources of firms leading to competitive advantage by utilizing the resources for efficiency (Wernerfelt, 1984). One of the source of competitive advantage are derived from human resource of the firm (Datta et al., 2005).Then, there are trends to utilize in strategic human resource management for studying the relationships of human resource practice and operational efficiency of the

firms (Combs, Liu, Hall, & Ketchen, 2006; Delery & Doty, 1996; Huselid, 1995). Ansoff (1965) argued that the effort and competency of employees for successful competitive advantage depend on resource utilization, both of tangible and intangible assets that are the foundation of strategy creation. Therefore, this makes one clearly understand receiving sustainable competitive advantage which is the main point of the RBV of the firm. Barney (1991) argued that a human resource is a resource of a firm for the resource-based view qualification. Hence, firms can get benefits from different collaboration of many workforces, leading to the competitive advantage of the firms (Barney & Wright, 1998). Moreover, Becker (1964) suggested the human capital theory focused on an explanation of the human resource concept.

Since the early 1960, human capital theory has taken the basic concepts from Becker (1964), who first proposed that humans are a valuable resource that can be developed into capital. The concept of the human capital theory has been spread throughout the research. According to the accumulation of human capital, increasing human capital leads to productive results and efficient service (Becker, 1964). Therefore, the study about human capital objectively leads to develop human capital, which is the most important thing used in organizational achievement (Datta et al., 2005; Jain & Gulati, 2016; Jiang et al., 2012).

Although human capital is an intangible asset, human capital usually cannot measure the value of a business. Human capital is a property that can add value to the tangible assets. The human is a kind of asset. It is generally unable to compare with business value, but it can be used to compare and measure their value that leads to best management (Brooking, 2010). Human capital management is also a person called human investment. A value is added to the individual. Training offers a higher position and salary. These are cited to upgrade the production standard. According to Becker (2007), money investment in a human is very important. Knowledge of an employee is mostly from outside the school. The on-the job-skill and knowledge employed by the workers appear after their work. Employees with the best health will have the ability to work with good quality. Nalbantian, Guzzo, Kieffer, & Doherty (2004) focused on the measure of human capital. They defined human capital as the stock of accumulated knowledge, as well as a skilled, experienced and creative staff and other relevant

attributes. Therefore, human capital is the key factor that could help humans use it for income or any other kind of work.

Pigou (1932), the first man who brought the theory of human capital into the discussion, has revealed that the investment of human capital is a physical human. Company and employees have a relationship between the employer and employee. Employers want people who are competent. Employees must invest in people, because employees are knowledgeable. It can be helpful to employers to invest in human capital. In the Journal of Political Economy, it states that since the year 1960, the human capital theory has been playing an important role as an influential economic theory. Many economists have taken part in expanding the ideas of human capital theory. The scholars of American economists such as Becker (1964) and Schultz (1998) have the prospective ideas that training and educating expenditures should be invested in money for raising a population's income.

The prospective idea about human capital has been brought to improve human resource value for support of the marketing of labor forces that are up-graded by educational investment, by training, and by raising human value. Block (1990) and Marginson (1993) have introduced the concept of human capital as well. However, the well-known applied ideology was printed in the year 1968 by Minser and Becker, titled "Human Capital.

Continually, Becker (2007) has divided the ideas about human capital into two characteristics which are specific and general. The specific human capital implicates personal knowledge and skill. The general human capital implicates public benefit. Human capital is analyzed as social capital, instructional capital and individual capital leadership. All these characters are dominated by human capital. Human capital refers to the knowledge, skills and competencies which carry people. There is a necessity to perform tasks such as technical skills, innovation, creativity, and capacity for leadership. Moreover, the human capital theory has been used as a reference theory for much research. For example, the human capital theory is used in the explanation the relationship between human resource management and employee motivation (Delery & Shaw, 2001; Gardner, Wright, & Moynihan, 2011), work attitudes (e,g., job satisfaction, commitment, perceived organizational support) and work behaviors (e.g., organizational citizenship behavior) (Jiang et al., 2012). Moreover, the underlying values of human

resource in the organization would tend to include learning as the key to ongoing improvement (Senge, 1990). Human capital theory has been also used to explained human resource outcome (e.g., voluntary turnover) and operational outcome such as organizational effectiveness (Wrigh, Dunford, & Snell, 2001), productivity (Dess & Shaw, 2001), product and service innovation (Crook, Todd, Combs, Woehr, & Ketchen Jr, 2011) and financial outcome (Morrow & McElroy, 2007; Shaw, Gupta, & Delery, 2005) included organizational profitability (Curtis, Hefley, & Miller, 1995) and organizational fit and flexibility (Evan & Davis, 2005; Wright & Snell, 1998).

However, the human capital theory fails the investigation of realism, due to weaknesses of method which for example in use of a single theoretical lens and closed system modeling, inappropriate application of mathematical tool, and multi-variable analysis of interdependent variables. Human capital theory imposes a single linear pathway on the complex path between heterogeneous education and work. It cannot explain how education augments productivity, or why salaries have become more unequal, or the role of status. This limitations are discussed with reference to research on social structure, work, earnings and education (Marginson, 2017).

In conclusion, the human capital theory is applied to explain the relationship among the five new purposed dimensions of human resource development capability. This foundation is the characteristic of human resource development system as a comprehensive set of firm abilities that enable firms and organizations to acquire, integrate, adapt, renew and combine their resources and capabilities, which fortify and patronize human resource outcomes. The components of the human resource outcome, in this research, are assessed by employee commitment, operational development, business productivity, firm competitiveness and firm success.

Contingency Theory

The contingency theory is a classic theory dominating organizational and strategic management research (Nath & Sudharshan, 1994). The core concept of the contingency theory is often used to explain research phenomena in all business management, marketing, finance, economic, and accounting literature. It attempts to identify and evaluate the conditions under what is likely to occur (Schoech, 2006), then decides the best practices and solutions regard the emerging situations.

Prior studies widely employed the contingency theory to examine the relationships between various endogenous and exogenous contextual factors (Wallace & Kreutzfeldt, 1991). Organizational context is the effect on the resource and development of organizations and human resource development (Katou, 2009), including on-the-job training (Versloot, Jong, & Thijjen, 2001). The heart of the contingency theory posits that if the firm wants to survive or effectively perform business operations, then the organizational structure and process of a firm must fit with its contexts: firm characteristics, culture, business environment, market conditions and technology (Cadez & Guilding, 2008; Drazin & Van de Ven, 1985). In the contingency theory, organizational structure is viewed as a function of context that is simultaneously determined by the external business environment, history and other organizational factors (Anderson & Lanen, 1999). These external factors are environmental or industrial factors such as industrial competition, government regulations, business environmental uncertainty (Gupta & Govindarajan, 1984; Khandwalla, 1972), stakeholder involvements and expectations, technological change, society, and economic conditions (Sauser, Reilly, & Shenhar, 2009). This leads to establishing or improving organizational management appropriate with changed situations, in order to obtain growth and survival (Chenhall & Langfield –Smith, 1998). Endogenous factors are the organizational factors or internal factors such as corporate vision, organizational climate, firm resources, experience, leadership and firm policy (Lawrence & Lorsch, 1967). The fits between exogenous and endogenous factors are deliberate organizational and firm performance. Therefore, superior organizational performance results in the proper alignment of internal and external contextual factors and operational management (Phokha & Ussahawanitchakit, 2010). Moreover, the contingency theory has been used as a reference theory for much researches. For example, the contingency theory is used to explanation the relationship between information technology capability and firm performance through environmental context (Stoel & Muhanna, 2009), explained environmental variables through organizational strategy and operational variables on organizational performance (Ginsberg & Venkatraman, 1985).

However, the contingency theory cannot adequately explained in various types of action which can be taken under different situations and it cannot offer much assistance to the practice of management. Moreover, the managerial action is to be

taken involves analysis of a large number of variables with multifarious dimension. Therefore, there is a possibility that managers may ignore the thorough analysis of all these variables and may resort to short-cut and easier way. In the empirical testing, it also difficult to test all factors in any situations because of the involvement of too many factors (Levitt et al., 1999).

The contingency theory in strategy literature holds that an appropriateness of strategies is contingent on competitive settings of businesses (Zeithaml, Varadarajan, & Zeithaml, 1988). In this research, the contingency theory is applied to explain the congruence among five antecedents and human resource development capability. This research expects that the fruitfulness of human resource development capability instituted by a firm will vary depending on transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. Moreover, the moderating approach is illustrated as a contingent variable which depends on the interaction between each of five antecedents and survival culture on human resource development capability.

Relevant Literature Review and Research Hypotheses

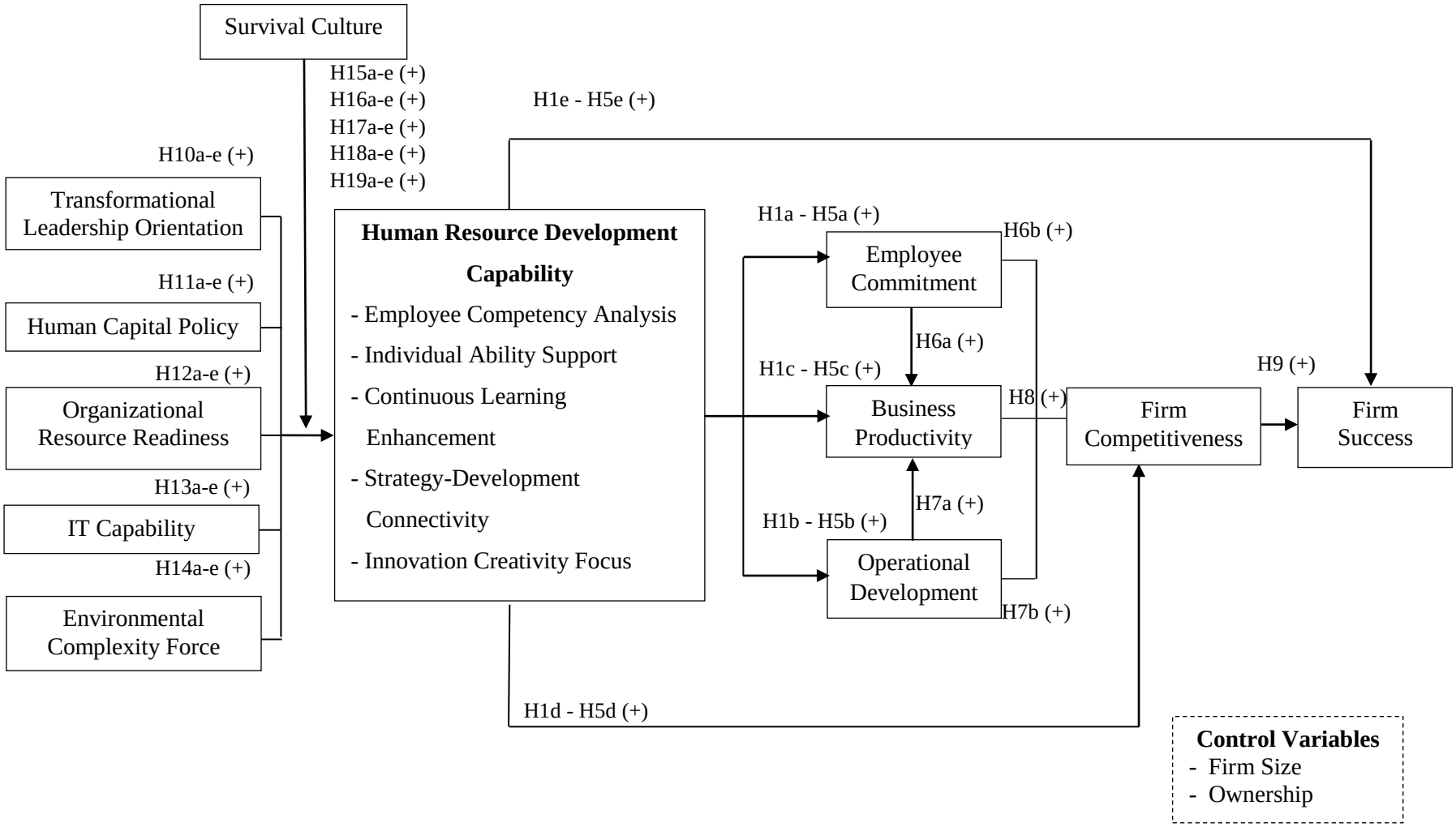
According to the theoretical foundations, this research is developed toward the integration of the human capital theory and contingency theory. Human resource development capability is a main variable and the center of this research. As described earlier, this research purposes that human resource development capability is positively and directly associated with firm success. Moreover, the mediating effects of employee commitment, operational development, business productivity and firm competitiveness are tested. Employee commitment, operational development, business productivity and firm competitiveness are supposed to have a positive relationship with firm success.

Secondly, the five antecedents of human resource development capability (transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force) are investigated and expect to yield positive relationships.

Lastly, this research also purposes that the strength of survival culture increases the relationship between human resource development capability and its antecedents.

Thus, Figure 1 illustrates the conceptual model of human resource development capability that includes the antecedents, consequents and moderating variables.

Figure 1: Conceptual Model of Human Resource Development Capability and Firm Success



Human Resource Development Capability

Human resource management is defined as the way employees are recruited, organized, developed, appraised, motivated and retained. Through proper planning and effective management of their people, organizations can achieve their goals (Wright & McMahan, 1992). Three primary dimensions of human resource management consist of skill-enhancement, motivation-enhancement and opportunity-enhancement (Jiang et al., 2012). It is a system in an organizational setting that works as a subset of the larger organizational system, and human resource development works as a subset of the human resource management system (Jian & Gulati, 2016). Human resource development is the activities and processes which are intended to have an impact on an organization and individual learning, and is constituted by planned interventional and individual learning processes (Hamlin & Stewart, 2011). Human resource development includes planned activities and processes designed to enhance organizational and individual learning and development human potential. It maximizes organizational effectiveness and performance, and helps bring about effective and beneficial change within and beyond the boundaries of an organization (Hamlin, 2004). Similarly, human resource development is the process of developing the human resources working in an organization by modernizing their knowledge and upgrading their skill, attitudes, and perceptions in order to meet the changing trends of the globalized economy, and also to utilize those developments for the attainment of the organizational goals (Michael, 1995). Another crucial viewpoint of human resource development is a system of strategic development and utilization of people working efficiently in the organization to cope with the environmental changes in business, competently managing the business challenges, and to gain competitive advantage (Huda, Karim, Ahmet, & Olu-Olu, 2007). Furthermore, it has some research that describes the definition of human resource development, which is shown in Table 1 below.

Table 1: The Summary of Definitions of Human Resource Development

Author(s)	Definition of Human Resource Development
Harbison & Myers (1964)	Human resource development is the process of increasing the knowledge, the skills and the capacities of all the people in a society.
Chalofsky & Lincoln (1983)	The discipline of human resource development is the study of how individuals and groups in organization change through learning.
Nadler & Nadler (1989)	Human resource development is a comprehensive learning system for the release of the organization's human potentials – a system that includes both vicarious (classroom, mediated, simulated) learning experiences and experiential, on-the-job experiences that are keyed to the organization's reasons for survival.
Michael (1995)	Human resource development is the process of developing the human resources working in an organization by modernizing their knowledge and upgrading their skill, attitudes and perceptions in order to meet the changing trends of the globalized economy and also to utilize those developments for the attainment of the organizational goals.
Swanson (1995)	Human resource development is a process of developing and unleashing human expertise through organizational development and personal training and development for the purpose of improving performance
Swanson & Holton (2001)	Human resource development is a process of improving an organization's performance through the capabilities of its personnel. Human resource development includes activities dealing with work design, aptitude, expertise and motivation.

Table 1: The Summary of Definition of Human Resource Development (continued)

Author(s)	Definition of Human Resource Development
Hamlin (2004)	Human resource development includes planned activities and processes designed to enhance organizational and individual learning, development human potential, maximize organizational effectiveness and performance and help bring about effective and beneficial change within and beyond the boundaries of organization.
Harrison & Kessels (2004)	HRD as an organizational process comprises the skilful planning and facilitation of a variety of formal and informal learning and knowledge processes and experiences, primarily but not exclusively in the workplace, in order that organizational progress and individual potential can be enhanced through the competence, adaptability, collaboration and knowledge-creating activity of all who work for the organization.
Huda & colleagues (2007)	Human resource development is a system of strategic development and utilization the peoples working efficiently in the organization to cope with the environmental changes in business, competently managing the business challenges and to gain competitive advantage.
Jain & Gulati (2016)	Human resource development is the process of developing value additions in the capabilities of individual employee, teams of employees and organization as a whole.

Human resource development system has a direct or indirect bearing on organizational performance (Jain & Gulati, 2016). Human resource contribution emphasizes fuller integration of micro-level and macro-level approaches and analysis linking human resource with organizational-level performance outcome (Alagaraja, 2012). This perspective is very significant for the management of organizations to look into while making strategic choices. There exists a consensus on the premise that human

resource development system can contribute to gain sustainable competitive advantage though facilitating the development of competencies of people and teamwork in an organization (Jain & Gulati, 2016). Human resource development method and technique consist of on-the-job training, mentorship, apprenticeship, vestibule training/simulators, web-based learning, instructor-led classroom training, programmed self-instruction, case studies/role playing, and systematic job rotations and transfers (Chatzimouratidis, Theotokas, & Lagoudis, 2012). Human resource development system and processes influence the organization's productivity, adaptability, flexibility, employee retention, quality of product or services competitiveness, reduction in costs, and as a whole, organization's overall performance (Jiang et al., 2012). In extant empirical research, human resource development system has a significant, positive impact on different outcomes of organizational performance (Batt & Colvin, 2011) including the productivity of human resource (Cho, Woods, Jang, & Erdem, 2006; Ely, 2004; Zwick, 2006), enhancement in profitability (return on investment, return on assets) (Ballot, Fakhfakh, & Taymaz, 2006; Faems, Sels, De Winne, & Maes, 2005; Paul & Anantharaman, 2003), quality of products or services (Katou & Budhwar, 2007; Lawler, Mohrman, & Ledford, 1998), employee commitment (Ahmad & Schroeder, 2003; Bulut & Culha, 2010) and a firm's overall performance (Fey & Bjorkman, 2001; Martell & Carroll, 1995).

In the human resource development research, three characteristics of human resource development is identified (Nalan & Garavan, 2016) that consists of: first, organizational level human resource development architecture or system characteristics that include the strategy or learning orientations (Aragon-Sanchez, Barba-Aragon, & Sanz-Valle, 2003; Gold & Thorpe, 2008), human resource development policy and programs (Admiraal & Lockhorst, 2009; Beaver & Lashley, 1998) and the strength of the human resource development system in terms of linkages between policies and practices (Devins & Johnnson, 2003; Gray & Mabey, 2005; Hoque & Bacon, 2008; McCole, Morrow, Ponsonby, & Kelly, 2001). Second, human resource development practice includes the use of external management training courses and qualification-based programs (Bryan, 2006; Loan-Clarke, Smith, & Whittaker, 2000; Marshall, Alderman, Wong, & Thwaites, 1995; Matlay, 2004), the amount of time devoted to delivering formal training programs (de Kok, 2002), the type of training methods used

(Fernald, Solomon, & Bradley, 1999; Raymond, Uwizeyemungu, Bergeron, & Gauvin, 2012; Sambrook, 2003; Smith & Barrett, 2014) and the use of apprenticeship learning for external qualifications (Forde & MacKenzie, 2004). Third, human resource development climate that is defined as perceptions that the employees can have on the developmental environment of their organization (Lakkoju, 2014) include opportunities for managers and employees to develop (Coetzer, 2007; Coetzer & Perry, 2008; Zientara, 2009), the climate for on-the-job training (Lorenzet, Cook, & Ozeki, 2006), the content of social support for employee involvement in training (Rauch, Frese, & Utsch, 2005) and employee attitudes concerning participation in human resource development (Wang, Tolson, Chiang, & Huang, 2010). In this research, it focuses on overall human resource development characteristics in a differential perspective.

In a review of the literature, previous research on human resource development literature has been concerned with many aspects such as training man-days per employee per year (Radhakrishna & Raja, 2015), general climate, workplace culture and human resource development mechanisms (Babushe & Narendranath, 2013; Lakkoju, 2014), planning support and personal management style (Hamlin, 2002), training and job enrichment (Rao, 1990), human resource development practice (Veth, Emans, Van der Heijden, Korzilius, & De Lange, 2015), level of human resource development competency (Khalil et al., 2009), investment on human resource development (Kumar, Nangia, & Rangnekar, 2012), improving individual effectiveness and performance (Hamlin & Stewart, 2011), training and development methods and techniques (Chatzimouratidis et al., 2012; Clarke, 2004), and outcome of human resource management (Zavyalova, 2009). More surprisingly, there is only a little empirical research that explains and measures best characteristics of human resource development system. Human resource development capability is a key element of this research. The term “capability” focuses on the role of strategic management in appropriately adapting, integrating and reconfiguring internal and external organizational resources, and the ability to match the requirements of the changing environment (Teece, Pisano, & Shuen, 1997).

Therefore, in this research, human resource development capability refers to the ability of a firm to be successful in developing human resources working in an organization by modernizing their knowledge and upgrading their skill, attitudes and

perceptions in order to meet the changing trends of the globalized economy and also to utilize those developments for the attainment of the organizational goals. Consequently, these reflect that resources and capability are key success factors for competitive advantage and sustainability (Barney, 1991); and human resource development capability becomes an increasingly important component of firm success.

This research proposes five dimensions of human resource development capability from an integrative review of prior literature consisting of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. Therefore, the research reviews the key dimension and other dimensions of human resource development capability in a diverse range of this term's definitions by divergent researchers who relate to a number of different perspectives. The summary of the key prior literature review on value creation is presented in Table 2 as the summary of the key conceptual and empirical research on human resource development capability.

Table 2: The Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability

Authors	Key Issue Examine	Main Finding
Rao & Pereira (1986)	Recent experiences in human resource development.	Human resource development is a process need to make the people grow continuously and the growth of people will ultimately lead to the growth and development of organization.
Smith (1988)	Human Resource Development: An Overview	Human resource development consists of programs and activities, direct and indirect, instructional and/or individual that positively affect the development of the individuals and the productivity of and profit of the organization.
London & Smither (1999)	Empowered self-development and continuous learning and also suggest continuous learning organization.	Organizations that need to change rapidly in response to changing conditions, structured employee and management development plans and programs become costly and impractical. Organizations can provide the resources that enable individual learning, but individuals must increasingly be responsible for their own development.

Table 2: Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability (continued)

Authors	Key Issue Examine	Main Finding
Luoma, 2000	Investigating the link between strategy and human resource development and suggest the capability-driven human resource development approach.	The capability-driven human resource development is introduced basing idea on organizational capability as a central source of competitive advantage. The organizational capability should be emphasized as the primary object of strategy a managerial attention should be focused on factors that support the capability.
Harrison & Kessels (2004)	Human Resource Development in a Knowledge Economy: An Organizational View	Human resource development as an organizational process comprises the skilful planning and facilitation of a variety of formal and informal learning and knowledge processes and experiences, primarily but not exclusively in the workplace, in order that organizational progress and individual potential can be enhanced through the competence, adaptability, collaboration and knowledge-creating activity of all who work for the organization.

Table 2: Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability (continued)

Authors	Key Issue Examine	Main Finding
Neffke & Henning (2013)	Investigate relatedness between industries in terms of the extent to which the same human capital can be employed in different industries. In particular, the author investigate the skill-relatedness among different industries by investigating labor flows between industries.	The degree to which firms can draw on their existing strengths to venture into new markets should therefore strongly affect their diversification decision. All the different resources of a firm, an important – if not the most important –resource of a firm is its employees and their skills. The author arrives at a measurement of relatedness that is derived from the revealed ability of skilled employees to move between industries.
Deb (2010)	Human resource development theory and practice.	To be survival in the present scenario of cut-throat competition, the organization have to develop appropriate human resource development strategies to manage their workforce in an organized manner and align their potential with that of their corporate missions and objectives.
Price and colleagues (2010)	Use of competency-based needs analysis in developing employee training program.	A basic training needs analysis examines the current state of performance and defines the desired state of performance, with the gap between the states characterizing needs.

Table 2: Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability (continued)

Authors	Key Issue Examine	Main Finding
Ehlen and colleagues (2013)	Explain that how the "enactment" of the three dimensions of social capital increases knowledge productivity and whether increased enactment is associated with improved innovation.	HRD has a critical role in conveying that innovation should be treated as an organic process by key stakeholders. HRD can support innovation by targeting each of the 4 factors of social capital identified and also by being an active supporter, coach and mentor to stakeholders involved with innovation. Action research which provides stakeholders with insight into their actions can help to facilitate change and innovation.
Kennett (2013)	Discusses the way in which employers provide training and how it has an impact on individual, organizational and industry skill development.	Employees expect their investment in training to raise the capability of the organization's collective skills and thereby to improve its productivity.
Park, Song, Yoon, & Kim (2013)	Organizations can stimulate individual innovative behavior by using proactive measures to encourage an organizational learning culture and employee engagement.	Human resource development practitioners have a role in enhancing employees' innovative behavior by encouraging a learning culture. HRD activities aimed at promoting employee engagement can have a positive association with innovation and organizational performance.

Table 2: Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability (continued)

Authors	Key Issue Examine	Main Finding
Huda, Anika, & Khaled (2014)	Study empirically the status and scope of strategic human resource development for manufacturing sector.	A strategically-oriented human resource development function can make a significant contribution to the success of an organization and this will manifest itself in the organization's ability to innovate, the quality of its strategic decision making, individual performance and productivity and how closely the skills of the organization are aligned with its strategic mission and plans and it most have evaluation system to identify an important and ability of employee to design work and planed a training program.
Sheehan & Garavan, (2014)	Innovation and human resource development. The critical role of innovation for sustained national, regional and organizational competitiveness	New growth theory posits that human capital, innovation and knowledge are significant contributors to growth.

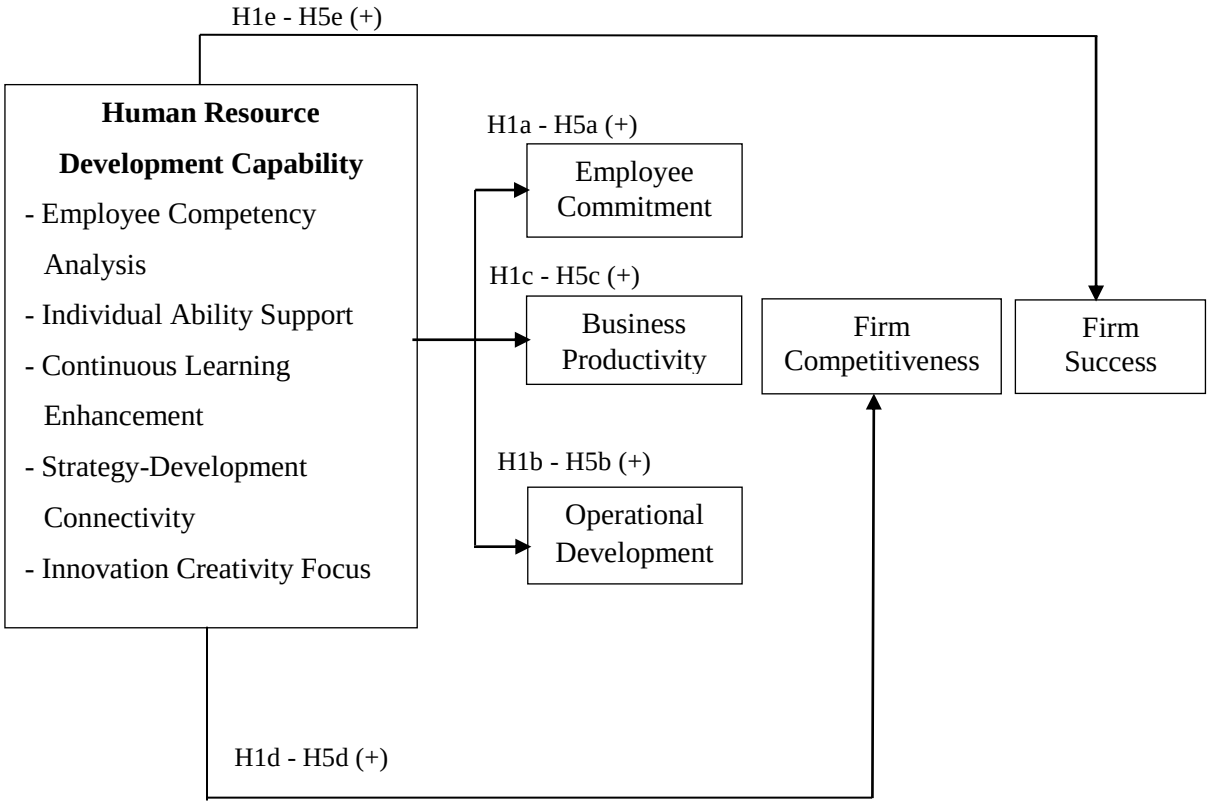
Table 2: Summary of the Key Conceptual and Empirical Research on Human Resource Development Capability (continued)

Authors	Key Issue Examine	Main Finding
Radhakrishna & Raja (2015)	The impact of human resource development initiatives on the performance of employment relations system in giant public sector steel industry in south India.	HRD includes quality of working life improvement opportunities such as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance, firm development and engagement which have a direct bearing on building employee relations. HRD is a continuous process to develop their general capability as an individual and enable them to exploit their inner potential.
Ambrozova and colleagues (2016)	Introduce the concept of Connatural Management Approach (CNM) and its potential for quality development of an individual in relation to management of organization and processes as well as management of people and human systems	The concept of one of the aspect of connatural management approach (CNM) is individual skill development for an effective action in the cognitive domain.
Jain & Gulati (2016)	Review of a wide array of previous research studies on human resource development and its impact on organizational performance as well as to synthesize the review results.	Human resource development is the process of developing value additions in the capabilities of individual employees, teams of employees and organization as a whole.

The Relationships among Human Resource Development Capability and Employee Commitment, Organizational Development, Business Productivity, Firm Competitiveness, and Firm Success

This section investigates the relationship among human resource development capability, which consists of five purposed dimensions: employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus; and five critical consequences which are employee commitment, operational development, business productivity, firm competitiveness and firm success. These relationships are presented as below:

Figure 2: The Relationships among Human Resource Development Capability, Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness and Firm Success



Employee Competency Analysis

Most human resource developments have evaluation systems to identify an important ability of employees to appropriately design work and plan a training program (Huda et al., 2014). Most fields of employee training have been gained through a variety of both methods with a heavy emphasis of on-the-job training within an apprentice-type learning system (Price et al., 2010). Although an on-the-job training program is the traditional method in teaching survey field employees on their jobs, when viewed critically, it has various limiting factors. Firstly, training for a competency of an employee through this type of learning process is lengthy in time. Secondly, the extent of knowledge gained can be limited in scope depending on the specific market in which the individual was employed. A competency-based needs analysis examines the current state of performance and defines the desired state of performance, with the gap between the states characterizing needs (Rossett, 1987) to truly understand the actual need for employee training (Price et al., 2010). Misanchuk (1984) identifies three main components of training needs including the competence or ability of individuals to perform a task, the relevance of a skill or ability for the job role, and finally, the individual's desire to undertake training. To focus on problem identification in the beginning of the process is, in some regards, not looking ahead toward the primary objective determining training needs to develop competent employees.

In this research, the concept of employee competency analysis is not only limited to the estimation of skill or an ability of individual to perform a task (Huda et al., 2014). The precise concept of employee competency analysis includes the aspect of identification and estimation of the actual need for employee training, and an individual’s desire to undertake training (Price et al., 2010). Moreover, the concept of employee competency analysis also refers to the firm’s operation for a human resource development planning. Therefore, employee competency analysis in this research is defined as the firm’s activities to identify and classify individuals and job-need-skill or the ability that includes an individual’s desire to undertake training for effective human resource development planning (Huda et al., 2014; Price et al., 2010; Rossett, 1987).

Many research studies have mentioned that that competency-based model is an important source for organizational performance in terms of employee development (Price et al., 2010). For example, the analysis of competency is positive a predictor on

employee commitment (Khan, Masrek, & Nadzar, 2015). Analysis discovered the absence of engineering curriculum for engineers from across various departments to be competent in design and development-related jobs (Ng, Chan, & Wong, 2006). Competency analysis would help bankers in enhancing their capabilities, promote benefits, reduce problems and also identify the factors related to success and failure of the implementation process (Imtiaz & Shahid, 2013). Therefore, the firm with employee competency analysis cues in human resource development capability will be able to attain greater employee commitment, operational development, business productivity, firm competitiveness and firm success. Thus, the hypotheses are proposed as follows:

Hypothesis 1a: Employee competency analysis is positively related to employee commitment.

Hypothesis 1b: Employee competency analysis is positively related to operational development.

Hypothesis 1c: Employee competency analysis is positively related to business productivity.

Hypothesis 1d: Employee competency analysis is positively related to firm competitiveness.

Hypothesis 1e: Employee competency analysis is positively related to firm success.

Individual Ability Support

Human resource development is the process of developing value additions in the capabilities of individual employees, teams of employees and the organization as a whole (Jain & Gulati, 2016). Employees in any organization expect that their investment in training will raise the capability of the organization's collective skills and thereby improve its productivity (Kennett, 2013). The general belief is that investment in certain forms of training and development has costs and economic benefits for the

individual and the organization (Elliot, 1991). An individual may decide to stay or leave an organization after considering the costs and benefits of the training and development that they receive. Investment in training and development benefits individuals by equipping them with skill that improves their productivity, thereby increasing their likelihood of promotion and making them more attractive to employers (Blundell, Dearden, & Meghir, 1996). The literature on the economics of training largely focus on the impact of firm-specific and general training on employee mobility across organizations (Kennett, 2013). Firm-specific training funded by the employee has lower rates of labor turnover (Becker, 2007). By contrast, general training (which is often not funded by the employer) has the effect of increasing employee mobility. Some training that is of value to employers other than the one providing the training may be funded by employers (Stevens, 1994). Therefore, if the individual development was coupled with perceived job security, growth opportunities, and wages higher than offered in the labor market, then the employee turnover was likely to decrease (Kennett, 2013). Moreover, human resource development includes planned activities and processes which are intended to have impact on organizations and individual learning, and is constituted by planned interventional and individual learning processes (Hamlin & Stewart, 2011).

Therefore, one of the aspects of the connatural management approach (CNM) that focuses on methods of developing these fine skills and natural talents of each individual enable them to effectively realize their potential in the unceasingly changing world. The concept of one of the aspects of the connatural management approach (CNM) is individual skill development for an effective action in the cognitive domain (Ambrozova et al., 2016). Therefore, this research suggests that an organization should enhance the general training development of an individual's ability. Three main components of individual ability in the context of human resource development (Ambrozova et al., 2016) consist of: firstly, rationality is the ability to logically consider information and knowledge in the framework of a given cognitive model. Secondly, sensibility is the ability of system thinking (Senge, Lichtenstein, Kaeufer, Bradbury, & Carroll, 2007) as reasonableness. Also wisdom or creative thinking is a process to be applied not only in linear and symmetrical tasks, but also in heuristics, asymmetrical tasks or tasks requiring decision-making influenced by uncertainty, permanent change, and other things.

By employing the organizational support literature that defines organizational support, it is the level of enhancement within an organization toward organizational activity (Jeong, Pae, & Zhou, 2006). In this research, the concept of individual ability support is not only limited to the specific ability of an employee (Kennett, 2013). The concept of individual ability support includes the general ability consisting of rationality, system thinking and creative thinking (Ambrozova et al., 2016). Moreover, it also includes the desire to develop other abilities of the employee (Kennett, 2013). Therefore, individual ability support in this research is defined as the encouragement of an organization in providing absolute resources to improve the skills of employees and give an opportunity to use prominent employee skills which includes development of the desire for other ability development of the employee (Ambrozova et al., 2016; Kennett, 2013).

From previous empirical research showed both positive and negative effects of individual ability development on the turnover intention of employees (Kennett, 2013). However, under the situations of employees who receive a great deal of specific training, job security and growth opportunities have a lower rate of turnover and improve employee productivity (Ichniowski, Shaw, & Prennushi, 1997) including individual outcome (Jameson, 2000; Matlay, 2002; Paloniemi, 2006; Perry, Badger, Lean, & Leybourne, 2010), operational performance (Beaver & Hutchings, 2005; Lange, Ottens, & Taylor, 2000; Macpherson & Jayawarna, 2007), and organizational performance (Nolan & Garavan, 2016). Therefore, a firm with individual ability support cues in human resource development capability will be able to attain greater employee commitment, operational development, business productivity, firm competitiveness and firm success. Thus, the hypotheses are proposed as follows:

Hypothesis 2a: Individual ability support is positively related to employee commitment.

Hypothesis 2b: Individual ability support is positively related to operational development.

Hypothesis 2c: Individual ability support is positively related to business productivity.

Hypothesis 2d: Individual ability support is positively related to firm competitiveness.

Hypothesis 2e: Individual ability support is positively related to firm success.

Continuous Learning Enhancement

Human resource development is a process that needs to make the people grow continuously and the growth of people will ultimately lead to the growth and development of an organization (Rao & Pereira, 1986). The nature of work is continuously changing (Ilgen & Pulakos, 1997). In organizations that need to change rapidly in response to changing conditions, structured employee and management development plans and programs become costly and impractical (London & Smither, 1999). Employees must prepare for tomorrow today and need to seek information to identify skill gaps, recognize areas to improve current performance, keep up with advances in their profession, and anticipate how changes elsewhere in the firm and the industry may affect work demands and skill requirements (London & Smither, 1999). Self-development is important to individuals in today's financially constrained, quality-oriented, rapidly changing organization. Employees need to consider whether they might be better of finding and preparing for other career directions. Employees need to engage in continuous learning to keep up with organizational changes and ensure their continued contribution to the organization.

An organization's role in self-development is in continuous learning organization, where there is an organization wide concern, value, belief and expectation that general knowledge acquisition and application are important (Tracey, Tannenbaum, & Kavanagh, 1995). Organizations provide resources and support that promote continuous learning (Holt, Noe, & Cavanaugh, 1996). Self-development is especially important to continuous learning in changing work environments. It needs to be guided by managers and human resource professionals who facilitate the learning process by providing feedback, coaching and resources for development (Hackman, 1986).

Organization that establish continuous learning cultures provide training and they reward the use of new skills and knowledge on the job (London & Smither, 1999). This enhances employees' awareness of the need for and value of, acquiring knowledge, skill and abilities throughout one's career. The literature is often focused on self-development and improvement, with learning organizations being presented as visionary ideals, and where learning behavior improves as a result of proactive and empowering intervention by senior management (Sicilia & Lytras, 2005). The learning organization is defined as learning continuously (Watkins & Marsick, 1993). Organizations should adopt flat, decentralized organizational structures that facilitate open communication and dialogue (Garvin, 1993). Team working facilitates individual growth and empowerment and therefore presents the ideal structural arrangement for organizations concerned to promoting an environment conducive to learning (Leonard-Barton, 1995). Other HR systems should be developed in line with this aspiration; for example, individual should have opportunities to participate in organizational decision-making, and reward systems should be designed to recognize the achievement of learning goals (Armstrong & Foley, 2003; Wang & Admed, 2003).

In this research, continuous learning enhancement is defined as firm motivation in self-study, knowledge and experience interchange to facilitate the unceasingly self-development of knowledge, skill, and the ability of the employee (Armstrong & Foley, 2003; Hackman, 1986; Holt et al., 1996; London & Smither, 1999).

Several research studies have mentioned that continuous learning organization is an important source of organizational performance. For example, HR systems in learning organizations provide a forum for discussion of staff developmental needs and gaining insight into staff feelings about work in a way that is tempered by deep and broad understanding of customer needs and requirements (Shipton, Zhou, & Mooi, 2013). Organizational learning helps organizations to affect the behavior of employees (Hurley, 2002; Hurley & Hult, 1998), increase their level of commitment and satisfaction that encourage performance improvement, and accomplishing organizational objectives efficiently (Ababneh, 2013). Therefore, a firm with continuous learning enhancement cues in human resource development capability will be able to attain greater employee commitment, operational development, business

productivity, firm competitiveness and firm success. Thus, the hypotheses are proposed as follows:

Hypothesis 3a: Continuous learning enhancement is positively related to employee commitment.

Hypothesis 3b: Continuous learning enhancement is positively related to operational development.

Hypothesis 3c: Continuous learning enhancement is positively related to business productivity.

Hypothesis 3d: Continuous learning enhancement is positively related to firm competitiveness.

Hypothesis 3e: Continuous learning enhancement is positively related to firm success.

Strategy-Development Connectivity

Human resource development is a system of strategic development and utilization for people working efficiently in the organization to cope with the environmental changes in business, competently managing the business challenges and gaining competitive advantage (Huda et al., 2007). To survive in the present scenario of cut-throat competition, the organization has to develop appropriate human resource development strategies to manage its workforce in an organized manner and align its potential with that of its corporate missions and objectives (Deb, 2010). Strategy and strategic implementation are central to organizational success and longevity (Beer & Eisenstat, 2000). However, the extant literature and anecdotal evidence from human resource development and management indicate that human resource development is often excluded from central roles related to strategy formulation and implementation (Becker & Huselid, 2006). Despite literature and testimony hailing the importance of human resource development for human capital growth and deployment (Swanson &

Holton, 2009) and the importance of human resource development-related knowledge and processes for organizational success, scant literature is available detailing how management utilizes and assimilates human resource development for organizational strategy implementation (Alagaraja & Egan, 2013). Organizational strategies exploit tangible resources (for example, technology, products, and services) as well as intangible resources and capabilities (for example, human resources, creation of a learning culture, leadership) in the organization. Strategies that exploit intangible resources such as the effective utilization of human resource development initiatives are more likely to be sources of competitive advantage rather than those that do not because these strategies are path-dependent, socially complex, and causally ambiguous (Barney, 1991; Itami & Roehl, 1987). Intangible resources are costly and difficult to imitate, and therefore translate into unique sources of competitive advantage for organizations (Ray, Barney, & Muhanna, 2004).

Therefore, based on the study of Alagaraja and Egan (2013) there is strong evidence on the importance of leadership commitment and involvement of middle managers in strategy implementation. The top management was instrumental in integrating human resource development system, practices and policies at all phases of the strategy formulation, planning, implementation and evaluation. Human resource and human resource development managers must recognize their critical role in acquiring and developing talent to build the momentum and commitment for successful strategy implementation outcomes. Human resource and human resource development managers need to recognize and elevate the role of informal leaders for managing change and resistance to change. Human resource development practitioners need to understand the strategic goals of the organization, must demonstrate their capacities, establish credibility regarding their operations-related understanding, should emphasize and validate value-added human resource development-related approaches, and take overtly aligned actions toward achieving organizational objectives. Unfortunately, these competencies appear to be rarely taught in human resource development or human resource management programs (Alagaraja & Egan, 2013). Human resource development professionals who are part of organizational strategic intervention have an opportunity to extend and the opportunity for mutual benefit toward shared management interests (Short, Bing, & Kehrhahn, 2003).

In this research, the concept of strategy-development connectivity is defined as firm commitment for integrating, sharing and transferring the goal, mission, vision, planning and implementation of the business to human resource development system, practices, and policies (Alagaraja & Egan, 2013; Deb, 2010) for people to work efficiently and to gain competitive advantage (Huda et al., 2007).

Several research studies have mentioned that strategy-development connectivity is an important source of organizational performance. Strategic human resource development can contribute to business performance: building organizational capabilities, improving employee satisfaction, shaping customer and shareholder satisfaction (Yeung & Berman, 1997), gaining competitive advantage, and business success (Pattanayak, 2003). Moreover, human resource development can help to create a source of sustained competitive advantage, especially when they are aligned with a firm's competitive strategy (Singh, 2011). Therefore, a firm with strategy-development connectivity cues in human resource development capability that will be able to attain greater employee commitment, operational development, business productivity, firm competitiveness and firm success. Thus, the hypotheses are proposed as follows:

Hypothesis 4a: Strategy-development connectivity is positively related to employee commitment.

Hypothesis 4b: Strategy-development connectivity is positively related to operational development.

Hypothesis 4c: Strategy-development connectivity is positively related to business productivity.

Hypothesis 4d: Strategy-development connectivity is positively related to firm competitiveness.

Hypothesis 4e: Strategy-development connectivity is positively related to firm success.

Innovation Creativity Focus

Human resource development has an important role in conveying that innovation should be treated as an organic process by key stakeholders. It can support innovation for organizational operations (Ehlen et al., 2013). Innovation is the ideas, practices, or objects that were perceived of as new by an individual or other unit of adoption (Rogers, 1995). Innovation also means a deliberate and radical change in existing products and processes for the organization to achieve a competitive advantage over the competitors (Leede & Looise, 2005). Innovation is widely recognized to be critical for sustaining the competitive advantage of firms and industries and at the regional and national levels. The critical role of innovation, and in particular, innovation's role, in generating creative destruction and subsequent economic growth was emphasized by the evolutionary economist (Sheehan et al., 2013). The ability of employees to create new knowledge, in terms of both products and of services, in order to maintain their market value, is crucial. This emphasis on permanent innovation transfers the workplace into a setting for learning and innovation (Billet, 2008; Van Woerkom & Poell, 2010). In dynamic and sometimes chaotic organizations, employees need to have more than average competences to innovate (Cozijnsen & Vrakking, 2013; Weick & Quinn, 1999). In order to increase the success rate of innovation, it seems vital to acquire expertise on how professionals in workplaces product knowledge within innovation groups, what problems they face, and how they can improve their ability to realize successful innovations (Ehlen et al., 2013).

The concept of knowledge productivity is based on the idea that knowledge is a competence linked to a person (Ehlen et al., 2013). Knowledge needs to be understood as the potential for action that not only depends upon the stored information, but also on the person interacting with it (Malhotra, 2000). Becoming knowledge-productive can be seen as acquiring new skills and attitudes as part of a personal competence. Knowledge productivity refers to the competence of individuals and groups to gradually improve and radically innovate in operating procedures, products and services (Ehlen et al., 2013). This process entails tracing relevant information, using this information to develop new abilities, and applying these abilities to improvement and innovation (Kessels, 2004). The concept of knowledge productivity includes the creation of knowledge products separate from the creation of personal abilities (Kessels,

Verdonschot, & De Jong, 2011). Moreover, an individual should have opportunities to use experience and knowledge to participate in organizational decision-making (Armstrong & Foley, 2003). Improvements or innovations may be of great economic value, but the most sustainable value lies in the abilities of professionals to generate such improvements and innovations in the future (Kessels, 2001). Innovating in products and services presuppose sharing knowledge in order to create something new. This process of sharing knowledge by which new knowledge is created within the workplace (Kessels, 2001) is knowledge productivity.

In this research, innovation creativity focus is based on the concept of knowledge productivity that enhance acquiring new skills and attitudes as part of a personal competence (Ehlen et al., 2013) in the operating procedures of sharing information and knowledge (Kessels, 2001). It entails tracing relevant information, using this information to develop new abilities, and applying these abilities for improvement and innovation (Kessels, 2004). It includes opportunities to use knowledge from the experience of employees to participate in organizational decision-making (Armstrong & Foley, 2003). Therefore, innovation creativity focus in this research is defined as the enhancement of an organization in generating new information, knowledge and experiences of employee and organizations for improving operational process in those organizations (Armstrong & Foley, 2003; Ehlen et al., 2013; Kessels, 2001; 2004).

Several research studies mentioned that innovation creativity focus is an important source of organizational performance. Knowledge productivity presumes a stimulating work environment with good relationships between employees. Creating a powerful learning environment should therefore be seen as an important field of action for human resource development (Kessels, 2004). Social capital has a positive relationship on employee commitment (Yen, Campbell, Irianto, Zulyusri, & Fadilah, 2014). Innovations tend to be more sustainable if professionals further develop these new abilities into resources for further action (Verdonschot, 2009). Intangible resources, like the capability to innovate or being innovative, are key drivers of competitive advantages in many international and global markets (Cho & Pucik, 2005; Hitt, Hoskisson, & Kim, 1997; Stock & Zacharias, 2011; Vincent, Bharadwaj, & Challagalla, 2004). It also is fundamental to business performance, growth, and ultimately business

success (Chamberlin, Doutriaux, & Hector, 2010; Cho & Pucik, 2005; Dervitsiotis, 2011). Process innovation is a positive stimulation for productivity (Daveri & Parisi, 2015), and it is a way of competitiveness in an organization (Sedlakova, 2015). Therefore, a firm with innovation creativity focus cues on human resource development capability and will be able to attain greater employee commitment, operational development, business productivity, firm competitiveness and firm success. Thus, the hypotheses are proposed as follows:

Hypothesis 5a: Innovation creativity focus is positively related to employee commitment.

Hypothesis 5b: Innovation creativity focus is positively related to operational development.

Hypothesis 5c: Innovation creativity focus is positively related to business productivity.

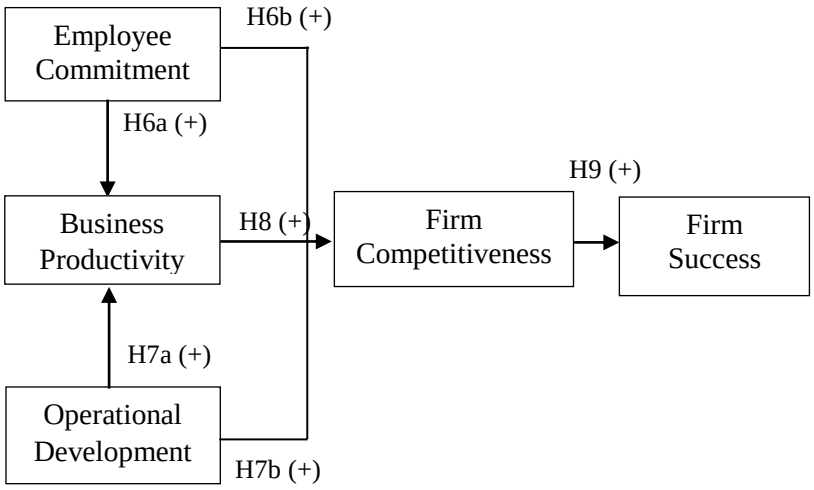
Hypothesis 5d: Innovation creativity focus is positively related to firm competitiveness.

Hypothesis 5e: Innovation creativity focus is positively related to firm success.

The Relationships among the Consequences of Human Resource Development Capability

This section examines the relationships among the consequences of human resource development capability consisting of employee commitment, operational development, business productivity, firm competitiveness and firm success. The literature review on the definition of each construct and purposed hypotheses are discussed below.

Figure 3: The Relationships among Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness and Firm Success



Employee Commitment

The concept of employee commitment is the attitude of the employee that thinks, feels and recognizes its commitment to achieving a corporate objective (Podsakoff & MacKenzie, 1994). Allen and Meyer (1990) defined that employee commitment is relationship of satisfaction, pride and the commitment of employees towards achieving corporate goals. Employee commitment is the behavior of the employee that is dedicated to working for the organization and the importance of the organization's objectives. Thus, employee commitment refers to an organization employee who behaves partially as a members is very proud of helping the organization to achieve the objectives (Meyer, Paunonen, Gellatly, Goffin, & Jakson, 1989). This helps both the employee and the organization to improve their skills which, in turn, improves the productivity of the organization and the employee. An employee who is involved completely in their work is said to have great organizational commitment since it will make them become loyal to the company and will commit themselves to the organization automatically in all aspects. This results in greater improvement in their career as well as in productivity (Deepa, Palaniswamy, & Kuppusamy, 2014). Employee commitment affects human capital by leading to an increased emphasis on

general knowledge, skill and ability within an industry, and affecting a firm's abilities to develop the competitive ability of the firm (Kwantes, 2007).

Previous research showed that the operational outcome in terms of employee commitment leads to greater organizational outcome in terms of productivity (Jiang et al., 2012). Employee commitment has a mediating role between human resource management and business productivity (Deepa et al., 2014). Employee commitment also leads to improved firm competitiveness (Kwantes, 2003; 2007; Vandenberghe, Bentein, & Stinglhamber, 2004). Therefore, the concept of employee commitment in this research has a significant relationship with business productivity and firm competitiveness. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 6a: Employee commitment is positively related to business productivity.

Hypothesis 6b: Employee commitment is positively related to firm competitiveness.

Operational Development

Operations management is an area of management concerned with designing and controlling the process of production and redesigning business operations in the production of goods or services. It involves the responsibility of ensuring that business operations are efficient in terms of using as few resources as needed and effective in terms of meeting customer requirements. It is concerned with managing the process that converts inputs (in the form of raw materials, labor and energy) into outputs (in the form of goods and/or services) (Kau & Loh, 2006; Spreng, Harrel, & Mackoy, 1995; Swanson & Kelley, 2001). Operational development is conceptualized, based on the concept of process improvement of operational management literature. It is an operational teams' ability to use a process perspective and structured methods to continuously improve operational activity (Yang, Lee, & Cheng, 2015). There are three dimensions of operational development framework: firstly, continuous improvement concern for ongoing activities aiming to enhance firm performance through focused incremental changes in the process (Anand, Ward, Tatikonda, & Schilling, 2009; Yang

et al., 2015). Process management is concerned with the view that firms consist of interrelated and repetitive processes (Peng, Schroeder, & Shah, 2008). Also structured methods are concerned with implementation of improvement projects that follow specific steps for problem identification, diagnosis, and solution-generation, and implementation (Choo, Linderman, & Schroeder, 2007).

Therefore, operational development in this research is defined as a process of improvement in an organization of continuous activity, process management, and structured methods for problem identification, diagnosis, solution, generation, and implementation (Anand et al., 2009; Choo et al., 2007; Yang et al., 2015).

Operational development is related to problem-solving skills, actions for enhancing performance, and reliable methods. It also displays the common characteristics of other capabilities such as knowledge and skill (Schreyogg & Kliesch-Eberl, 2007). Moreover, operational development is related to change in productivity and profit (Patterson, West, & Wall, 2004). It also is has effects on short and long-term firm competitiveness and performance (Birdi et al., 2008). Therefore, the concept of operational development in this research has a significant relationship with business productivity and firm competitiveness. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 7a: Operational development is positively related to business productivity.

Hypothesis 7b: Operational development is positively related to firm competitiveness.

Business Productivity

The productivity concept relates to efficiency and effectiveness, which is equal to performance or profitability, and features productivity such as time, quality and value creation (Oeij, Looze, Ten Have, Van Rhijn, & Kuijt-Evers, 2011). In any organization, productivity is considered from the proportion of outputs and inputs, in which input includes labor, capital, and resources; while outputs may be defined as physical volumes (e.g., product volumes) or financial outcomes (e.g., profit or added value) (Oeij

et al., 2011). The many ways to improve organizational productivity are described as output increases at a constant input; input decreases at a constant output; output increases and input decreases; output and input increase with the increase of proportionally less input, and input and output decrease with the decrease of proportionally less output (Oeij et al., 2011). Another definition of productivity is the maximizing of resource utilization, manpower, cost reduction and employee satisfaction (Khanmohammadiotaqsara, Khalili, & Mohseni, 2012). Regarding the productivity literature, the definition of business productivity as the ability of the business to operate efficiently is indicated by the proportional inputs or economic resources (e.g., material, energy, time and use of labor) and is less relative to the proportional outputs (e.g., product volume or product quality). The firm is able to improve productivity by increasing the proportion of output to input that is likely to attain the firms' objectives and goals. The way of improving efficient operations includes reducing material, labor, energy and time in the working process while maintaining constant output, or increasing output while maintaining constant input (Oeij et al., 2011).

Therefore, business productivity in this research is defined as the efficiency and effectiveness of business in using any resources and outcomes including time, quality, value creation; or proportion of input (labor, capital and resource) and output (product volumes or financial outcome) (Oeij et al., 2011).

Higher productivity produces more output by providing the same level of input; on the other hand, it produces the same output by providing a lesser level of input (Halkos & Tzeremes, 2007). At the national level, productivity is a key factor that is related to economic growth. Similarly, at the firm level, high productivity is the important factor for better performance, successful competition and firm survival (Oeij et al., 2011). The prior research finds that the intangible assets including capabilities, skills, and know-how can increase productivity; and finally, productivity increases firm performance (Halkos & Tzeremes, 2007). The productivity of labor can commonly improve a competitiveness of the firm based on a unit of the manufacture factor (Chaudhuri & Ray, 1997; Latruff, 2010; Tanase, 2011). Productivity growth is vital for building competitiveness at the international and domestic level (Balakrishnan & Pushpangadan, 1998; Sehgal & Sharma, 2011). Productivity performance is an important determinant for competitiveness of an industry and the firm (Sultan & Jain,

2016). Therefore, the concept of business productivity in this research has a significant relationship with firm competitiveness. Consequently, the research hypothesis is proposed as follows:

Hypothesis 8: Business productivity is positively related to firm competitiveness.

Firm Competitiveness

In firm operations, the company may use a business strategy (cost leadership, differentiation, focus or niche) to achieve competitive advantage (Porter, 1980). Cater and Pucko (2005) have attempted to identify the basic forms of competitive advantage and analyze the link between these forms of competitive advantage and firm performance. The results indicated that firms which use both strategic differentiation and cost leadership are more successful than firms that use only the strategic one. Moreover, the results also show that a stronger competitive advantage in any of the discussed forms is reflected in greater firm performance. The competitive advantage is the ability of the organization over a competitor who cannot imitate. Otherwise, a competitor needs time to adapt long before in order to emulate the ability of the organization such as in management systems within the organization, organization management system and image, or the reputation of the organization. Firm competitiveness includes maintaining a highly skilled employee who has advantages and is possessed by a capability above other firms in the industry (Abushaiba & Zainuddin, 2012).

Four characteristics of competitiveness consist of being long-term oriented, controllable, relative and dynamic (Man, Lau, & Chan, 2002). The long-term oriented characteristic emphasizes long-term performance. The controllable characteristic relates to the different resources and abilities by which firms are able to manage. The relative characteristic means the consideration of the firms' competitiveness by comparing them to other competitors in the same industry. The dynamic characteristic refers to the dynamic renovation of competitiveness by creating new forms of competitive advantage such as quality, speed and service.

In this research, firm competitiveness refers to the readiness of corporate management over the competitors in terms of quality, price, cost, image and reliability (Man et al., 2002). It includes maintaining a highly-skilled employee who has advantages, and is possessed by a capability above other firms in the industry (Abushaiba & Zainuddin, 2012).

Prior research indicates that competitive advantage enhances firm performance (Abushaiba & Zainuddin, 2012; Intarapanich & Ussahawanitchakit, 2011; Laonamtha, Ussahawanitchakit & Boonlua, 2013; Zhou, Brown, & Dev, 2009). Firms need to increase quality management that focuses on a core business process, social relationship, collaboration with competitors and partners (Loch, Chick, & Huchzermeier, 2007), or a cooperative network (Álvarez, Marin, & Fonfría, 2009). Therefore, firms concentrate on knowledge security (Pearce, 1999). Firms emphasize the adjustment of the business environment within the industry, such as in launching technology innovation products to the marketplace. It provides faster product cycles presaging new product variants, faster product obsolescence linked to intensified customers' needs, and increasing sustainable consumption (Sonntag, 2000). Hence, business competitiveness is likely to affect achievement, which leads to firm success. As a consequence, the research hypothesis is proposed as follows:

Hypothesis 9: Firm competitiveness is positively related to firm success.

Firm Success

Success is the result of the right formula combination of strategies and the implementation of activities to achieve strategic objectives. While firm performance closely means firm success, it is represented by the growth rates of sales, profit, market share (Bartb, 2003) and efficiency (productivity, return on equity and net profit) (Davies & Walters, 2004). Therefore, this research proposes that firm success refers to the comprehensive results of a firm which is represented by goal achievement such as in the growth rates of sales, profit and market share; but with the opposite, there is a decreased rate of potential employee turnover.

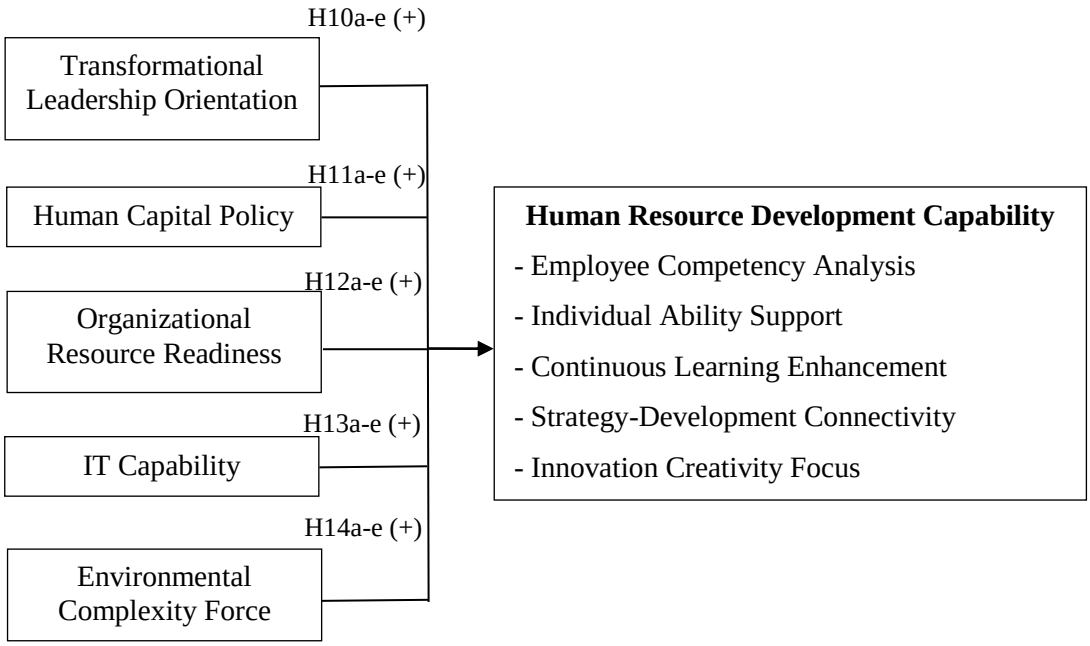
Moreover, Chalatharawat and Ussahawanitchakit (2009) pointed out a firm's success as a potential that is derived from the attainment of a firm's objective, which is

the overall performance of four main perspectives: financial, customers, internal business processes, learning, and growth. Likewise, Cadez and Guilding (2008) argued that firm success dimensions are measured from customer satisfaction, return on investment, product quality improvement, sales volume, market share and profitability. Chatman and Barsade (1995) defined that organizational success is associated with strategic capabilities which need to be managed for firm performance or survival in extremely competitive states and their study presents that organizational success is connected with its strategies, a capability which needs to be accomplished for firm performance or survival among highly competitive situations. Hence, firm success implies the output of implementing human resource development capability and its consequences.

The Relationships among Human Resource Development Capability and its Antecedents of Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force

This section presents the influence of proposed antecedents of human resource development capability. With regard to the contingency theory, this research proposes transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force as the significant antecedents of human resource development capability dimensions: employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. Therefore, the aforementioned relationships are illustrated in Figure 4.

Figure 4: The Relationships among Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force and Human Resource Development Capability



Transformational Leadership Orientation

The concept of transformational leadership is a focus on leaders and the motivation to change and improve the performance of organizations (Avolio, Zhu, Koh, & Bhatia, 2004). In this study, transformational leadership orientation refers to leadership behavior focused on charisma or the role model leader to employees (Waldman, Ramirez, House, & Puranam, 2001). It is also leaders who motivate the inspiration of employees (Bass, 1985), stimulate the intellect of subordinates (Bass & Avolio, 1989) and consider individual employee's problem (Bass, 1985).

Pearce and Conger (2003) suggested that transformation leadership is focused on the ability of leaders to influence change toward best attitude to the team and its members in order to work effectively. Pearce, Yoo and Alavi (2004) found that transformational leadership is oriented to changing the behavior of leaders to work as a team and achieve efficient organization. Chen and colleagues (2012) suggested that transformational leadership is a form of leadership that focuses on the utility of the team members and achieves goals. Howell and Frost (1989) suggested that transformational leadership orients the employee toward a positive attitude about learning and training

that can lead to operational efficiency. Barling, Weber and Kelloway (1996) found that transformational leadership is a leadership that focuses on the satisfaction of employees with the training intention that leads to a positive attitude which is shared between subordinates and superiors. Hassan, Fuwad and Rauf (2010) suggested that a transformational leadership role is the focus of the training to motivate employees to work more efficiently. Levac (2008) suggested that transformational leadership considers changes about gender and other forms of equality, because it can modify to ensure that it can respond the enterprise. Transformational leadership has moderated a perceived HRM of individual levels of employees (Vermeeren, 2014). Moreover, transformational leadership is a source of innovativeness in an organization (Raj & Srivastva, 2016) and it also applies a strong influence to an employee's creativity (Gumusluoglu & Ilsev, 2009).

Based on the literature review above, transformational leadership orientation has the potential capability to enhance five dimensions of human resource development capability that consist of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 10a: Transformational leadership orientation is positively related to employee competency analysis.

Hypothesis 10b: Transformational leadership orientation is positively related to individual ability support.

Hypothesis 10c: Transformational leadership orientation is positively related to continuous learning enhancement.

Hypothesis 10d: Transformational leadership orientation is positively related to strategy-development connectivity.

Hypothesis 10e: Transformational leadership orientation is positively related to innovation creativity focus.

Human Capital Policy

Human capital has a diverse and extensive means. Both similar and different meanings, such as that of human capital, are concerned with education, training, and health (Schultz, 1998). Human capital is a unit-level resource that is created from the emergence of individuals' knowledge, skills, abilities, or other characteristics (KSAOs) (Ployhart & Moliterno, 2011). Scholars have proposed guidelines for the major components of human capital including knowledge, skills and abilities of employees (Becker, 1964). Human capital is an ability of individuals in applying solutions to meet the needs of the customers, attributes, and competency mindsets (Stewart & Ruckdeschel, 1998). Human capital is about performance, attitude and cognitive abilities (Roos, Edvinsson, & Dragonetti, 1998). Human capital is the talent, knowledge, skills and experiences of the employee and the manager. Human capital includes knowledge, skills, innovation and the ability of people to manage. Human capital includes values culture, and the philosophy of the organization (Edvinsson & Malone, 1999). Moreover, human capital consists of four aspects. Firstly, ability is a proficiency in a set of activities. Human capital is various forms of work, including components of knowledge, skills and talents. Secondly, behavior is how an expression can be observed that affects the success of the work. Thirdly, efforts are mental and physical resources with the aim to raise awareness and specific destinations. Fourthly, the time of an investment in human capital includes the number of hours per day in a single year, or during the day or year (Davenport, Carr, & Bibby, 2002). It also found that human capital is deeply rooted and cannot be separated from knowledge, skills or experience. It is divided into groups and human capital skills in action such as skills in gathering information, information processing communication skills, experience, knowledge, social skills and perspectives on values, beliefs and attitudes (Dess & Picken, 1999). Human capital in the period from 2000 onwards means that it is related to know-how in the ability, skills and expertise of the organization (Dzinkowski, 2000).

A firm's policy will highlight its importance in the context of the broad organizational mission and agenda (Whitmarsh, 2009), and it also seems to provide guidelines and set standards about what is generally acceptable and not acceptable in terms of behavior, and what is to be done in certain situations. Where there is a breach of standards of conduct or performance, the organization will have informal or formal

procedures to correct such a breach (Bailey, 2011). It has a positive relationship with employee behavior (Norton, Zacher, & Ashkanasy, 2014). The goal of human capital should be having people throughout the firm committed to the strategic agenda and believing that human capital policy is an essential ingredient of the success of an organization. Therefore, in this research, human capital policy is defined as placing an important of an organization in knowledge, skill, ability and other characteristic of employees in the organization. There is a wide range of policy that is relevant to the human resource practitioner (Bailey, 2011).

Based on the literature review above, human capital policy has the potential capability to enhance five dimensions of human resource development capability that consists of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 11a: Human capital policy is positively related to employee competency analysis.

Hypothesis 11b: Human capital policy is positively related to individual ability support.

Hypothesis 11c: Human capital policy is positively related to continuous learning enhancement.

Hypothesis 11d: Human capital policy is positively related to strategy-development connectivity.

Hypothesis 11e: Human capital policy is positively related to innovation creativity focus.

Organizational Resource Readiness

This resource is a tool for considering strategic resources available to a business. Resources include all firm assets, capabilities, organizational processes,

attributes, information, experience, knowledge and technology. In a resource-based perspective, resources can be tangible, intangible and personnel-based (Grant, 1991). Likewise, these abilities comprise at least three dimensions: physical assets, technologies and skills required to use them; human resources and organizational capabilities such as culture and values; and the intangible resources of reputation and radical expertise. However, if the organization has the resources in readiness and potentiality, this advantage will support the firms to create new opportunity. Resource readiness refers to an organization's ability to allocate the existence of an organization's resources to maximize benefits, and the adequacy of a firm's resource can compete with competitors (Tzokas, Saren, & Brownlie, 1997). In this research, organizational resource readiness is defined as the fruitfulness of both tangible and intangible factors for supporting the work of firm processes to achieve organization targets (Barney, 1991; Ray, Barney, & Muhanna, 2004). In addition, Takeno and colleagues (2001) indicate that in utilizing the shared resource, the updated information should also be gained and shared by processes including information-sharing, resource-sharing, techniques and know-how about sharing and opportunity-sharing. Organizational resource readiness has been shared over the firm where the capability to create new products, new services and new processes will increase (Kratzer, Gemunden, & Lettl, 2008).

Based on the literature review above, organizational resource readiness has the potential capability to enhance five dimensions of human resource development capability that consist of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 12a: Organizational resource readiness is positively related to employee competency analysis.

Hypothesis 12b: Organizational resource readiness is positively related to individual ability support.

Hypothesis 12c: Organizational resource readiness is positively related to continuous learning enhancement.

Hypothesis 12d: Organizational resource readiness is positively related to strategy-development connectivity.

Hypothesis 12e: Organizational resource readiness is positively related to innovation creativity focus.

Information Technology Capability

In a rapidly changing environment, firms must develop and use new technologies in order to adapt to new environmental opportunities (Karim & Mitchell, 2000). Information technology capability or IT capability refers to the ability of a firms' innovation technology based on implementation or physical infrastructure and other information technology support (Mark & Su, 2010), the achievement of information system implementation (set of interrelated components used to collect, process, store and disseminate information to support decision-making, analysis and management controls in an organization) (Coulter, 2002), and integration and utilization of data from a common database for generating information for operations and decision making (Chapman, 2005). New ways of operating become more interesting to achieve the goals of a firm. Especially, technological learning has an important role in enabling organizations to generate new knowledge and improve capabilities and skills that can lead to accomplishment (Chaikambang & Ussahawanitchakit, 2012). IT capability has three dimensions that consist of IT knowledge, IT operations and IT infrastructure (Turulja & Bajgoric, 2016).

Accordingly, technology learning enhances the capacity of effective action in the market and it is a major force for technology dynamics and change (Wene, 2007). Capabilities of technology learning can create business growth and new applications can develop new lines of business. Moreover, technological capability is an organization's ability to mobilize and deploy computer-based technologies (for example hardware, software, network-to-data communication, soft technologies, or advance management practice) for operational activities such as strategic cost management in a wide variety of industries. Information technology changes the role of the HR function (Steijn & Van Den Muyzenberg, 2012). Even if it is possible to analyze IT capability of firms individually, IT has become an integral part of all business processes, so it is often seen

as an integral part of all other firms' capabilities. IT can be used to develop competitive products or services as well as to improve decision making processes. It is expected from IT to quicken and improve HR-related administrative, operational and planning decisions (Broderick & Boudreau, 1991). Empirical research shows that IT capability has a significant relationship with human resource management capability (Yurulja & Bajgoric, 2016).

Based on the literature review above, IT capability has that potential capability to enhance five dimensions of human resource development capability consisting of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 13a: IT capability is positively related to employee competency analysis.

Hypothesis 13b: IT capability is positively related to individual ability support.

Hypothesis 13c: IT capability is positively related to continuous learning enhancement.

Hypothesis 13d: IT capability is positively related to strategy-development connectivity.

Hypothesis 13e: IT capability is positively related to innovation creativity focus.

Environmental Complexity Force

Environmental uncertainty changes in external variables affect the activity of the company, which frequently involves greater difficulty in predicting the future and greater improbability surrounding relationships with suppliers. Complex environments contain many external variables that must be taken into consideration (Gonzalez-Benito,

Da Rocha, & Queiruga, 2010). Environmental complexity is a function of the number of external components with which the firm must have interest. It is a function of heterogeneity, dissimilarity, or diffusion among them and it is a function of the sophisticated or technical knowledge required to interact effectively with them (Cannon & John, 2007). In addition, environmental complexity positively moderates the effects of lean procedures and gains on performance (Azadegan, Patel, Zangoueinezhad, & Linderman, 2013). However, this complexity arises in part from an exponential increase in organizational information processing capabilities, an increasingly dynamic and global business environment, and growing amounts of information about both the content and structure of this environment (Satish, 1997). However, complexity relates to the ability to forecast the effects of environmental trends of the firm, the ability to examine the effects of organizational decisions, and the utility of environmental information in expectations which affect decision-making (Boyd & Fulk, 1996).

In this research, environmental complexity force focuses on an organization's complex operations with many factors for deliberate, considerable and new information to process. The firm must capitalize on opportunities in the environment while avoiding threats. Environmental complexity force is defined as the level of variation in business conditions that has ambiguity and instability or heterogeneity of external events that are involved with the firm potential to perceive continuously to explain things, rapid changes and adaptation to effectively cope with change (Nicolau, 2005).

Based on the literature review above, environmental complexity force has the potential capability to enhance five dimensions of human resource development capability that consist of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. As a consequence, the research hypotheses are proposed as follows:

Hypothesis 14a: Environmental complexity force is positively related to employee competency analysis.

Hypothesis 14b: Environmental complexity force is positively related to individual ability support.

Hypothesis 14c: Environmental complexity force is positively related to continuous learning enhancement.

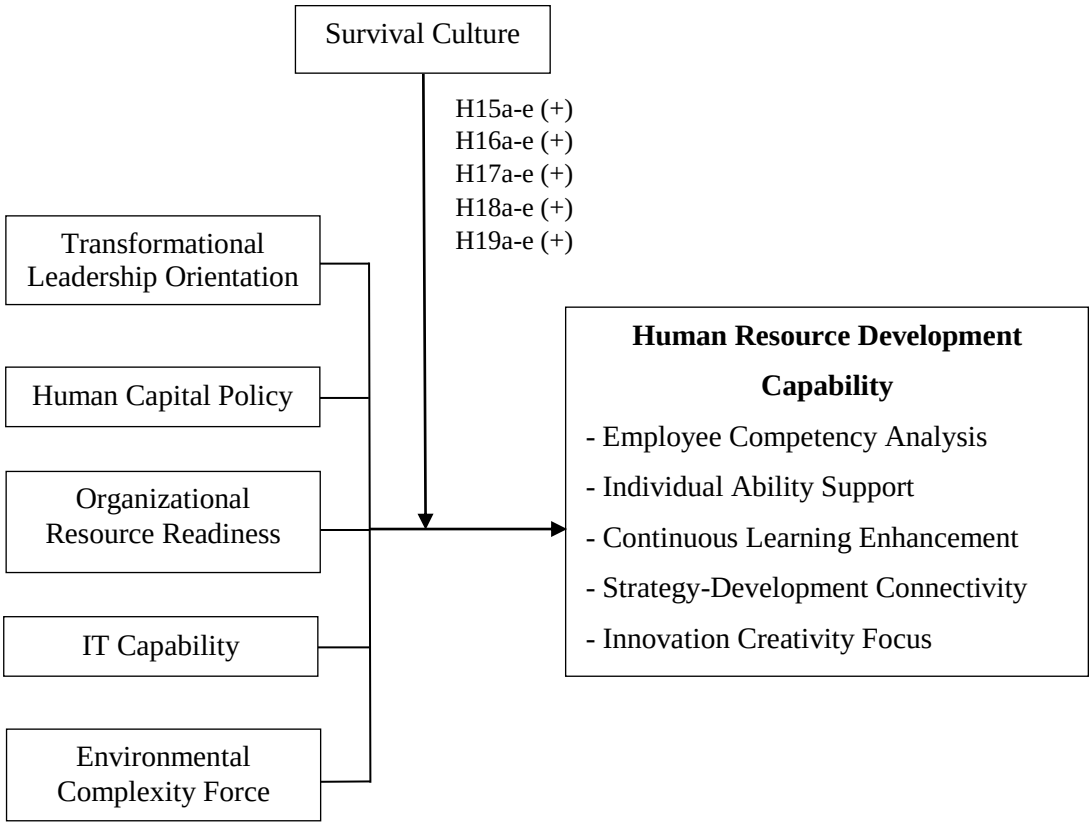
Hypothesis 14d: Environmental complexity force is positively related to strategy-development connectivity.

Hypothesis 14e: Environmental complexity force is positively related to innovation creativity focus.

The Moderator of Human Resource Development Capability

This section illustrates the moderating effects of survival culture on the relationship between human resource development capability and its antecedents as in Figure 5.

Figure 5: The Moderating Role of Survival Culture on the Relationships among Human Resource Development Capability, Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability and Environmental Complexity Force



Survival Culture

The concept of the survival culture is in the same way, the common practice for the preparation of social, moral values and beliefs for the survival of the organization (Hofstede, 1980). Also, there is an increase in multi-cultural and multi-generational employees and contractors in the workplace (McCray, 2009). Japan's social culture is a sample of a survival norm that requires its people to work hard. Japannese people have a sence of crisis over "how to survive" and it has prompted them to work hard to overcome the crises (Singh, 2011). The cultural significance associated with the operations and strategies are needed to increase the efficiency of the project (Jetu & Riedl, 2013). To determine the impact of operation and training one must be willing to participate in a collaborative enterprise (Adekiya & Ibrahim, 2016). In this research, survival culture refers to the practical way of co-operation for the readiness in building strength and worthiness trust for the organizations survival that is adopted from business competition (Hofstede, 1980).

Corporate culture has an effect on the relationship between leadership and the creativity of staff in the banking industry (Erkutlu 2012). Hayton and Cacciotti (2013), on survival culture, promoted creativity and innovation to support the activities of the operators. Survival culture promotes a culture of human capital management related to security, rules and the work of employees (AlHogail, 2015). Survival culture is important to the positive impact of work team on the project's success (Belassi & Tukel, 1996). Kappos & Rivard (2008) have suggested that survival culture affects human resource management and the performance of the project team. The efficiency of cross-cultural training is based on human capital management (Rodrigues, Bu, & Min, 2000). The evaluation of training local managers could be the establishment of corporate culture (Zhao, 2005). The leadership practices that influence the culture of the training of the employees are within the organization (Yap & Webber, 2015).

The readiness of the organization must have a basic understanding of survival culture (Oliver, 2008). Survival culture that supports social security and operations in the organization (Schlienger & Teufel, 2003). Survival cultural is the beliefs and practices in human resource management (Wright, 2013). The principle of equality implies cultural context, beliefs and patterns that are fair to reflect the equality of

cultures (Barry, 2002). The equality of the survival culture is equality as to cultural norms and cultural relations that occur within an organization (He, 2004).

Accordingly, survival culture is likely to promote firms to achieve their five dimensions of human resource development capability that consist of employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. Therefore, the hypotheses are proposed as follow:

Hypothesis 15a: Survival culture will positively moderate the relationships between transformational leadership orientation and employee competence analysis.

Hypothesis 15b: Survival culture will positively moderate the relationships between transformational leadership orientation and individual ability support.

Hypothesis 15c: Survival culture will positively moderate the relationships between transformational leadership orientation and continuous learning enhancement.

Hypothesis 15d: Survival culture will positively moderate the relationships between transformational leadership orientation and strategy-development connectivity.

Hypothesis 15e: Survival culture will positively moderate the relationships between transformational leadership orientation and innovation creativity focus.

Hypothesis 16a: Survival culture will positively moderate the relationships between human capital policy and employee competence analysis.

Hypothesis 16b: Survival culture will positively moderate the relationships between human capital policy and individual ability support.

Hypothesis 16c: Survival culture will positively moderate the relationships between human capital policy and continuous learning enhancement.

Hypothesis 16d: Survival culture will positively moderate the relationships between human capital policy and strategy-development connectivity.

Hypothesis 16e: Survival culture will positively moderate the relationships between human capital policy and innovation creativity focus.

Hypothesis 17a: Survival culture will positively moderate the relationships between organizational resource readiness and employee competence analysis.

Hypothesis 17b: Survival culture will positively moderate the relationships between organizational resource readiness and individual ability support.

Hypothesis 17c: Survival culture will positively moderate the relationships between organizational resource readiness and continuous learning enhancement.

Hypothesis 17d: Survival culture will positively moderate the relationships between organizational resource readiness and strategy-development connectivity.

Hypothesis 17e: Survival culture will positively moderate the relationships between organizational resource readiness and innovation creativity focus.

Hypothesis 18a: Survival culture will positively moderate the relationships between IT capability and employee competence analysis.

Hypothesis 18b: Survival culture will positively moderate the relationships between IT capability and individual ability support.

Hypothesis 18c: Survival culture will positively moderate the relationships between IT capability and continuous learning enhancement.

Hypothesis 18d: Survival culture will positively moderate the relationships between IT capability and strategy-development connectivity.

Hypothesis 18e: Survival culture will positively moderate the relationships between IT capability and innovation creativity focus.

Hypothesis 19a: Survival culture will positively moderate the relationships between environmental complexity force and employee competence analysis.

Hypothesis 19b: Survival culture will positively moderate the relationships between environmental complexity force and individual ability support.

Hypothesis 19c: Survival culture will positively moderate the relationships between environmental complexity force and continuous learning enhancement.

Hypothesis 19d: Survival culture will positively moderate the relationships between environmental complexity force and strategy-development connectivity.

Hypothesis 19e: Survival culture will positively moderate the relationships between environmental complexity force and innovation creativity focus.

Summary

In this chapter, the conceptual model of human resource development capability and firm success is illustrated. Two principal theories are used to draw the relationships in the conceptual framework; the human capital and contingency theories.

This research has also proposed a set of 19 testable hypotheses to explain the overall relationships among constructs in the conceptual model. These relationships are classified into four different groups which are as the following: the first group is relevant to the linkages among human resource development capability and its consequences, comprised of employee commitment, operational development, business

productivity, firm competitiveness and firm success. The following group holds the relationship among five consequences of human resource development capability. The third group contains the influences of five antecedents on each of five dimensions of human resource development capability, including transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. Lastly, the final group relates to the moderating role of survival culture on the relationship between human resource development capability and its antecedents. All proposed hypotheses are presented in Table 3.

Table 3: The Summary of Hypothesized Relationships

Hypothesis	Description of Hypothesized Relationship
H1a	Employee competency analysis is positively related to employee commitment.
H1b	Employee competency analysis is positively related to operational development.
H1c	Employee competency analysis is positively related to business productivity.
H1d	Employee competency analysis is positively related to firm competitiveness.
H1e	Employee competency analysis is positively related to firm success.
H2a	Individual ability support is positively related to employee commitment.
H2b	Individual ability support is positively related to operational development.
H2c	Individual ability support is positively related to business productivity.
H2d	Individual ability support is positively related to firm competitiveness.
H2e	Individual ability support is positively related to firm success.
H3a	Continuous learning enhancement is positively related to employee commitment.
H3b	Continuous learning enhancement is positively related to operational development.

Table 3: Summary of Hypothesized Relationships (continued)

Hypothesis	Description of Hypothesized Relationship
H3c	Continuous learning enhancement is positively related to business productivity.
H3d	Continuous learning enhancement is positively related to firm competitiveness.
H3e	Continuous learning enhancement is positively related to firm success.
H4a	Strategy-development connectivity is positively related to employee commitment.
H4b	Strategy-development connectivity is positively related to operational development.
H4c	Strategy-development connectivity is positively related to business productivity.
H4d	Strategy-development connectivity is positively related to firm competitiveness.
H4e	Strategy-development connectivity is positively related to firm success.
H5a	Innovation creativity focus is positively related to employee commitment.
H5b	Innovation creativity focus is positively related to operational development.
H5c	Innovation creativity focus is positively related to business productivity.
H5d	Innovation creativity focus is positively related to firm competitiveness.
H5e	Innovation creativity focus is positively related to firm success.
H6a	Employee commitment is positively related to business productivity.
H6b	Employee commitment is positively related to firm competitiveness.
H7a	Operational development is positively related to business productivity.
H7b	Operational development is positively related to firm competitiveness.
H8	Business productivity is positively related to firm competitiveness.
H9	Firm competitiveness is positively related to firm success.

Table 3: Summary of Hypothesized Relationships (continued)

Hypothesis	Description of Hypothesized Relationship
H10a	Transformational leadership orientation is positively related to employee competency analysis.
H10b	Transformational leadership orientation is positively related to individual ability support.
H10c	Transformational leadership orientation is positively related to continuous learning enhancement.
H10d	Transformational leadership orientation is positively related to strategy-development connectivity.
H10e	Transformational leadership orientation is positively related to innovation creativity focus.
H11a	Human capital policy is positively related to employee competency analysis.
H11b	Human capital policy is positively related to individual ability support.
H11c	Human capital policy is positively related to continuous learning enhancement.
H11d	Human capital policy is positively related to strategy-development connectivity.
H11e	Human capital policy is positively related to innovation creativity focus.
H12a	Organizational resource readiness is positively related to employee competency analysis.
H12b	Organizational resource readiness is positively related to individual ability support.
H12c	Organizational resource readiness is positively related to continuous learning enhancement.
H12d	Organizational resource readiness is positively related to strategy-development connectivity.

Table 3: Summary of Hypothesized Relationships (continued)

Hypothesis	Description of Hypothesized Relationship
H12e	Organizational resource readiness is positively related to innovation creativity focus.
H13a	IT capability is positively related to employee competency analysis.
H13b	IT capability is positively related to individual ability support.
H13c	IT capability is positively related to continuous learning enhancement.
H13d	IT capability is positively related to strategy-development connectivity.
H13e	IT capability is positively related to innovation creativity focus.
H14a	Environmental complexity force is positively related to employee competency analysis.
H14b	Environmental complexity force is positively related to individual ability support.
H14c	Environmental complexity force is positively related to continuous learning enhancement.
H14d	Environmental complexity force is positively related to strategy-development connectivity.
H14e	Environmental complexity force is positively related to innovation creativity focus.
H15a	Survival culture will positively moderate the relationships between transformational leadership orientation and employee competence analysis.
H15b	Survival culture will positively moderate the relationships between transformational leadership orientation and individual ability support.
H15c	Survival culture will positively moderate the relationships between transformational leadership orientation and continuous learning enhancement.

Table 3: Summary of Hypothesized Relationships (continued)

Hypothesis	Description of Hypothesized Relationship
H15d	Survival culture will positively moderate the relationships between transformational leadership orientation and strategy-development connectivity.
H15e	Survival culture will positively moderate the relationships between transformational leadership orientation and innovation creativity focus.
H16a	Survival culture will positively moderate the relationships between human capital policy and employee competence analysis.
H16b	Survival culture will positively moderate the relationships between human capital policy and individual ability support.
H16c	Survival culture will positively moderate the relationships between human capital policy and continuous learning enhancement.
H16d	Survival culture will positively moderate the relationships between human capital policy and strategy-development connectivity.
H16e	Survival culture will positively moderate the relationships between human capital policy and innovation creativity focus.
H17a	Survival culture will positively moderate the relationships between organizational resource readiness and employee competence analysis.
H17b	Survival culture will positively moderate the relationships between organizational resource readiness and individual ability support.
H17c	Survival culture will positively moderate the relationships between organizational resource readiness and continuous learning enhancement.
H17d	Survival culture will positively moderate the relationships between organizational resource readiness and strategy-development connectivity.
H17e	Survival culture will positively moderate the relationships between organizational resource readiness and innovation creativity focus.
H18a	Survival culture will positively moderate the relationships between IT capability and employee competence analysis.

Table 3: Summary of Hypothesized Relationships (continued)

Hypothesis	Description of Hypothesized Relationship
H18b	Survival culture will positively moderate the relationships between IT capability and individual ability support.
H18c	Survival culture will positively moderate the relationships between IT capability and continuous learning enhancement.
H18d	Survival culture will positively moderate the relationships between IT capability and strategy-development connectivity.
H18e	Survival culture will positively moderate the relationships between IT capability and innovation creativity focus.
H19a	Survival culture will positively moderate the relationships between environmental complexity force and employee competence analysis.
H19b	Survival culture will positively moderate the relationships between environmental complexity force and individual ability support.
H19c	Survival culture will positively moderate the relationships between environmental complexity force and continuous learning enhancement.
H19d	Survival culture will positively moderate the relationships between environmental complexity force and strategy-development connectivity.
H19e	Survival culture will positively moderate the relationships between environmental complexity force and innovation creativity focus.

CHAPTER III

RESEARCH METHODS

The previous chapter illustrates a comprehensive review of relevant literature detailing human resource development capability, theoretical foundation, antecedents, consequences, moderators and the hypothesis development. Consequently, this chapter demonstrates the research methods that help to clarify the understanding of the hypothesis testing process. Thus, this chapter is organized into four sections as follows. Firstly, the sample selection and data collection procedures, including population and sample, data collection and test of non-response bias are detailed. Secondly, the variable measurements are developed. Thirdly, the instrumental verifications, including test of validity and reliability, and the statistical analysis are presented. Finally, the table of summary of definitions and operational variables of constructs is included.

Sample Selection and Data Collection Procedures

Population and Sample

Previous research mainly focuses on high technology or manufacturing industries when discussing the importance of human resource management (Zacharatos et al., 2007). The auto parts industry in Thailand is selected as the population of this research. In order to illustrate the research phenomenon, a list of 618 auto parts firms in Thailand are provided by the Thai Auto Parts Manufacturers Association (www.thaiautoparts.or.th, accessed December 2, 2016). According to Krejcie and Morgan (1970), the required sample size to be a representative of this auto parts industry in this research is 237, which is a minimum required sample size. However, previous research suggests that the average response rate of the mailed questionnaire survey is a range between 15 and 20 percent (Aaker, Kumar, & Day, 2001; Menon, Bharadwaj, Adidam, & Edison, 1999). Therefore, oversampling is needed to ensure a minimum sample size (Bartlett II, Kptrlik, & Higgins, 2001). To maximize the possibility of a response rate, this research determines that 1,185 firms adequate for a

sampling frame (237 x 5); however, this number exceeds the total population. As a result, this research finally uses 618 firms as a sample population.

According to the questionnaire mailing, 25 surveys were undeliverable because some of these firms had moved to unknown locations. Deducting the underliverable from the original 618 mailed, the valid mailing was 593 surveys. Finally, a collection of 130 responses was received. However, only 128 complete questionnaires were usable for further analysis. The effective response rate was approximately 21.59 percent. The response rate for a mail survey, without an appropriate follow-up procedure, if greater than 20 percent, is considered acceptable (Aaker et al., 2001). Hence, 128 firms are a sufficient sample size for employing multiple regression analysis. The details of the questionnaire mailing are show in Table 4.

Table 4: Details of Questionnaire Mailing

Details	**Number**
Mailed Questionnaires	618
Undelivered Questionnaires	25
Valid Questionnaire Mailed	593
Non-Response Questionnaires	463
Received Questionnaires	130
Unusable Questionnaires	2
Usable Questionnaires	128
Response Rate (128/593) x 100	21.59 %

In this research, the chosen industry offers the potential to simultaneously examine five dimensions of human resource development capability. The auto parts industry in Thailand represents highly-competitive industries (Sriboonlue & Ussahawanitchakit, 2014). With respect to the National Science and Technology Development Agency, Thailand is first in ASEAN as to automobiles and auto parts manufacturing, and ninth in the world with the total value in export of more 16.5 billion U.S. dollars in 2015, even though growth declined in 2016 (NSTDA, 2016).

Secondly, the auto parts industry in Thailand has an important place in human resource development by the criteria of ISO/TS 16929 that regards human resources (HR) as necessary to: determine the essential competence for individual performing work moving quality of the product, provide training or taking other activities to satisfy these needs, appraising the effectiveness of the activities taken, ensuring that its individuals are conscious of the relevance and importance of their actions and how they contribute to the achievement of the quality objectives, and maintaining appropriate records of education, training, skill and experience (Hekelova & Srdosova, 2009).

Thirdly, the continuous development of automobile technology also has encouraged the auto parts industry to keep moving and innovating. The improvement of engines and the emerging of alternative energies such as liquid petroleum gas (LPG), natural gas vehicles (NGV) and gasohol (E20), have made a huge impact on the auto parts industry. Therefore, the Thai auto parts businesses have played a significant role in helping to increase and expand the Thai economy in terms of economic growth and stability (Panya & Ussahawanitchakit, 2013).

Finally, with regard to globalization, the auto parts businesses in Thailand face the challenge of competition among many competitors, both local and international. Modern automobile manufacturing has initiatives in relationship to its human resource management which is important for greater productivity, competitiveness and success by emphasizing worker involvement (Zacharatos et al., 2007). Therefore, based on the human capital theory, this selected sample is appropriate for the investigation of the human resource development capability phenomena.

Data Collection

The questionnaires are appropriately used to collect data in this research. These are an extensively-used method for large-scale data collection in strategic management and organizational research. The advantage of questionnaire mailing is that a representative sample can be collected from the chosen population in a variety of locations at low cost (Kwok & Sharp, 1998; Pongpearchan & Ussahawanitchakit, 2011). In this research, the questionnaire was directly distributed to the key informants who work as human resource directors and managers of the auto parts businesses industry in

Thailand. Then, the completed questionnaires are directly sent back to the researcher by the prepared return envelopes in order to ensure confidentially.

In this research, a valid and reliable self-administered questionnaire comprises seven sections. In the first section, respondents are requested to provide their personal information such as gender, age, marital status, level of education, work experience, average monthly income, and current position. The second section questions the organizational characteristic; for example, business investment, business entity, business ownership, business location, period of time in business, number of full-time employees, operational capital, the firm's average revenues per year, and labor union. For the third to sixth sections, respondents are canvassed on their perceptions toward human resource development capability, its consequences, antecedents and moderators. Moreover, the Likert five-point interval scale, ranging from 1 = strongly disagree, to 5 = strongly agree, is employed.

To be more detailed, the third section collects the key concepts of human resource development capability dimensions: employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity and innovation creativity focus. The fourth section presents questions concerning the consequences of human resource development capability, including employee commitment, operational development, business productivity, firm competitiveness and firm success. The fifth section includes questions regarding to the antecedents of human resource development capability including transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. The sixth section consists of a set of questions in relation to survival culture that affects the relationship between human resource development capability antecedents and human resource development capability. Finally, the seventh section provides an open-ended question to gather key respondent suggestions and opinions.

Test of Non-Response Bias

The testing of non-response bias is the important step before the sample is generalized to the population. Regarding Armstrong and Overton (1977), a chi-square comparison of demographics information (for example firm size, firm age, firm capital,

revenue per year and ownership) between early and late respondents are tested to prevent and assure possible response bias problem. Extrapolation methods have the assumption that subjects who answer later, or require more prodding to answer, are more likely to be treated as non-respondents. If the results of the Pearson chi-square statistics show no statistically significant differences of demographics information between early and late respondents, then there is no non-response bias problem between respondents and non-respondents (Lewis, Hardy, & Snaith, 2013; Rogelberg & Stanton, 2007).

All 128 received questionnaires were divided into two equal groups: the first 64 responses are treated as the early respondents (the first group) and the other 64 responses are treated as the late respondents (the second group). The first group represented the early respondents and the second group represented the late respondents. By employing a chi-square statistic, the differences of organizational demographics in terms of the business investment, business ownership, firm age, number of employees, firm capital, firm revenue, and labor union were compared.

The results are as follows: the business investment (Pearson chi-square = 0.216, $p > 0.05$), the business ownership (Pearson chi-square = 0.051, $p > 0.05$), the firm age (Pearson chi-square = 0.758, $p > 0.05$), the number of employees (Pearson chi-square = 0.553, $p > 0.05$), the firm capital (Pearson chi-square = 0.203, $p > 0.05$), the firm revenue (Pearson chi-square = 0.358, $p > 0.05$), and the labor union (Pearson chi-square = 0.256, $p > 0.05$). These results provide the evidence that there were no statistically significant differences between two groups at a 95% confidence level. It can be confidently mentioned that non-response bias is not a serious problem in this research (Armstrong & Overton, 1977). The detailed results of the non-response bias test are presented in Appendix B.

Measurements

In measuring each construct in the conceptual model, a multiple-item measurement process is developed. Since constructs are abstracts that cannot be directly measured or observed they should be measured by multiple items (Churchill, 1979). Moreover, using multiple items provide a more extensive range of the content of a

conceptual definition and improvement of reliability (Neuman, 2006). In this research, all constructs are transformed into operational variables to gain more accuracy in measuring research constructs. All variables are derived from the definition and previous literature by a five-point Likert scale ranging from 1 = strongly disagree, to 5 = strongly agree. In summary, all operational definitions of each construct which are comprised of the dependent variable, the independent variables, the moderating variable and the control variables, are described below.

Dependent Variable

Firm success. Firm success is represented by the growth rates of sales, profit, and market share; and are linked to strategic capabilities while having a need to be managed for firm performance or survival in an extremely competitive state (Chatman & Barsade, 1995). A firm's success is a potential derived from the attainment of a firm's objective, which is the overall performance of four main perspectives: financial, customers, internal business processes, and learning and growth. Likewise, Cadez and Guilding (2008) argued that firm success dimensions are measured from customer satisfaction, return on investment, product quality improvement, sales volume, market share and profitability. Chatman and Barsade (1995) defined organizational success as that associated with strategic capabilities which need to be managed for firm performance or survival in extremely competitive states; and their study presents that organizational success is connected with its strategies, a capability which needs to be accomplished for firm performance or survival among highly competitive situations. This construct is adapted from Cadez and Guilding (2008) which includes a six-item scale.

Independent Variables

This research consists of 14 independent variables which are separated into three categories; core construct, consequential variables and antecedent variable. Firstly, human resource development capability is the center and core construct of this research. It can be measured through five distinctive attribute dimensions: employee competence analysis, individual ability support, continuous learning enhancement, strategy-development capability and innovation creativity focus. These attributes reflect the good

characteristics of human resource development capability. The measure of each attribute depends on its definition which is detailed below.

Employee competency analysis. Employee competency analysis is the firm's activities to identify and classify individuals and jobs needing skill or ability. This includes an individual's desire to undertake training for effective human resource development planning (Huda et al., 2014; Price et al., 2010; Rossett, 1987). This construct is developed as a new scale from the definition including a four-item scale.

Individual ability support. Individual ability support is the encouragement of an organization in providing absolute resource to improve the skills of employees and give an opportunity to use prominent employee skill. It includes development of the desire to gain other ability development of employee (Ambrozova et al., 2016; Kennett, 2013). This construct is developed as a new scale from the definition including a four-item scale.

Continuous learning enhancement. Continuous learning enhancement is firm motivation in self-study, knowledge and experience interchange to facilitate the unceasingly self-development of knowledge, skill and ability of employees (Armstrong & Foley, 2003; Hackman, 1986; Holt et al., 1996; London & Smither, 1999). This construct is developed as a new scale from the definition including a four-item scale.

Strategic-development connectivity. Strategy-development connectivity is firm commitment to integrating, sharing and transferring the gold, mission, vision, planning and implementation of the business to human resource development system, practices and policies (Alagaraja & Egan, 2013; Deb, 2010) for people's efficient work and to gain competitive advantage (Huda et al., 2007). This construct is developed as a new scale from the definition including a five-item scale.

Innovation creativity focus. Innovation creativity focus is the enhancement of organization in generating new information, knowledge and experience of employees and organizations to improve operational process in an organization (Armstrong &

Foley, 2003; Ehlen et al., 2013; Kessels, 2001, 2004). This construct is developed as a new scale from the definition including a four-item scale.

Consequential Variables

The second category is the consequences of human resource development capability, namely, employee commitment, operational development, business productivity and firm competitiveness. The measure of each consequential variable conforms to its definition and relative literatures, and is discussed as follows.

Employee commitment. Employee commitment is a psychological connection between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization (Allen & Meyer, 1996; Chaudhuri & Bartlett, 2014). This construct is adapted from Meyer and colleagues (1989) including a four-item scale.

Operational development. Operational development is a process improvement of an organization in continuous activity, process management and structured methods for problem identification, diagnosis, generational solutions, and implementation (Anand et al., 2009; Choo et al., 2007; Yang et al., 2015). This construct is adapted from Yang and colleagues (2015) including a four-item scale.

Business productivity. Business productivity is efficiency and effectiveness, which is equal to performance or profitability, and features productivity such as time, quality and value creation (Oeij et al., 2012). In any organization, productivity is considered from the proportion of outputs and inputs, in which input includes labor, capital and resources; while outputs may be defined as physical volumes (e.g., product volumes) or financial outcomes (e.g., profit or added value) (Oeij et al., 2012). This construct is adapted from Oeij and colleagues (2012), including a four-item scale.

Firm competitiveness. Firm competitiveness refers to the readiness of corporate management over its competitors in terms of quality, price, cost, image and reliability (Man et al., 2002). It includes maintaining a highly-skilled employee who has

advantages and is possessed by a capability above other firms in the industry (Abushaiba & Zainuddin, 2012). This construct is adapted from Abushaiba and Zainuddin (2012), including a four-item scale.

Antecedent Variables

Lastly, the third category is the five antecedents of human resource development capability comprised of transformational leadership orientation, human capital policy, organizational resource readiness, IT capability and environmental complexity force. All antecedent variables align to their definitions and the prior literature. The measure of each variable is discussed as follows.

Transformational leadership orientation. Transformation leadership orientation is the organization's ability that has a leader who encourages and advocates the employees to develop according to organizational objectives (Bass & Avolio, 1989). This construct is adapted from Bass and Avolio (1989), including a four-item scale.

Human capital policy. Human capital is a resource that is created from the emergence of knowledge, skill, ability and other characteristics of people (KSAOs) (Ployhart & Moliterno, 2011). Therefore, human capital policy is important in the context of the broad organizational mission and agenda (Whitmarsh, 2009) that focuses on enhancement and improvement of knowledge, skill, ability and other characteristics of the employees. This construct is developed as a new scale from the definition, including a four-item scale.

Organizational resource readiness. Organizational resource readiness is the fruitfulness of tangible and intangible resources of an organization for supporting the work of organizational processes to achieve a corporate target (Ray et al., 2004). This construct is developed as a new scale from the definition, including a four-item scale.

Information Technology capability. Information technology capability is the ability of a firm's innovation technology based on implementation or physical infrastructure and other information in technology support (Mark & Su, 2010) for

generating information for operations and decision-making (Chapman, 2005). This construct is adapted from Turulja and Bajgoric (2016), including a four-item scale.

Environmental complexity force. Environmental complexity force is the pressure of proliferation and diversity of relevant factors in the environment (Nicolau, 2005). This construct is developed as a new scale from the definition, including a four-item scale.

Moderating Variable

Drawing on the contingency theory, survival culture is a moderator in this research which moderates the relationship between human resource development capability and its antecedents.

Survival culture. Survival culture refers to the capability of an organization which has co-operated in practice to help survival from environmental difficulties (Hofstede, 1980). This construct is adapted from Hofstede (1980), including a four-item scale.

Control Variables

Two control variables are included in this research. Firm size and ownership are the characteristics that may influence the hypothesized relationships.

Firm size. The size of the plant might be directly related to manufacturing performance (Jayaram, Droge, & Vickery, 1999; Bayo-Moriones & de Cerio, 2001). The number of workers in an organization is representative of business size and is widely used in the literature on management and organization (Bello-Pintado, 2015). Firm size was included as a control variable because a larger firm might have more resources than a smaller firm, which might moderate the relationship between human resource development and firm performance (Ji, Tang, Wang, Yan, & Liu, 2012). Accordingly, firm size is a dummy variable in which 0 means the firm has a number of full time employees less than or equal to 300, and 1 means the firm has a number of full time employees more than 300.

Ownership. There is substantial variation in the way human resources are managed among different ownership types and regions (Ding, Akhtar, & Ge, 2006). Organizational culture and economic conditions play an important role in determining an organization's human resource strategy and practice (Roos, Fernström, & Pike, 2004). The ownership of a manufacturing firm has been related to human resource performance in which company-owned units have a higher human resource management intensity than franchised units, and franchised units have a higher HR performance than company-owned-units (Brand & Croonen, 2010; Chandler & McEvoy, 2000; Kotey & Slade, 2005; Yin & Zajac, 2004). Accordingly, ownership is a dummy variable in which 0 means the firm is a single units and 1 means the firm is a franchised units.

Methods

In this research, most of the constructs in the conceptual model are newly-developed. Consequently, the 30 first respondent were used to pre-test method which is appropriately conducted to assert the validity and reliability of the questionnaire. Firstly, the questionnaire was double-checked by a specialist and experienced scholars. Later, the rationale of the pre-test was conducted to check for a clear and accurate understanding of the questionnaire before using real data collection.

Validation and Reliability

Validation. Validity is the degree to which a measure precisely represents the correct and accurate instrument (Hair, Black, Babin, & Anderson, 2010). Especially, the validity testing of measurement in this research accurately confirms the concept or construct of the study. According to Neuman (2006), accuracy occurs if there is a poor fit between the theories the researchers use to describe or analyze the social world and what happens in the real world. This research tested the validity of the measure or series of measures to verify and illustrate the correct concept of the research.

Firstly, content validity is the extent to which the items of the scale are sufficiently reflected in the interrelated theoretical domain (Green, Boissoles, & Boulet, 1988). It refers to the degree to which the essence of the scale represents the construct

being measured (Thoumrungroje, 2013). With regard to the relevant theory and literature review, each of the items in the questionnaire was subjectively assessed by two specialist and related academic experts to ensure the content validity (see also Appendix G).

Secondly, construct validity refers to a set of measured items that actually reflect theoretical latent constructs that those items are designed to measure (Hair, Anderson, Tatham, & Black, 2006). If the scale really reflects and indicates its designated construct, then convergent validity and discriminant validities should be established. Convergent validity demonstrates items that are indicators of a specific construct convergence or share a high proportion of variances in common (Hair et al., 2010). It is the accuracy of a scale in correlating with other scales that are designed to measure the same construct (Thoumrungroje, 2013). Discriminant validity is the extent to which a construct is truly distinct from other constructs (Hair et al., 2010). It is the accuracy of a scale in distinguishing itself from other scales to measure a different construct (Thoumrungroje, 2013). In short, this validity also means that individually-measured items should represent only one construct. Therefore, both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are used to examine the construct validity of the data in the questionnaire. Moreover, to ensure the construct validity, the size of the factor loading must be greater than the 0.40 cut-off and statistically significant (Nunnally & Berstein, 1994).

In this research, construct validity is illustrated by convergent validity. Convergent validity demonstrated that the item are indicator of a specific construct converge or share a high proportion of variance in common. Therefore, the high values of factor loading were considered in a specific construct. The result found that each item of all variable is loaded on a single factor and the range of factor loading is between 0.705 and 0.927 for EFA, and between 0.679 and 0.960 for CFA. These values are greater than the cut-of score of 0.4 which indicates acceptable construct validity (see Appendix C for more details).

Reliability. Reliability is the degree to which the measurement is trusted and error-free (Hair et al., 2010). In this research, the Cronbach's alpha coefficient was used to test the internal consistency of each construct. Internal consistency is an approach to

evaluate the consistency or reliability within a collection of multiple items that represent the scale (Thoumrungroje, 2013). The coefficient alpha or Cronbach's alpha was employed to estimate the reliability. Accordingly, Cronbach's alpha should be greater than 0.70 to ensure the internal consistency (Nunnally & Bernstein 1994; Hair et al., 2006). The findings of Cronbach's alpha coefficients were between 0.805 and 0.938, which exceeds the acceptable cut-off score. It can be concluded that internal consistency of the entire scale exists in this research (see also Appendix C for more details).

Statistical Techniques

Before hypotheses testing, all of raw data was checked, encoded and recorded in a data file. Then, the basis assumption of regression analysis, such as the normality, linearity, homoscedasticity and multicollinearity was tested. Moreover, the results of assumption testing are shown in Appendix D.

Variance inflation factor. To deal with the multicollinearity problem, this research employs a variance inflation factor (VIF) and a tolerance value as indicators to indicate a high degree of multicollinearity among the independent variables. Regarding Hair and colleagues (2006), if a tolerance value is greater than 0.10, and the VIF is less than 10, then multicollinearity is not a concern (Hair et al., 2010). In this research, an analysis of collinearity statistics indicates that the range of VIF value is between 1.099 and 8.293, which indicates that there is no multicollinearity problem.

Correlation analysis. Correlation analysis was illustrated to test the correlation among all variables and a correlation matrix was provided to examine a bivariate-correlation and to explore the relationships between the variables and this correlation value which is between equal to 1 and -1. In this research, Pearson correlation analysis was used because the data that was used was interval level and the assumption testing for regression analysis was not ignore. If the variables become highly correlated, the correlation coefficient is greater than 0.8, and shows significance, it is the first indication of a multicollinearity problem (Hair et al., 2010; Homberg, Artz, & Wieseke, 2012). In this research, the factor score of all variables were prepared to avoid the

multicollinearity problem. Consequently, the relationships between independent variables are not problem and are shown in Table 6 (chapter four).

Multiple regression analysis. The Ordinary Least Squares (OLS) regression analysis is used to test all postulated hypotheses. Since both dependent and independent variables in this research are categorical data and interval data, OLS is an appropriate method for examining the hypothesized relationships (Hair et al., 2010). As a result, all proposed hypotheses in this research are transformed into eighteen statistical equations. Each equation conforms to the hypothesis development described in the previous chapter. Moreover, the statistical equations are separated into sections as follows:

The first section contains statistical equations examining the relationships among human resource development capability, employee commitment, operation development, business productivity, firm competitiveness and firm success as shown below.

Equation 1: $\boldsymbol{ECM} = \alpha_1 + \beta_1 ECA + \beta_2 IAS + \beta_3 CLE + \beta_4 SDC + \beta_5 ICF + \beta_6 FS + \beta_7 OS + \varepsilon_1$

Equation 2: $\boldsymbol{OPD} = \alpha_2 + \beta_8 ECA + \beta_9 IAS + \beta_{10} CLE + \beta_{11} SDC + \beta_{12} ICF + \beta_{13} FS + \beta_{14} OS + \varepsilon_2$

Equation 3: $\boldsymbol{BNP} = \alpha_3 + \beta_{15} ECA + \beta_{16} IAS + \beta_{17} CLE + \beta_{18} SDC + \beta_{19} ICF + \beta_{20} FS + \beta_{21} OS + \varepsilon_3$

Equation 4: $\boldsymbol{BNP} = \alpha_4 + \beta_{22} ECM + \beta_{23} OPD + \beta_{24} FS + \beta_{25} OS + \varepsilon_4$

Equation 5: $\boldsymbol{FCP} = \alpha_5 + \beta_{26} ECA + \beta_{27} IAS + \beta_{28} CLE + \beta_{29} SDC + \beta_{30} ICF + \beta_{31} FS + \beta_{32} OS + \varepsilon_5$

Equation 6: $\boldsymbol{FCP} = \alpha_6 + \beta_{33} ECM + \beta_{34} ODP + \beta_{35} BNP + \beta_{36} FS + \beta_{37} OS + \varepsilon_6$

Equation 7: $\boldsymbol{FSC} = \alpha_7 + \beta_{38} ECA + \beta_{39} IAS + \beta_{40} CLE + \beta_{41} SDC + \beta_{42} ICF + \beta_{43} FS + \beta_{44} OS + \varepsilon_7$

Equation 8: $\boldsymbol{FSC} = \alpha_8 + \beta_{45} FCP + \beta_{46} FS + \beta_{47} OS + \varepsilon_8$

The second section shows statistical equations examining the effects of the antecedent variables on human resource development capability. The influence of survival culture, as a moderator, is also included as shown below.

Equation 9: $ECA = \alpha_9 + \beta_{48}TLO + \beta_{49}HCP + \beta_{50}ORR + \beta_{51}ITC + \beta_{52}ECF + \beta_{53}FS + \beta_{54}OS + \varepsilon_9$

Equation 10: $ECA = \alpha_{10} + \beta_{55}TLO + \beta_{56}HCP + \beta_{57}ORR + \beta_{58}ITC + \beta_{59}ECF + \beta_{60}SVC + \beta_{61}(TLO * SVC) + \beta_{62}(HCP * SVC) + \beta_{63}(ORR * SVC) + \beta_{64}(ITC * SVC) + \beta_{65}(ECF * SVC) + \beta_{66}FS + \beta_{67}OS + \varepsilon_{10}$

Equation 11: $IAS = \alpha_{11} + \beta_{68}TLO + \beta_{69}HCP + \beta_{70}ORR + \beta_{71}ITC + \beta_{72}ECF + \beta_{73}FS + \beta_{74}OS + \varepsilon_{11}$

Equation 12: $IAS = \alpha_{12} + \beta_{75}TLO + \beta_{76}HCP + \beta_{77}ORR + \beta_{78}ITC + \beta_{79}ECF + \beta_{80}SVC + \beta_{81}(TLO * SVC) + \beta_{82}(HCP * SVC) + \beta_{83}(ORR * SVC) + \beta_{84}(ITC * SVC) + \beta_{85}(ECF * SVC) + \beta_{86}FS + \beta_{87}OS + \varepsilon_{12}$

Equation 13: $CLE = \alpha_{13} + \beta_{88}TLO + \beta_{89}HCP + \beta_{90}ORR + \beta_{91}ITC + \beta_{92}ECF + \beta_{93}FS + \beta_{94}OS + \varepsilon_{13}$

Equation 14: $CLE = \alpha_{14} + \beta_{95}TLO + \beta_{96}HCP + \beta_{97}ORR + \beta_{98}ITC + \beta_{99}ECF + \beta_{100}SVC + \beta_{101}(TLO * SVC) + \beta_{102}(HCP * SVC) + \beta_{103}(ORR * SVC) + \beta_{104}(ITC * SVC) + \beta_{105}(ECF * SVC) + \beta_{106}FS + \beta_{107}OS + \varepsilon_{14}$

Equation 15: $SDC = \alpha_{15} + \beta_{108}TLO + \beta_{109}HCP + \beta_{110}ORR + \beta_{111}ITC + \beta_{112}ECF + \beta_{113}FS + \beta_{114}OS + \varepsilon_{15}$

Equation 16: $SDC = \alpha_{16} + \beta_{115}TLO + \beta_{116}HCP + \beta_{117}ORR + \beta_{118}ITC + \beta_{119}ECF + \beta_{120}SVC + \beta_{121}(TLO * SVC) + \beta_{122}(HCP * SVC) + \beta_{123}(ORR * SVC) + \beta_{124}(ITC * SVC) + \beta_{125}(ECF * SVC) + \beta_{126}FS + \beta_{127}OS + \varepsilon_{16}$

Equation 17: $ICF = \alpha_{17} + \beta_{128}TLO + \beta_{129}HCP + \beta_{130}ORR + \beta_{131}ITC + \beta_{132}ECF + \beta_{133}FS + \beta_{134}OS + \varepsilon_{17}$

Equation 18: $ICF = \alpha_{18} + \beta_{135}TLO + \beta_{136}HCP + \beta_{137}ORR + \beta_{138}ITC + \beta_{139}ECF + \beta_{140}SVC + \beta_{141}(TLO * SVC) + \beta_{142}(HCP * SVC) + \beta_{143}(ORR * SVC) + \beta_{144}(ITC * SVC) + \beta_{145}(ECF * SVC) + \beta_{146}FS + \beta_{147}OS + \varepsilon_{18}$

Where;

ECA	=	Employee Competence Analysis
IAS	=	Individual Ability Support
CLE	=	Continuous Learning Enhancement
SDC	=	Strategy - Development Connectivity
ICF	=	Innovation Creativity Focus
ECM	=	Employee Commitment
OPD	=	Operational Development
BNP	=	Business Productivity
FCP	=	Firm Competitiveness
FSC	=	Firm Success
TLO	=	Transformational Leadership Orientation
HCP	=	Human Capital Policy
ORR	=	Organizational Resource Readiness
ITC	=	IT Capability
ECF	=	Environmental Complexity Force
SVC	=	Survival Culture
FS	=	Firm Size
OS	=	Ownership
α	=	Constant
β	=	Regression Coefficient
ε	=	Error Term

Summary

This chapter summarizes the research methods used in the investigation for this research, from simple selection to data gathering, examining all constructs purposed in the conceptual model, and answering the research questions. To be specific, there are four main parts in this chapter: (1) sample selection and data collection procedures, (2) measurement of variables, (3) verification of the instrument, and, (4) statistical techniques. A total list of 618 auto parts firms in Thailand were provided by the Thai Auto parts Manufacturer Association in Thailand. The key informants completing the questionnaires were the human resource managers or human resource directors. Moreover, a valid and reliable questionnaire is the primary instrument of data collection. This chapter also provides the measurements of each construct in the model, which are based on the existing literature. For multiple regression analysis, testable statistical eighteen, equations are formulated. Finally, a summary of the construct definitions and the operational explanation is given in Table 5.

Table 5: Definition and Operational Variables of Constructs

Construct	Definition	Operational Variables	Scale Source
		Dependent variable	
Firm success (FSC)	The goal achievement and receive the revenue and profit consistence with target; continuously increased in market share, financial and performance; well-known and agreement in business professional.	The acceptation of customer as professional business, the increasing of sale and revenue, the increasing of new customer continuously, the continuous growth of operation in total.	Pongpearchan & Ussahawanitchakit (2011)
		Independent variable	
Employee competency analysis (ECA)	Firm's activities to identification and classification of individual and job need skill or ability includes individual's desire to undertake training for effectively human resource development planning.	Firm has identification and classification of individual and job need skill or ability and individual's desire to undertake training.	New scale
Individual ability support (IAS)	Encouragement of organization in providing absolute resource to improve skill of employee and give an opportunity to uses prominent employee skill and includes development on desire to other ability development of employee.	Firm encourage in providing absolute resource to improve skill of employee and give an opportunity to uses prominent employee skill and develop them from desire to other ability development of employee.	New scale

Table 5: Definition and Operational Variables of Constructs (continued)

Construct	Definition	Operational Variables	Scale Source
Continuous learning enhancement (CLE)	Firm activity in provide the resource and support, guided and coaching by manager and rewarding employee from use of new skills and knowledge on the job to facilitate the unceasingly self-development on knowledge, skill and ability of employee.	Firm has activity in provide the resource and support, guided and coaching by manager and rewarding employee from use of new skills and knowledge on the job.	New scale
Strategy-development connectivity (SDC)	Firm commitment to integrating, sharing and transferring the gold, mission, vision, planning and implementation of the business to human resource development system, practices and policies.	Firm has integrating, sharing and transferring the gold, mission, vision, planning and implementation of the business.	New scale

Table 5: Definition and Operational Variables of Constructs (continued)

Construct	Definition	Operational Variables	Scale Source
Innovation creativity focus (ICF)	Enhancement of organization in generating new information, knowledge and experience of employee and organization to improve of operational process in organization.	Firm encourage to generating new idea, process and provide resource to research and development new somethink.	New scale
Mediating variables			
Employee commitment (ECM)	Organization employee that behaves partially as membership is very proud of helping organization to achieve the objectives.	Employee has citizenship, important in organization and want to firm success.	Adapted from Meyer et al. (1989)
Operational development (OPD)	Process improvement of organization of continuous activity, process management and structured method for problem identification and diagnosis and solution generation and implementation.	Process improvement in continuous, good process management and good structured method.	Adapted from Yang et al. (2015)

Table 5: Definition and Operational Variables of Constructs (continued)

Construct	Definition	Operational Variables	Scale Source
Business productivity (BNP)	Business productivity is efficiency and effectiveness, which is equal to performance or profitability and features productivity such as time, quality and value creation.	The proportion input or economic resource (e.g., material, energy, time and labor) less relative to the proportion outputs (e.g., product volume or product quality)	Adapted from Oeij et al. (2012)
Firm competitiveness (FCP)	The readiness of corporate management over the competitors in terms of quality, price, cost, image and reliability includes highly skilled employee.	Firm has advantage in quality, price, cost, image and reliability includes highly skilled employee.	New scale
Antecedent variables			
Transformational leadership orientation (TLO)	Leadership behavior that focused on job execution help encourages the inspiration and pay attention to employees in order to change and develop occurring in organization.	Visionary executives in management, can inspire the staff and to encourage people to learn to work effectively.	Adapted from Bass & Avolio (1989).

Table 5: Definition and Operational Variables of Constructs (continued)

Construct	Definition	Operational Variables	Scale Source
	Antecedent variables		
Human capital policy (HCP)	Human capital policy is its importance in the context of the broad organizational mission and agenda that focus on enhancement and improvement of knowledge, skill, ability and other characteristics of the employees.	Perception in the organization in place important in improvement in knowledge, skill, ability and other characteristic of employee.	Adapted from Ployhart & Moliterno (2011)
Organizational resource readiness (ORR)	The fruitfulness of tangible and intangible resource of organization for support the work of organizational processes to achieve corporate target.	Tangible and intangible resource such as information, resource, technique, know-how and opportunity.	New scale
IT capability (ITC)	The infrastructure and other information technology support of organization for generating information for operations and decision making.	Three components of collecting, analyzing and presenting capability of information technology.	Adapted from Turulja & Bajgoric (2016)

Table 5: Definition and Operational Variables of Constructs (continued)

Construct	Definition	Operational Variables	Scale Source
Environmental complexity force	As degree of the change of the external organizations; the firm must adapt to such changes in the political, economic, social and technological.	Degree of the change the external organizations; the firm must adapt to such changes in the political, economic, social and technological.	New scale
Moderating variable			
Survival Culture	The practical way co-operation for the readiness in building the strength and trust worthiness for the organization survival that adopt from business competition.	Fighting competition in business, building on the strengths and to focus on the target operating clearly.	Adapted from Hofstede (1980)
Control variables			
Firm size	The number of workers is representative of business size.	Dummy variable 0 = below and equal to 300 employees, 1 = higher than 300 employees	Bello-Pintado (2015)
Ownership	Company-owned units or franchised units.	Dummy variable 0 = single-unit, 1 = franchised unit	Brand & Croonen (2010)

CHAPTER IV

RESULTS AND DISCUSSION

The previous chapter presented the research methods which include the population and sample, data collection, and the test of non-response bias. Moreover, measurement, assumption testing, data analysis and hypotheses testing are described. This chapter is organized as follows. Firstly, this chapter presents the respondent characteristics, the sample characteristics, and correlation analysis. Secondly, the hypothesis testing and the results are detailed. Finally, the summary of all hypotheses testing and conclusions is included in Table 16.

Respondents Characteristics

Respondent Characteristics

In this research, the key informants are the human resource directors or human resource managers who have the most comprehensive understanding regarding firm characteristic, firm human resource policy, human resource characteristic, and firm performance. The respondent characteristics are described by the demographic characteristics, including gender, age, marital status, level of education, work experience, average monthly income, and current position.

Table 6: Demographic Characteristic of Respondents

Description	Categories	Frequency	Percentage
Gender	Male	58	45.31
	Female	70	54.69
	Total	128	100.00

Table 6: Demographic Characteristic of Respondents (continued)

Description	Categories	Frequency	Percentage
Age	Less than 30 years old	6	4.69
	30 – 40 years old	37	28.90
	41 – 50 years old	57	44.53
	More than 50 years old	28	21.88
	Total	128	100.00
Marital Status	Single	31	24.22
	Married	89	69.53
	Divorced/Separated	8	6.25
	Total	128	100.00
Level of Education	Bachelor's degree or lower	73	57.03
	Higher than Bachelor's degree	55	42.97
	Total	128	100.00
Work Experiences	Less than 5 years	11	8.59
	5 – 10 years	17	13.28
	11 – 15 years	26	20.31
	More than 15 years	74	57.82
	Total	128	100.00
Average Monthly Income	Less than 50,000 Baht	35	27.34
	50,001 – 70,000 Baht	35	27.34
	70,001 – 90,000 Baht	28	21.88
	More than 90,000 Baht	30	23.44
	Total	128	100.00
Current Position	Human resource director	13	10.16
	Human resource manager	115	89.84
	Total	128	100.00

From Table 6, shown the demographic characteristic of 128 respondents are as the following. Approximately 54.69 percent of respondents are female. The age span of respondents is 41 – 50 years old (44.53 percent). The majority of respondents are

married (69.53 percent). A total of 57.03 percent earned a bachelor's degree or lower. Exactly 57.82 percent have work experience of more than 15 years. The average monthly income of respondents ranges less than 70,000 baht (54.68 percent). Finally, the majority of the respondents hold a current position as human resource manager (89.84 percent).

Firm Characteristic

Table 7: Characteristics of Auto Parts Businesses

Description	Categories	Frequency	Percentage
Business Investment	Domestic Investment	63	49.22
	International Investment	65	50.78
	Total	128	100.00
Business Entity	Limited Companies	123	96.09
	Partnership	5	3.91
	Total	128	100.00
Business Ownership	Single Units	53	41.41
	Franchised Units	75	58.59
	Total	128	100.00
Business Location	Northern Region	1	0.78
	Central Region	54	42.19
	Eastern Region	30	23.44
	Northeastern Region	2	1.56
	Bangkok	41	32.03
	Total	128	100.00
Periods of Time in Business	Less than 5 years	1	0.78
	5 – 10 years	7	5.47
	11 – 15 years	12	9.38
	More than 15 years	108	84.37
	Total	128	100.00

Table 7: Characteristics of Auto Parts Businesses (continues)

Description	Categories	Frequency	Percentage
Number of Full Time Employees	Less than and equal 300 employees	64	50.00
	More than 300 employees	64	50.00
	Total	128	100.00
Operational Capital	Less than 50,000,000 Baht	36	28.13
	50,000,001 – 75,000,000 Baht	22	17.19
	75,000,001 – 100,000,000 Baht	16	12.50
	More than 100,000,000 Baht	54	42.18
	Total	128	100.00
Labor Union	Firm' Employees have Labor Union	37	28.91
	Firm' Employees have not Labor Union	91	71.09
	Total	128	100.00
Firm's Average Revenues per Years	Less than 50,000,000 Baht	13	10.16
	50,000,001 – 75,000,000 Baht	12	9.38
	75,000,001 – 100,000,000 Baht	26	20.31
	More than 100,000,000 Baht	77	60.15
	Total	128	100.00

The results of the demographic characteristics of 128 auto parts businesses are shown in Table 7. The results indicate that the majority of the firm respondents have business investment from international investment (50.78 percent). The firm respondents have registered as a limited company (96.09 percent). Most of firm respondents are a franchised units (58.59 percent) and are location in the central region (42.19 percent). Approximately 84.37 percent of firm respondents have been operating in the auto parts industry for over 15 years. In addition, it is estimated that half of firm respondents employ more than 300 full time employees (50.00 percent). Most of firm respondents have an operating capital of more than 100,000,000 baht (42.18 percent)

and 60.15 percent of firm respondents have average revenues per year of more than 100,000,000 baht. Lastly, employees in the respondent's firms not have a labor union, equaling 71.09 percent.

Correlation Analysis

In this research, a bivariate correlation analysis of Pearson's correlation was used on all variables for two purposes. The first purpose is to explore the relationships among variables. Another purpose is to verify the multicullinearity problem. Multicollinearity problems exist when the inter-correlation between independent variables exceeds 0.80 (Hair et al., 2010). In this research, the bivariate correlation procedure is subject to a two-tailed test of statistical significance at two levels as $p < 0.05$, and $p < 0.01$. The result of the correlation analysis of all variables in this research are shown in Table 8.

Accordingly, Table 8 shows that all of the five dimensions of human resource development capability have significant, positive relationships with employee commitment, operational development, business productivity, firm competitiveness, and firm success ($r = 0.557 – 0.781$, $p < 0.01$). For the antecedents, these variables are significantly related to all dimensions of human resource development capability ($r = 0.618 – 0.793$, $p < 0.01$). The moderating effect of survival culture have correlations with all variables between 0.689 and 0.865, $p < 0.01$. In addition to the relationships among the variables, the correlations among all variables in the conceptual model are in the range of 0.176 at $p < 0.05$ to 0.865 with $p < 0.01$, which correlations more than 0.8 have no relationship with the independent variables. Thus, the results indicate no multicollinearity problem in this research (Hair et al., 2010).

Table 8: Descriptive Statistic and Correlation Matrix of Human Resource Development Capability and All Constructs

	ECA	IAS	CLE	SDC	ICF	ECM	OPD	BNP	FCP	FSC	TLO	HCP	ORR	ITC	ECF	SVC	FS
Mean	4.205	4.164	4.138	4.128	4.101	4.037	4.052	3.939	3.906	3.876	4.134	4.169	4.093	4.068	4.388	4.127	MA
S.D.	0.602	0.617	0.591	0.625	0.705	0.687	0.700	0.674	0.733	0.763	0.635	0.613	0.672	0.693	0.568	0.675	MA
IAS	0.841**																
CLE	0.786**	0.796**															
SDC	0.782**	0.775**	0.772**														
ICF	0.733**	0.737**	0.772**	0.798**													
ECM	0.694**	0.621**	0.668**	0.781**	0.694**												
OPD	0.652**	0.661**	0.623**	0.687**	0.661**	0.801**											
BNP	0.591**	0.620**	0.606**	0.753**	0.693**	0.749**	0.752**										
FCP	0.606**	0.659**	0.651**	0.720**	0.761**	0.762**	0.758**	0.850**									
FSC	0.557**	0.581**	0.579**	0.651**	0.653**	0.720**	0.732**	0.790**	0.874**								
TLO	0.717**	0.793**	0.719**	0.786**	0.683**	0.753**	0.776**	0.757**	0.771**	0.704**							
HCP	0.706**	0.722**	0.667**	0.803**	0.718**	0.715**	0.745**	0.759**	0.767**	0.701**	0.844**						
ORR	0.706**	0.740**	0.712**	0.789**	0.757**	0.742**	0.733**	0.761**	0.771**	0.711**	0.807**	0.851**					
ITC	0.704**	0.741**	0.728**	0.782**	0.753**	0.652**	0.681**	0.676**	0.714**	0.672**	0.766**	0.805**	0.818**				
ECF	0.618**	0.622**	0.583**	0.644**	0.617**	0.448**	0.460**	0.477**	0.511**	0.470**	0.622**	0.661**	0.657**	0.671**			
SVC	0.692**	0.734**	0.709**	0.780**	0.779**	0.689**	0.689**	0.701**	0.737**	0.727**	0.769**	0.785**	0.811**	0.865**	0.695**		
FS	0.299**	0.328**	0.241**	0.346**	0.262**	0.248**	0.259**	0.282**	0.246**	0.255**	0.295**	0.420**	0.408**	0.301**	0.341*	0.320**	
OS	0.097	0.173	0.176*	0.090	0.182*	0.155	0.141	0.230**	0.239**	0.227**	0.236**	0.241**	0.198*	0.214*	0.170	0.176*	0.301**

N = 128

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

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

Hypothesis Testing and Results

This research employs the Ordinary Least Squares (OLS) regression to investigate the hypothesized relationships. Also, the regression equation is a linear combination of the independent variables that best explains and predicts the dependent variables. Furthermore, two dummy variables of firm size and ownership are also included in the equations. There are 18 statistical equations in this research. The results of descriptive statistic and hypotheses testing are discussed according to regression equations as follows:

The Relationships among Each Dimension of Human Resource Development Capability and Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

Figure 6: The Relationship among Each Dimension of Human Resource Development Capability and Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

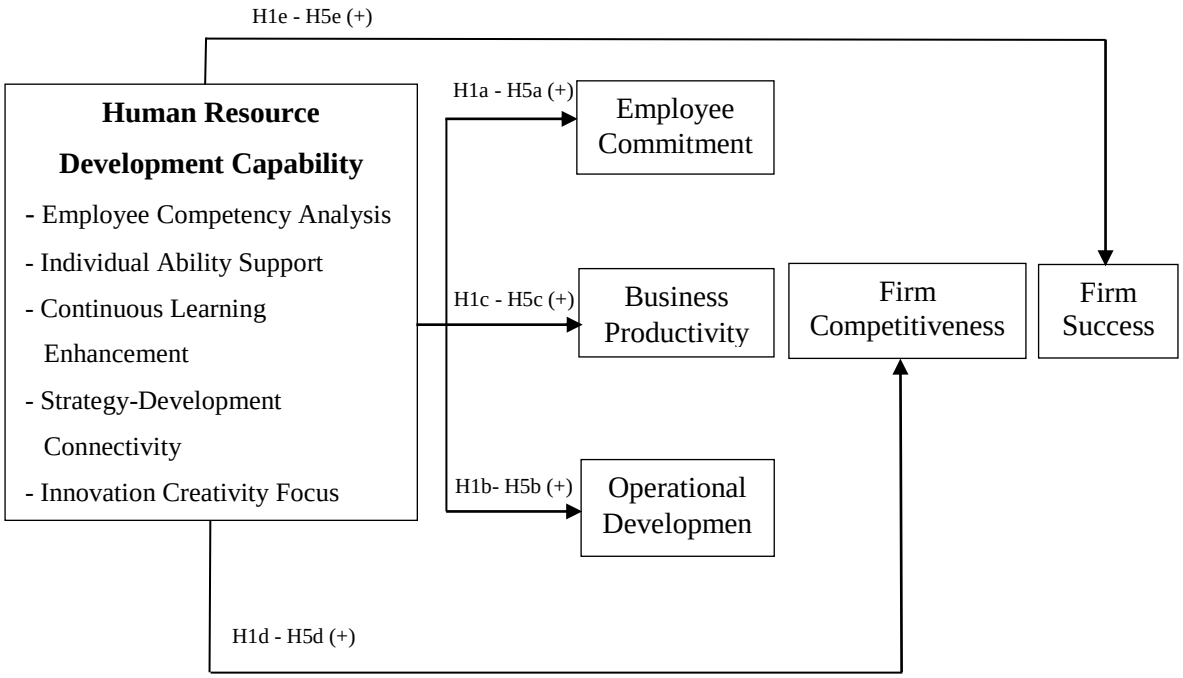


Figure 9 shows the relationships among human resource development capability and its consequences which are proposed in Hypotheses 1(a-e) – 5(a-e). The relationship in each hypothesis is proposed to be in a positive direction. These hypotheses can be transformed into a regression equation in equations 1, 2, 3, 5, and 7.

Table 9: Descriptive Statistics and Correlation Matrix of Each Dimension of Human Resource Development Capability, Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

	ECA	IAS	CLE	SDC	ICF	ECM	OPD	BNP	FCP	FSC
Mean	4.205	4.164	4.138	4.128	4.101	4.037	4.052	3.939	3.906	3.876
S.D.	0.602	0.617	0.591	0.625	0.705	0.687	0.700	0.674	0.733	0.763
IAS	0.841**									
CLE	0.786**	0.796**								
SDC	0.782**	0.775**	0.772**							
ICF	0.733**	0.737**	0.772**	0.798**						
ECM	0.694**	0.621**	0.668**	0.781**	0.694**					
OPD	0.652**	0.661**	0.623**	0.687**	0.661**	0.801**				
BNP	0.591**	0.620**	0.606**	0.753**	0.693**	0.749**	0.752**			
FCP	0.606**	0.659**	0.651**	0.720**	0.761**	0.762**	0.758**	0.850**		
FSC	0.557**	0.581**	0.579**	0.651**	0.653**	0.720**	0.732**	0.790**	0.874**	
FS	0.299**	0.328**	0.241**	0.346**	0.262**	0.248**	0.259**	0.282**	0.246**	0.255**
OS	0.097	0.173	0.176*	0.090	0.182*	0.155	0.141	0.230**	0.239**	0.227**

N = 128

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

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

Table 9 indicates the correlations among each dimension of human resource development capability and its consequences. In the first dimension, the results illustrate the significant positive correlation between employee competency analysis and employee commitment ($r = 0.694$, $p < 0.01$), operational development ($r = 0.652$, $p < 0.01$), business productivity ($r = 0.591$, $p < 0.01$), firm competitiveness ($r = 0.606$, $p < 0.01$), and firm success ($r = 0.557$, $p < 0.01$). In the second dimension, individual

ability support has a significant positive correlation to employee commitment ($r = 0.621$, $p < 0.01$), operational development ($r = 0.661$, $p < 0.01$), business productivity ($r = 0.620$, $p < 0.01$), firm competitiveness ($r = 0.659$, $p < 0.01$), and firm success ($r = 0.581$, $p < 0.01$). For the third dimension, continuous learning enhancement has a significant and positive correlation with employee commitment ($r = 0.668$, $p < 0.01$), operational development ($r = 0.623$, $p < 0.01$), business productivity ($r = 0.606$, $p < 0.01$), firm competitiveness ($r = 0.651$, $p < 0.01$), and firm success ($r = 0.579$, $p < 0.01$). As to the fourth dimension, strategic-development connectivity is significantly and positively correlated to employee commitment ($r = 0.781$, $p < 0.01$), operational development ($r = 0.687$, $p < 0.01$), business productivity ($r = 0.753$, $p < 0.01$), firm competitiveness ($r = 0.720$, $p < 0.01$), and firm success ($r = 0.651$, $p < 0.01$). The last dimension, innovation creativity focus has a significant and positive correlation with employee commitment ($r = 0.694$, $p < 0.01$), operational development ($r = 0.661$, $p < 0.01$), business productivity ($r = 0.693$, $p < 0.01$), firm competitiveness ($r = 0.761$, $p < 0.01$), and firm success ($r = 0.653$, $p < 0.01$). The findings in Table 7 indicate that all correlations are less than 0.80 as recommended by Hair and colleagues (2010). Moreover, the variance inflation factor (VIF) in equations 1, 2, 3, 5, and 7 indicate the maximum value as 4.426 (see the detail of VIF in Appendix D, Table D3). As mentioned earlier, the VIF value was lower than 10 as recommended by Hair and Colleagues (2010), meaning that the independent variables are not correlated with each other. Therefore, multicollinearity is not a problem in this research.

Next, Table 10 illustrates the multiple regression analysis of the relationship among human resource development capability (employee competency analysis, ECA; individual ability support, IAS; continuous learning enhancement, CLE; strategic-development connectivity, SDC; and innovation creativity focus, ICF) and its consequences (employee commitment, ECM; operational development, OPD; business productivity, BNP; firm competitiveness, FCP; and firm success, FSC), as shown in Table 9.

Table 10: Result of Regression Analysis for the Effects of Human Resource Development Capability on Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

Independent Variables	**Dependent Variables**				
	ECM	**OPD**	**BNP**	**FCP**	**FSC**
	H1-5a	**H1-5b**	**H1-5c**	**H1-5d**	**H1-5e**
	Equation 1	**Equation 2**	**Equation 3**	**Equation 5**	**Equation 7**
Employee Competency Analysis (ECA)	**0.327*** (0.118)**	0.139 (0.123)	-0.083 (0.119)	-0.100 (-.119)	-0.008 (0.135)
Individual Ability Support (IAS)	-0.148 (0.119)	0.198 (0.124)	0.070 (0.120)	0.186 (0.121)	0.082 (0.137)
Continuous Learning Enhancement (CLE)	0.137 (0.112)	0.032 (0.117)	-0.078 (0.114)	0.068 (0.114)	0.043 0.129)
Strategy Development Connectivity (SDC)	**0.315*** (0.115)**	**0.266** (0.119)**	**0.618*** (0.116)**	**0.387*** (0.116)**	**0.338*** (0.131)**
Innovation Creativity Focus (ICF)	**0.241** (0.107)**	**0.230** (0.111)**	**0.258** (0.108)**	**0.297*** (0.109)**	**0.285** (0.105)**
Firm Size (FS)	-0.034 (0.128)	-0.012 (0.133)	-0.036 (0.129)	-0.105 (0.129)	-0.026 (0.146)
Ownership (OS)	0.141 (0.125)	0.082 (0.130)	**0.306** (0.126)**	**0.266** (0.127)**	**0.246* (0.143)**
Adjusted R^2	0.600	0.564	0.582	0.578	0.456
F-Statistic	27.733	24.105	25.902	25.427	15.961
Durbin-Watson	2.096	1.902	1.979	1.894	1.792
Max VIF	4.426	4.426	4.426	4.426	4.426

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

Regarding Table 10, the results of the OLS regression analysis illustrate that the first dimension, employee competency analysis (Hypotheses 1a), is significantly and positively related to employee commitment ($\beta_{01} = 0.327$, $p < 0.01$). The analysis of competency has a significant, positive relationship with employee commitment (Khan, Masrek, & Nadzar, 2015). **Therefore, hypothesis 1a is supported.** However, Table 8 illustrates no significant relationship of employee competency analysis with operational

development (β_{08} = 0.139, p > 0.10), business productivity (β_{15} = -0.083, p > 0.10), firm competitiveness (β_{26} = -0.100, p > 0.10), and firm success (β_{38} = -0.008, p > 0.10). Previous research suggested that even the analysis of competency has no direct effects on firm performance (Khan, Masrek, & Nadzar, 2015), but it does have a direct effect on employee commitment and job satisfaction of the employees, which is a direct effect on firm performance, in firm productivity, turnover intention, and firm success (Mathieu & Zajac, 1990). Thus, competency analysis has indirect effects on firm performance. **Therefore, hypotheses 1b–1e are not supported.** Briefly, employee competency analysis is positively related to employee commitment. However, employee competency analysis is not related to operational development, business productivity firm competitiveness, and firm success.

Secondly, it is found that individual ability support, the second dimension, is no significantly related to employee commitment (β_{02} = -0.148, p > 0.10), operational development (β_{09} = 0.198, p > 0.10), business productivity (β_{16} = 0.070, p > 0.10), firm competitiveness (β_{27} = 0.186, p > 0.10), and firm success (β_{39} = 0.082, p > 0.10). Previous research has suggested that if firm emphasis on individual ability without a perceived job security, growth opportunities and the wage of an employee, it is high opportunity that emerges with employee turnover intention, and it reduces operational performance and firm performance (Ambrozova et al., 2016; Kennett, 2013). Hence, the firm should emphasize individual ability coupled with perceived job security, growth opportunities, and wages of employees to enhance the firm operation and performance. **Therefore, hypotheses 2a-2e are not supported.** Summarily, individual ability support is not related to employee commitment, operational development, business productivity, firm competitiveness, and firm success.

Thirdly, like the second dimension, continuous learning enhancement (the third dimension) is not significantly related to employee commitment (β_{03} = 0.137, p > 0.10), operational development (β_{10} = 0.032, p > 0.1), business productivity (β_{17} = -0.078, p > 0.10), firm competitiveness (β_{28} = 0.068, p > 0.10), and firm success (β_{40} = 0.043, p > 0.10). Previous research has suggested that continuous learning has no direct effects on firm performance, but it has an indirect effect on firm performance (Baker & Sinkula, 1999) through the mediating role of firm capability, innovativeness, and competencies creation (Murray, 2003). Moreover, learning organization is necessary

studied coupled with organizational structure and formation factors (Goh & Ryan, 2002). **Therefore, hypotheses 3a-3e are not supported.** It implies that continuous learning enhancement is not related to employee commitment, operational development, business productivity, firm competitiveness, and firm success.

Fourthly, unlike the first three dimensions, strategic-development connectivity (the fourth dimension) is significantly and positively related to all of its consequences which are employee commitment ($\beta_{04} = 0.315$, $p < 0.01$), operational development ($\beta_{11} = 0.266$, $p < 0.05$), business productivity ($\beta_{18} = 0.618$, $p < 0.01$), firm competitiveness ($\beta_{29} = 0.387$, $p < 0.01$), and firm success ($\beta_{41} = 0.338$, $p < 0.01$). The finding is consistent with previous research shows a connection between firm objective, mission and agenda through transferring, sharing and integrating with human resource development which can contribute to organizational capabilities, improving employee satisfaction and business performance (Yeung & Berman, 1997) and gaining competitive advantage and business success (Pattanayak, 2003). To survive in the present scenario of cut-throat competition, the organization has to develop appropriate human resource development strategies to manage its workforce in an organized manner and align its potential with that of its corporate missions and objectives (Deb, 2010). Organizational strategies exploit tangible (for example technology, products, and services) as well as intangible resources and capabilities (for example human resources, creation of a learning culture, leadership) in the organization. Strategies that exploit intangible resources such as the effective utilization of human resource development initiatives are more likely to be sources of competitive advantage rather than those that do not, because these strategies are path-dependent, socially complex, and causally ambiguous (Barney, 1991; Itami & Roehl, 1987). The strategic development and utilization of people working efficiently in the organization to cope with the environmental changes in business, and competently managing business challenges, is a source for gaining competitive advantage (Huda et al., 2007). Moreover, human resource development can help to create a source of sustained competitive advantage, especially when it is aligned with a firm's competitive strategy (Singh, 2011). **Therefore, hypotheses 4a-4e are supported.** Summarily, the strategic-development connectivity is positively related to employee commitment, operational development, business productivity, firm competitiveness, and firm success.

Finally, the research reveals that innovation creativity focus is significantly and positively associated with employee commitment ($\beta_{05} = 0.241$, $p < 0.05$), operational development ($\beta_{12} = 0.230$, $p < 0.05$), business productivity ($\beta_{19} = 0.258$, $p < 0.01$), firm competitive ($\beta_{30} = 0.297$, $p < 0.01$), and firm success ($\beta_{42} = 0.285$, $p < 0.05$). The finding is consistent with previous research in that the ability of employees to create new knowledge, in terms of both products and of services, in order to maintain their market value, is crucial. This emphasis on permanent innovation transfers the workplace into a setting for learning and innovation (Billet, 2008; Van Woerkom & Poell, 2010). In dynamic and sometimes chaotic organizations, employees need to have more than average competences to innovate (Cozijnsen & Vrakking, 2013; Weick & Quinn, 1999). In order to increase the success rate of innovation, it seems vital to acquire expertise on how professionals in the workplace gain product knowledge within innovation groups, what problems they face, and how they can improve their ability to realize successful innovations (Ehlen et al., 2013). Knowledge needs to be understood as the potential for action that not only depends upon the stored information but also on the person interacting with it (Malhotra, 2000). Becoming knowledge-productive can be seen as acquiring new skills and attitudes as part of a personal competence (Ehlen et al., 2013). The concept of knowledge productivity in terms of innovation creativity focus is an important source of action in human resource development (Kessel, 2004), and employee commitment (Yen et al., 2004). It also is fundamental to business performance, growth and ultimately business success (Chamberlin et al., 2010; Dervitsiotis, 2011). Process innovation is a positive stimulation to productivity (Daveri & Parisi, 2015) and it is a way of competitiveness in the organization (Sedlakova, 2015). **Therefore, hypotheses 5a-5e are supported.** Briefly, the innovation creativity focus is positively related to employee commitment, operational development, business productivity, firm competitiveness, and firm success.

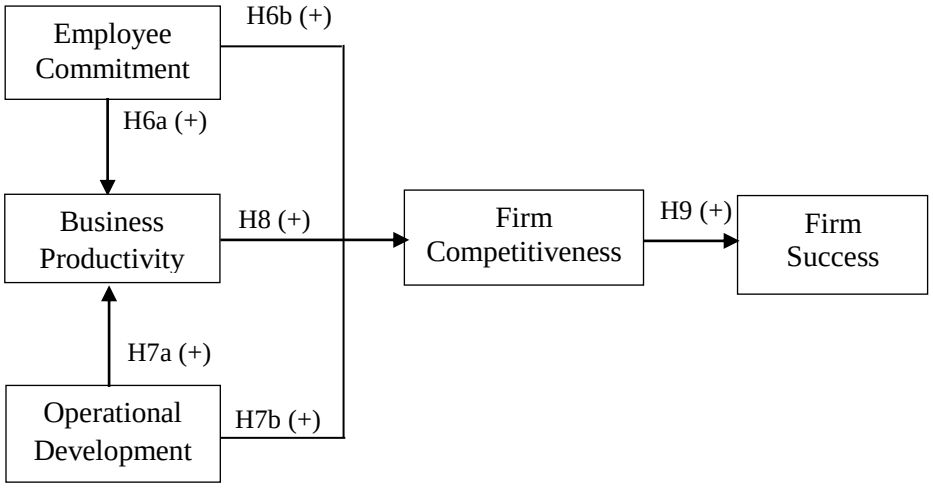
Moreover, the result of the power of indication illustrates that the adjusted R-square is between 0.456 and 0.600, tested F-statistic are between 15.961 and 27.733, Durbin-Watson scores are between 1.792 and 2.096 of which there is a range of 1.50 to 2.50 (Duebin & Watson, 1971), and the maximum VIF is 4.426.

Additionally, the results of control variables indicate that firm size (number of employees) are not related to employee commitment ($\beta_{06} = -0.034$, $p > 0.10$),

operational development (β_{13} = -0.012, p > 0.10), business productivity (β_{20} = -0.036, p > 0.10), firm competitiveness (β_{31} = -0.105, p > 0.10), and firm success (β_{43} = -0.026, p > 0.10). The results can be interpreted that consequences of human resource development capability are not influenced by firm size. The other control variables are business ownership, which are not related to employee commitment (β_{07} = 0.141, p > 0.10) and operational development (β_{14} = 0.082, p > 0.10), excluding the result of equations 3, 5, and 7 which found that business ownership has positive influences on business productivity (β_{21} = 0.306, p < 0.05), firm competitiveness (β_{32} = 0.266, p < 0.05), and firm success (β_{44} = 0.246, p< 0.10). Therefore, it can be interpreted that franchised units that have a higher HR performance (include business productivity, firm competitiveness, and firm success) than company-owned-units (Brand & Croonen, 2010; Chandler & McEvoy, 2000).

The Relationships among Employee Commitment, Operational Development, Firm Competitiveness, and Firm Success

Figure 7: The Relationships among Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness and Firm Success



According to Figure 7, the relationships among employee commitment, operational development, business productivity, firm competitiveness and firm success are shown. This research proposes that employee commitment, operational development, business productivity and firm competitiveness have an effect on firm success in positive directions (Hypotheses 6-9). These hypotheses are transformed into regression equations 4, 6 and 8.

Table 10 illustrates correlations among employee commitment, operational development, business productivity, firm competitiveness, and firm success. The results show the positive correlation between employee commitment and business productivity ($r = 0.749$, $p < 0.01$). Similarly, operational development has a significant and positive correlation with business productivity ($r = 0.752$, $p < 0.01$). Firm competitiveness has significant and positive correlations with employee commitment ($r = 0.762$, $p < 0.01$), operational development ($r = 0.758$, $p < 0.01$), business productivity ($r = 0.850$, $p < 0.01$), and firm success ($r = 0.874$, $p < 0.01$). From the finding in Table 10, most correlations are less than 0.80 as recommended by Hair and colleagues (2010).

Table 11: Descriptive Statistics and Correlation Matrix of Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

	ECM	OPD	BNP	FCP	FSC	FS	OS
Mean	4.205	4.164	4.138	4.128	4.101	NA	NA
S.D.	0.602	0.617	0.591	0.625	0.705	NA	NA
OPD	0.801**						
BNP	0.749**	0.752**					
FCP	0.762**	0.758**	0.850**				
FSC	0.720**	0.732**	0.790**	0.874**			
FS	0.248**	0.259**	0.282**	0.246**	0.255**		
OS	0.155	0.141	0.230**	0.239**	0.227**	0.301	

N = 128

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

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

Moreover, the correlation value between employee commitment and operational development ($r = 0.801$, $p < 0.01$), and firm competitiveness and firm success ($r = 0.874$, $p < 0.01$) are over 0.80. In Appendix D, Table D3 shows that the VIF value of employee commitment (VIF = 2.814 in equation 4, and 3.244 in equation 6), operational development (VIF = 2.823 in equation 4, and 3.290 in equation 6) are less than 10, lower than cut-off score (Hair et al., 2010). Moreover, firm competitiveness and firm success are not independent variables in the same equation. Therefore, both the correlation and the VIF ensure the non-existence of a multicollinearity problem.

Table 12: Result of Regression Analysis for the Effects among Employee Commitment, Operational Development, Business Productivity, Firm Competitiveness, and Firm Success

Independent Variables	**Dependent Variables**		
	BNP	**FCP**	**FSC**
	H6-7a	**H6-7b, 8**	**H9**
	Equation 4	**Equation 6**	**Equation 8**
Employee Commitment (ECM)	**0.370*** (0.089)**	**0.196** (0.078)**	
Operational Development (OPD)	**0.440*** (0.089)**	**0.175** (0.080)**	
Business Productivity (BNP)		**0.567*** (0.072)**	
Firm Competitiveness (FCP)			**0.857*** (0.046)**
Firm Size (FS)	0.083 (0.114)	-0.063 (0.093)	0.074 (0.093)
Ownership (OS)	0.183 (0.113)	0.105 (0.094)	0.009 (0.094)
Adjusted R^2	0.643	0.761	0.754
F-Statistic	57.252	80.401	128.517
Durbin-Watson	1.864	2.117	2.212
Max VIF	2.823	3.290	1.099

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

For the hypothesis testing, the results of regression analysis are identified in Table 12. As expected, it was found that employee commitment has significant effects on business productivity ($\beta_{22} = 0.370$, $p < 0.01$) and firm competitiveness ($\beta_{33} = 0.296$, $p < 0.05$). The employee commitment or the behavioral outcome in terms of employee commitment, leads to a greater operational outcome in terms of productivity (Juang et al., 2012. It also is a mediating role between human resource management and business productivity (Deepa et al., 2014) and leads to improved firm competitiveness

(Kwantes, 2007). **Therefore, hypotheses 6a and 6b are supported.** Briefly**,** employee commitment is positively related to business productivity and firm competitiveness.

Next, the interesting finding indicates that operational development has strong and positive effects on business productivity ($\beta_{23} = 0.440$, $p < 0.01$) and firm competitiveness ($\beta_{34} = 0.175$, $p < 0.05$). The finding is consistent with previous research in that operational development a related to problem-solving skills, action for enhancing operational performance, organizational competition, and financial performance; and also displays the common characteristics of other capabilities such as the knowledge and skill of an organization (Schreyogg & Kliesch-Eberl, 2007). The operational development that focuses on employee involvement and total quality management found both positive relationships with various indices of firm performance including productivity, sales per employee, return on assets, and return on equity (Lawler et al., 1998). Furthermore, the firm's operational development is related to change in the productivity and profit of an organization (Patterson, West, & Wall, 2004). Moreover, it also has effects on both short and long-term firm competitiveness and performance (Birdi et al., 2008). **Therefore, hypotheses 7a and 7b are supported.** Accordingly, the operational developments are positively related to business productivity and firm competitiveness.

Next, the findings indicate that business productivity has strong, positive effects on firm competitiveness ($\beta_{35} = 0.567$, $p < 0.01$). The finding is consistent with previous research in that the higher productivity produces more outputs by providing the same level of inputs; on the other hand, it produces the same outputs by providing a lesser level of inputs (Halkos & Tzeremes, 2007). Productivity is a key factor that is related to economic growth. Similarly, at the company level, high productivity is the important factor for better performance, successful competition and firm survival (Oeij et al., 2011). The productivity of labor can commonly improve the competitiveness of the firm based on a unit factor of manufacturing (Chaudhuri & Ray, 1997; Latruff, 2010; Tanase, 2011). Productivity growth is vital for building competitiveness at the international and domestic levels (Balakrishnan & Pushpangadan, 1998; Sehgal & Sharma, 2011). Productivity performance is an important determinant for competitiveness of an industry and the firm (Sultan & Jain, 2016).**Therefore,**

hypothesis 8 is strongly supported. Accordingly, business productivity is positively related to firm competitiveness.

Finally, the finding indicates that firm competitiveness has strong and positive effects on firm success ($\beta_{45} = 0.857$, $p < 0.01$). This finding is consistent with previous research in that competitive advantage enhances firm performance (Abushaiba & Zainuddin, 2012). Firm competitiveness has direct, positive effects on firm success (Bharadwaj & Menon, 2000). It plays an important role to improve firm performance (Tesla, Iraldo, & Frey, 2011). **Therefore, hypothesis 9 is strongly supported.** Briefly, firm competitiveness is positively related to firm success.

Moreover, the result of the power of indication is illustrated that the adjusted R-square is between 0.643 and 0.761, F-statistic tests are between 57.252 and 128.517, Durbin-Watson scores are between 1.864 and 2.212 (which are in the range of 1.50-2.50) (Duebin & Watson, 1971), and the maximum VIF is 3.290.

Additionally, the result of the control variables indicate that firm size (number of employees) has no significant relationship with business productivity ($\beta_{24} = 0.083$, $p > 0.10$), firm competitiveness ($\beta_{36} = -0.063$, $p > 0.10$), and firm success ($\beta_{46} = 0.074$, $p > 0.10$). Similarly, the result of other control variables indicate that business ownership has no significant relationship with business productivity ($\beta_{25} = 0.183$, $p > 0.10$), firm competitiveness ($\beta_{37} = -0.105$, $p > 0.10$), and firm success ($\beta_{47} = 0.009$, $p > 0.10$). Therefore, the consequential relationship of human resource development capability is not influenced by firm size and business ownership.

The Relationships among the Antecedents, Human Resource Development Capability and Moderating Role of Survival Culture

Figure 8: The Relationships among Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force and Human Resource Development Capability

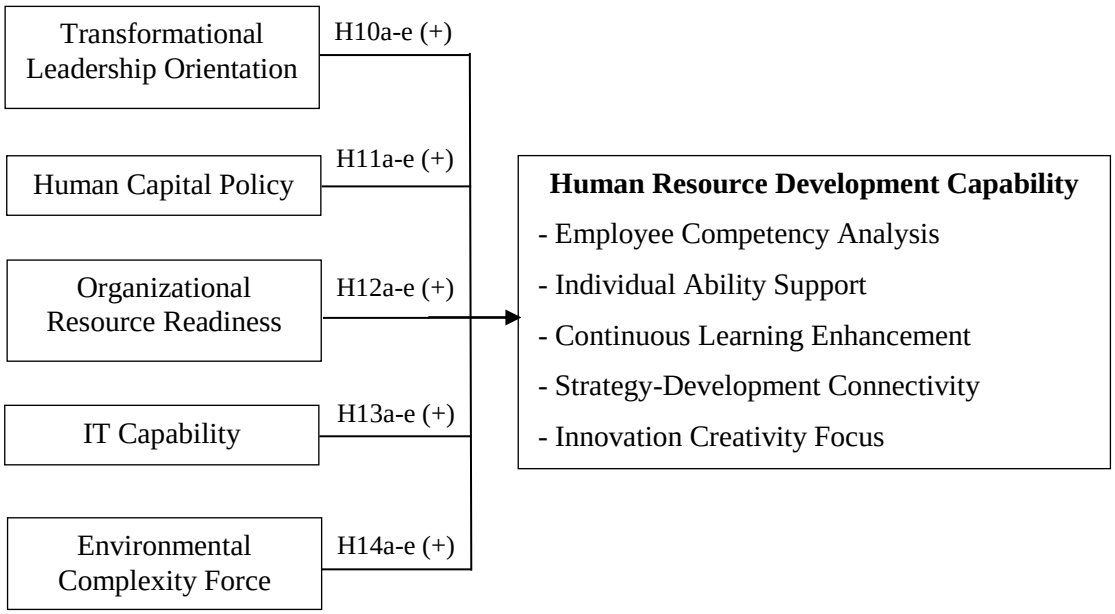


Figure 8 illustrates the relationships among five antecedents consisting of transformational leadership orientation, human capital policy, organizational resource readiness, its capability, and environmental complexity force with five dimensions of human resource development capability; it also proposes Hypotheses 10(a-e)-14(a-e). The relationship in each hypothesis is proposed in a positive direction. These hypotheses can be transformed into the regression equation in models 9, 11, 13, 15 and 17.

Table 13: Descriptive Statistic and Correlation Matrix of Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force, Each Dimension of Human Resource Development Capability, and Survival Culture

	TLO	HCP	ORR	ITC	ECF	SVC	ECA	IAS	CLE	SDC	ICF	FS
Mean	4.134	4.169	4.093	4.068	4.388	4.127	4.205	4.164	4.138	4.128	4.101	MA
S.D.	0.635	0.613	0.672	0.693	0.568	0.675	0.602	0.617	0.591	0.625	0.705	MA
HCP	0.844**											
ORR	0.807**	0.851**										
ITC	0.766**	0.805**	0.818**									
ECF	0.622**	0.661**	0.657**	0.671**								
SVC	0.769**	0.785**	0.811**	0.865**	0.695**							
ECA	0.717**	0.706**	0.706**	0.704**	0.618**	0.692**						
IAS	0.693**	0.722**	0.740**	0.741**	0.622**	0.734**	0.841**					
CLE	0.719**	0.667**	0.712**	0.728**	0.583**	0.709**	0.786**	0.796**				
SDC	0.786**	0.803**	0.789**	0.782**	0.644**	0.780**	0.782**	0.775**	0.772**			
ICF	0.683**	0.718**	0.757**	0.753**	0.617**	0.779**	0.733**	0.737**	0.772**	0.798**		
FS	0.295**	0.420**	0.408**	0.301**	0.341**	0.320**	0.299**	0.328**	0.241**	0.346**	0.262**	
OS	0.236**	0.241**	0.198**	0.214**	0.170	0.176*	0.097	0.173	0.176*	0.090	0.182*	0.301**

N = 128

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

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

Table 13 describes the correlations among transformational leadership orientation, human capital policy, organizational resource readiness, information technology capability, environmental complexity force, and each dimension of human resource development capability (HRDC). In details, it seems that all antecedents have a positive correlation with all dimensions of human resource development capability. Firstly, transformational leadership orientation correlates with employee competency analysis ($r = 0.717$, $p < 0.01$), individual ability support ($r = 0.639$, $p < 0.01$), continuous learning enhancement ($r = 0.719$, $p < 0.01$), strategic-development connectivity ($r = 0.786$, $p < 0.01$), and innovation creativity focus ($r = 0.683$, $p < 0.01$). Secondly, human capital policy correlates with employee competency analysis ($r = 0.706$, $p < 0.01$), individual ability support ($r = 0.722$, $p < 0.01$), continuous learning

enhancement ($r = 0.667$, $p < 0.01$), strategic-development connectivity ($r = 0.803$, $p < 0.01$), and innovation creativity focus ($r = 0.781$, $p < 0.01$). Thirdly, organizational resource readiness correlates with employee competency analysis ($r = 0.706$, $p < 0.01$), individual ability support ($r = 0.704$, $p < 0.01$), continuous learning enhancement ($r = 0.712$, $p < 0.01$), strategic-development connectivity ($r = 0.789$, $p < 0.01$), and innovation creativity focus ($r = 0.757$, $p < 0.01$).

Fourthly, information technology capability correlates with employee competency analysis ($r = 0.704$, $p < 0.01$), individual ability support ($r = 0.741$, $p < 0.01$), continuous learning enhancement ($r = 0.728$, $p < 0.01$), strategic-development connectivity ($r = 0.782$, $p < 0.01$), and innovation creativity focus ($r = 0.753$, $p < 0.01$). Finally, environmental complexity force correlates with employee competency analysis ($r = 0.618$, $p < 0.01$), individual ability support ($r = 0.622$, $p < 0.01$), continuous learning enhancement ($r = 0.583$, $p < 0.01$), strategic-development connectivity ($r = 0.644$, $p < 0.01$), and innovation creativity focus ($r = 0.617$, $p < 0.01$). Most of correlations are less than 0.80 to be recommended by Hair and colleagues (2010). Moreover, the correlation value between independent variables of transformational leadership orientation with human capital policy ($r = 0.844$, $P < 0.01$), organizational resource readiness ($r = 0.807$, $p < 0.01$), human capital policy with organizational resource readiness ($r = 0.851$, $p < 0.01$), information technology capability ($r = 0.805$, $p < 0.01$), and organizational resource readiness ($r = 0.818$, $p < 0.01$) more than 080. However, the variance inflation factor (VIF) of transformational leadership orientation, human capital policy, organizational resource readiness, and information technology indicate the maximum value as 5.550 (see the details of VIF in Appendix D, Table D3), which are lower than the cut-off score of 10 (Hair et al., 2010). Therefore, multicollinearity is not a problem in this research.

Table 14: Result of Regression Analysis for the Effects of Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force and Human Resource Development Capability

Independent Variables	Dependent Variables				
	ECA	**IAS**	**CLE**	**SDC**	**ICF**
	H10-14a	**H10-14b**	**H10-14c**	**H10-14d**	**H10-14e**
	Equation 9	**Equation 11**	**Equation 13**	**Equation 15**	**Equation 17**
Transformational Leadership Orientation (TLO)	**0.303*** (0.112)**	0.113 (0.111)	**0.350*** (0.111)**	**0.264*** (0.091**	0.034 (0.111)
Human Capital Policy (HCP)	0.131 (0.131)	0.144 (0.129)	-0.086 (0.129)	**0.249** (0.106)**	0.113 (0.129)
Organizational Resource Readiness (ORR)	0.089 (0.122)	**0.203* (0.120)**	**0.194* (0.120)**	0.117 (0.099)	**0.335*** (0.107)**
Information Technology Capability (ITC)	**0.226** (0.108)**	**0.306*** (0.107)**	**0.346*** (0.107)**	**0.261*** (0.088)**	**0.303*** (0.107)**
Environmental Complexity Force (ECF)	**0.134* (0.080)**	0.103 (0.079)	0.062 (0.079)	0.065 (0.065)	**0.259* (0.152)**
Firm Size (FS)	0.091 (0,129)	0.075 (0.127)	-0.044 (0.127)	0.127 (0.105)	-0.125 (0.128)
Ownership (OS)	-0.189 (0.120)	-0.024 (0.118)	0.023 (0.118)	**-0.264*** (0.097)**	0.033 (0.118)
Adjusted R^2	0.599	0.607	0.604	0.737	0.600
F-Statistic	27.679	28.637	28.261	50.933	27.820
Durbin-Watson	2.028	2.080	2.180	2.181	2.119
Max VIF	5.920	5.920	5.920	5.920	5.920

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

The results of regression analysis are explained in Table 14. Firstly, the results indicate that transformational leadership orientation has a positive effect on three dimensions of human resource development capability consisting of employee competency analysis ($\beta_{48} = 0.303$, $p < 0.01$), continuous learning enhancement ($\beta_{88} = 0.350$, $p < 0.01$), and strategic development connectivity ($\beta_{108} = 0.264$, $p < 0.01$). The finding is consistent with previous research in that it is generally known in modern management that transformation leadership has positive enhancement in attitudes about

learning and training that can lead to operational efficiency (Howell & Frost, 1989). It can upgrade employee satisfaction with the training intention that leads to attitudes which are shared between leader and follower (Weber & Kelloway, 1996). It also plays on motivating the employee training (Hassan et al., 2010). Transformational leadership orientation is a strategic tools to moderate a perceived human resource management of the individual level of the employee (Vermeeren, 2014). The leadership style of CEOs, TMTs, and line managers is the most important to stakeholders who influence the formulation and implementation of human resource development practices (Alagaraja, Cumverland, & Choi, 2015). **Therefore, hypotheses 10a, 10c and 10d are strongly supported.** Briefly, transformational leadership orientation is positively related to employee competency analysis, continuous learning enhancement, and strategic-development connectivity.

Nevertheless, transformational leadership orientation has no significant relationship with individual ability support ($\beta_{68} = 0.113$, $p > 0.10$) and innovation creativity focus ($\beta_{128} = 0.034$, $p > 0.10$). Although transformational leadership is a source of innovativeness in an organization (Raj & Srivastva, 2016), it also applies a strong influence to employee creativity (Gumusluoglu & Ilsev, 2009). The insignificant results may imply that organizational encouragement in providing resources give opportunities to use employee skills and responses the desire to development of employees, including generating and sharing the information, knowledge and experience are necessarily coupled with active engagement and self-actualization by which the active engagement and self-actualization are not effected by transformational leadership (Dvit, Eden, Avilio, & Shamir, 2002). **Therefore, hypotheses 10b and 10e are not supported.** Summarily, transformational leadership orientation is not related to individual ability support and innovation creativity focus.

Secondly, the findings from this research describe that human capital policy has a positive effect on strategic-development connectivity ($\beta_{109} = 0.249$, $p < 0.05$). The finding is consistent with previous research in that organizational policy seems to provide guidelines and set standards about what is generally acceptable and not acceptable in terms of behavior, what is to be done on certain situations, where there is a breach of standards of conduct or performance, and whether the organization will have informal or formal procedures to correct such a breach (Bailey, 2011). It has a

positive relationship with employee behavior. The goal of human capital should have people throughout the firm committed to the strategic agenda and believing that human capital policy is an essential ingredient of success of an organization (Norton, Zacher, & Ashkanasy, 2014). **Therefore, hypothesis 11d is supported.** Summarily, human capital policy is positively related to strategic-development connectivity.

However, human capital policy has no significant effect on employee competency analysis ($\beta_{49} = 0.131$ $p > 0.10$), individual ability support ($\beta_{69} = 0.144$, $p > 0.10$), continuous learning enhancement ($\beta_{89} = -0.086$, $p > 0.10$), and innovation creativity focus ($\beta_{129} = 0.113$, $p > 0.10$). The finding is consistent with previous research in that human resource policies fail to support workplace learning, training and development (Clarke, 2006). Because, the workplace learning, training and developing are wanted in relation to meeting much of complex knowledge and skill needs to be required in today's workplaces (Paauwe & William, 2001). Thus, the human capital policy is not directly related to human resource learning and development, but human capital policy should emphasize in learning organizations that have a direct effect on employee learning and development (Clarke, 2006; Raper, Ashton, Felstead, & Storey, 1997). **Therefore, hypotheses 11a, 11b, 11c and 11e are not supported.** Briefly, human capital policy is not related to employee competency analysis, individual ability support, continuous learning enhancement, and innovation creativity focus.

Thirdly, the findings of this research indicate that organizational resource readiness has positive relationships with individual ability support ($\beta_{70} = 0.203$, $p < 0.10$), continuous learning enhancement ($\beta_{90} = 0.194$, $p < 0.10$), and innovation creativity focus ($\beta_{130} = 0.335$, $p < 0.01$). The finding is consistent with previous research in that the competency-based needs analysis process will provide a systematic approach to determine the most important training needs which allow the management to determine the needs to better utilize available resources (Price et al., 2010). Moreover, a firm utilizing the shared resource of the updated information should also be gained and shared by processes, including information-sharing, resource-sharing, techniques and know-how sharing, and opportunity-sharing (Takeno et al., 2001). Organizational resource readiness has been shared all over the firm where the capability to create new products, new services and new processes will increase (Kratzer, Gemunden, & Lettl, 2008). **Therefore, hypotheses 12b, 12c and 12e are supported.**

Summarily, organizational resource readiness is positively related to individual ability support, continuous learning enhancement, and innovation creativity focus.

However, organizational resource readiness has no significant effect on employee competency analysis ($\beta_{50} = 0.089$, $p > 0.10$) and strategic-development connectivity ($\beta_{110} = 0.117$, $p > 0.10$). The finding is consistent with previous research in that the implementation of organizational resource readiness in the any part of the organization must be specified by many factors such as top management support, vision, mission and goals including resource allocation, firm culture structure, communication, and user involvement that determine their resources to appropriate department (Alhakimi & Alzahary, 2015). For example, in this research, organizational resource readiness implements human resource development. The top management support is the first to demonstrate the willingness to provide the necessary resources and authority or power for human resource development success, including a business plan that would have a clear vision for human resource development and to guide the resource usage (Fui-Hoon Nah, Lee-Shang Lau, & Kuang, 2001). Moreover, the organizational culture and resource allocation can be a facilitator or a major impediment to successful implementation of resources in human resource development (Razmi, Ghodsi, & Sangari, 2008). **Therefore, hypotheses 12a and 12d are not supported.** Briefly, organizational resource readiness is not related to employee competency analysis and strategic-development connectivity.

Fourthly, the result of regression analysis indicates that information technology capability has a positive relationship with all dimensions of human resource development capability consisting of employee competency analysis ($\beta_{51} = 0.226$, $p < 0.05$), individual ability support ($\beta_{71} = 0.306$, $p < 0.01$), continuous learning enhancement ($\beta_{91} = 0.346$, $p < 0.01$), strategic-development connectivity ($\beta_{111} = 0.261$, $p < 0.01$), and innovation creativity focus ($\beta_{131} = 0.303$, $p < 0.01$). The finding is consistent with previous research in that information technology supports several parts of human resource development such as in technical skill, managerial and interpersonal skill (Couger et al., 1995). Information technological capability is an organization's ability to mobilize and deploy computer-based technologies (for example hardware, software, network-to-data communication, soft technologies, or advanced management practice) for operational activities such as strategic cost management in a wide variety

of industries. Information technology changes the role of the human resource function (Steijn & Van Den Muyzenberg, 2012). The achievement of information system implementation (set of interrelated components are used to collect, process, store and disseminate information to support decision-making, analysis and management controls in an organization) (Coulter, 2002), and integration and utilization of data from a common database for generating information for operations and decision-making (Chapman, 2005). The information technology is expected to quicken and improve human resource related administrative, operational and planning decisions (Broderick & Boudreau, 1991). Thus, information technology capability has a significant relationship with human resource management capability (Yurulja & Bajgoric, 2016). **Therefore, hypotheses 13a, 13b, 13c, 13d and 13e are supported.** Summarily, information technology capability is positively related to employee competency analysis, individual ability support, continuous learning enhancement, strategic-development connectivity, and innovation creativity focus.

Finally, the findings from this research describe that environmental complexity force has a positive relationship with employee competency analysis ($\beta_{52} = 0.134$, $p < 0.10$) and innovation creativity focus ($\beta_{132} = 0.259$, $p < 0.10$). The finding is consistent with previous research in that environmental complexity force has an effect on the decision-making of an organization that in is a state of uncertainty and developing a process (Ashill & Jobber, 2014). It influences organizational work and skills and also affects the context and practice of training, development and human resource development (Garavan et al., 2008). **Therefore, hypotheses 14a and 14e are supported.** Briefly, environmental complexity force is positively related to employee competency analysis and innovation creativity focus.

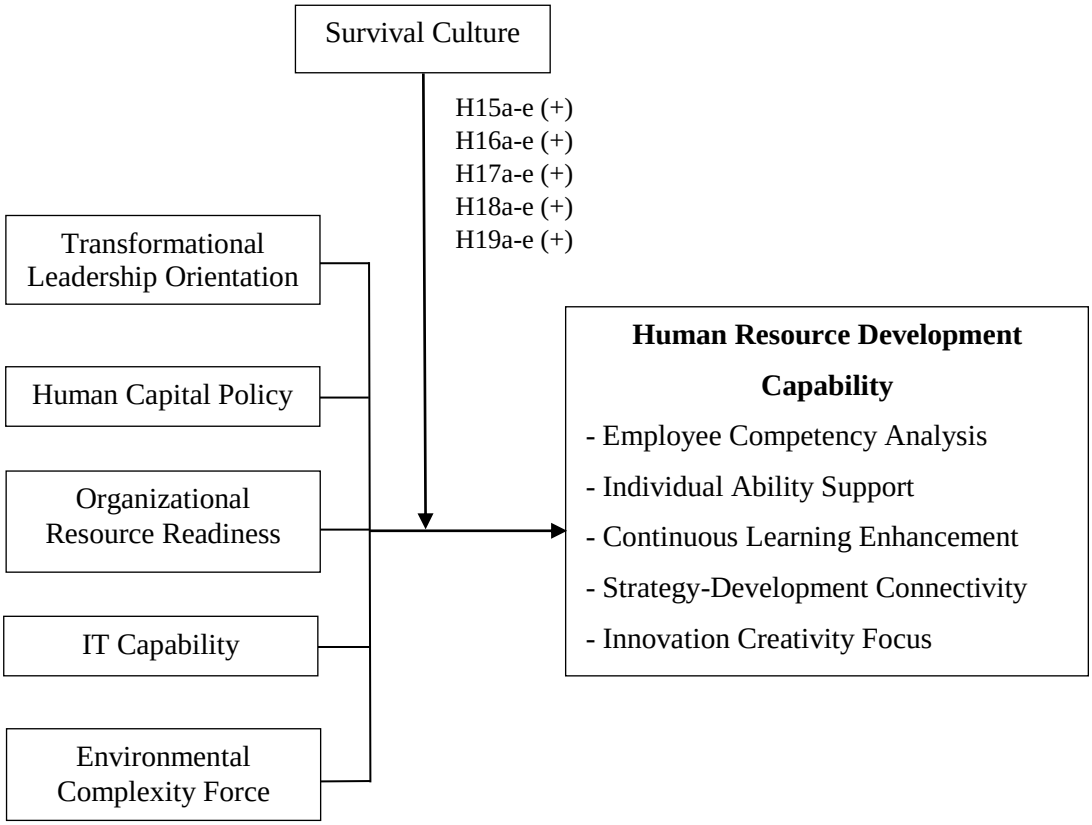
However, environmental complexity force has no significant relationship with individual ability support ($\beta_{72} = 0.103$, $p > 0.10$), continuous learning enhancement ($\beta_{92} = 0.062$, $p > 0.10$), and strategic-development connectivity ($\beta_{112} = 0.065$, $p > 0.10$). This result may imply that the response in the external factors of environmental complexity force are dependent on the organizational vision, mission and goal (Fui-Hoon Nah et al., 2010) including top management support (Osman, Tusuff, Tang, & Jafari, 2006), resource allocation, organizational culture, decision mechanisms, and structure (Razmi et al., 2008) that will engage in the human resource development

department. **Therefore, hypotheses 14b, 14c and 14 d are not supported.** Summarily, environmental complexity is not related to individual ability support, continuous learning enhancement, and strategic-development connectivity.

Moreover, the results of the power of indication illustrate that the adjusted R-square are between 0.599 and 0.737, F-statistic tests are between 27.679 and 50.933, Durbin-Watson scores are between 2.028 and 2.181 (which there is a range of 1.50 to 2.50) (Duebin & Watson, 1971), and the maximum VIF is 5.920.

Additionally, the results of control variables indicate that firm size (number of employees) have no significant effect on all five dimensions of human resource development capability consisting of employee competency analysis ($\beta_{53} = 0.091$, $p > 0.10$), individual ability support ($\beta_{73} = 0.075$, $p > 0.10$), continuous learning enhancement ($\beta_{93} = -0.044$, $p > 0.10$), strategic-development connectivity ($\beta_{113} = 0.127$, $p > 0.10$), and innovation creativity focus ($\beta_{133} = -0.125$, $p > 0.10$). The result can be interpreted that human resource development capability is not influenced by firm size. The other control variable is business ownership, which has no significant effect on all five dimensions of human resource development capability consisting of employee competency analysis ($\beta_{54} = -0.189$, $p > 0.10$), individual ability support ($\beta_{74} = -0.024$, $p > 0.10$), continuous learning enhancement ($\beta_{94} = 0.023$, $p > 0.10$) and innovation creativity focus ($\beta_{134} = 0.033$, $p > 0.10$). This exclude the result of equation 15 which shows that business ownership has negative and significant relationship with strategic-development connectivity ($\beta_{114} = -0.264$, $p < 0.01$). The results can be interpreted that the ownership of a manufacturing firm is related to human resource performance by which company-owned units have a higher human resource management intensity than franchised units (Brand & Croonen, 2010; Chandler & McEvoy, 2000). Summarily, firm size and most of business ownership are not significantly related to all five dimensions of human resource development capability, excluding business ownership that is related to strategic-development connectivity.

Figure 9: The Moderating Role of Survival Culture on the Relationships among Human Resource Development Capability, Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, Information Technology Capability and Environmental Complexity Force



The Moderating Effect of Survival Culture

The survival culture is posited as the moderator in this research in order to test the moderating effects of survival culture that influences the relationship between five antecedent variables and each dimension of human resource development capability. These relationships are proposed as Hypotheses 15(a-e)-19(a-e), and in regression equations 10, 12, 14, 16 and 18 that are shown in Figure 9.

The correlation coefficients between survival culture and five dimensions of human resource development capability are illustrated in Table 12 consisting of employee competency analysis ($r = 0.692$, $p < 0.01$), individual ability support ($r = 0.734$, $p < 0.01$), continuous learning enhancement ($r = 0.790$, $p < 0.01$), strategic-

development connectivity ($r = 0.780$, $p < 0.01$), and innovation creativity focus ($r = 0.779$, $p < 0.01$). All pairs of survival culture and every dimension of human resource development capability are significant and less than 0.80 as recommended by Hair and colleagues (2010).

In the correlation with five antecedent variables, survival culture has a positive relationship with transformational leadership orientation ($r = 0.769$, $p < 0.01$), human capital policy ($r = 0.785$, $p < 0.01$), organizational resource readiness ($r = 0.811$, $p < 0.01$), information technology capability ($r = 0.865$, $p < 0.01$), and environmental complexity force ($r = 0.695$, $p < 0.01$). Most correlations are less than 0.80 as recommended by Hair and colleagues (2010), exceeding the effects of survival culture on organizational resource readiness and information technology capability. However, the value of VIF is 5.255 (ORR), and 5.300 (ITC), as show in Appendix D, Table D3, which is lower than the cut-off value of 10. Therefore, the multicollinearity problem is irrelevant in this research.

Table 15: Result of Regression Analysis for the Effects of Moderator of Relationship between Transformational Leadership Orientation, Human Capital Policy, Organizational Resource Readiness, IT Capability, Environmental Complexity Force and Human Resource Development Capability

Independent Variables	Dependent Variables				
	ECA	**IAS**	**CLE**	**SDC**	**ICF**
	H15-19a	**H15-19b**	**H15-19c**	**H15-19d**	**H15-19e**
	Equation 10	**Equation 12**	**Equation 14**	**Equation 16**	**Equation 18**
Transformational Leadership Orientation (TLO)	**0.231**** **(0.120)**	0.058 (0.117)	**0.292**** **(0.121)**	**0.242**** **(0.099)**	-0.068 (0.115)
Human Capital Policy (HCP)	0.092 (0.133)	0.122 (0.130)	-0.104 (0.134)	**0.227**** **(0.110)**	0.057 (0.128)
Organizational Resource Readiness (ORR)	**0.339**** **(0.150)**	**0.203*** **(0.122)**	0.179 (0.126)	0.092 (0.103)	**0.243**** **(0.120)**
Information Technology Capability (ITC)	**0.239**** **(0.126)**	**0.249**** **(0.123)**	**0.304**** **(0.127)**	**0.203**** **(0.104)**	0.154 (0.120)
Environmental Complexity Force (ECF)	**0.158*** **(0.090)**	0.110 (0.088)	0.079 (0.388)	0.069 (0.074)	**0.151*** **(0.086)**
Survival Culture (SVC)	0.059 (0.125)	0.143 (0.122)	0.127 (0.126)	0.149 (0.103)	**0.360***** **(0.120)**
TLOxSVC	-0.116 (0.131)	-0.049 (0.128)	-0.114 (0.132)	0.015 (0.108)	-0.112 (0.126)
HCPxSVC	0.059 (0.146)	0.101 (0.143)	0.115 (0.147)	-0.003 (0.121)	-0.001 (0.140)
ORRxSVC	**0.150**** **(0.089)**	**0.313**** **(0.131)**	-0.106 (0.135)	0.031 (0.111)	0.067 (0.129)
ITCxSVC	**0.306***** **(0.123)**	**0.295**** **(0.120)**	0.091 (0.124)	-0.015 (0.101)	-0.135 (0.118)
ECFxSVC	0.001 (0.097)	0.01 (0.095)	0.062 (0.098)	0.080 (0.080)	**0.248***** **(0.093)**
Firm Size (FS)	0.091 (0.129)	0.063 (0.126)	-0.034 (0.130)	0.120 (0.107)	-0.094 (0.124)
Ownership (OS)	-0.170 (0.122)	-0.015 (0.119)	0.026 (0.123)	**-0.231**** **(0.100)**	0.066 (0.117)
Adjusted R^2	0.806	0.624	0.597	0.737	0.633
F-Statistic	16.027	16.957	15.261	27.912	17.599
Durbin-Watson	2.072	2.108	2.204	2.244	2.139
Max VIF	8.293	8.293	8.293	8.293	8.293

Beta coefficients with standard in parenthesis. ***p < 0.01, **p < 0.05, *p < 0.1

From the result of the regression analysis in Table 15, the moderating effect of survival culture on the relationship among five antecedents and each of five dimensions of human resource development capability are as follows. Firstly, survival culture has no significant moderating effects on the relationship between transformational leadership orientation and employee competency analysis (β_{61} = -0.116, p > 0.10), individual ability support (β_{81} = -0.049, p > 0.10), continuous learning enhancement (β_{101} = -0.114, p > 0.10), strategic-development connectivity (β_{121} = 0.015, p > 0.10), and innovation creativity focus (β_{141} = -0.112, p > 0.10). The finding is consistent with previous research in that the learning and adaptation culture are not significant in a moderating role in relationships between transformational leadership with job and appraisal performance, skill development, learning organization and career development (Froehlich, Segers, & Bossche, 2014). **Therefore, hypotheses 15a, 15b, 15c, 15d, and 15e are not supported.** Summarily, survival culture does not moderate the relationships between transformational leadership orientation with employee competency analysis, individual ability support, continuous learning enhancement, strategic-development connectivity, and innovation creativity focus.

Secondly, survival culture has no significant moderating effects on the relationship between human capital policy and employee competency analysis (β_{62} = 0.059, p > 0.10), individual ability support (β_{82} = 0.101, p > 0.10), continuous learning enhancement (β_{102} = 0.115, p > 0.10), strategic-development connectivity (β_{122} = -0.003, p > 0.10), and innovation creativity focus (β_{142} = -0.001, p > 0.10). The finding is consistent with previous research in that there are culture differences within any global organization which culture, values, or norms develop from, or are strengthened through, successes of work groups and employees within the firm (Singh, 2011). Thus, the culture difference of parent companies in terms of human capital policy and subsidiary firms may cause inconsistency of operation. Moreover, the implementation of human resource development depends on consistency and aligns between mission, vision and policy of an organization and human resource development systems (Yorke & Barto, 2013). **Therefore, hypotheses 16a, 16b, 16c, 16d, and 16e are not supported.** Briefly, survival culture does not moderate the relationships between human capital policy and employee competency analysis, individual ability

support, continuous learning enhancement, strategic-development connectivity, and innovation creativity focus.

Thirdly, survival culture has significant moderating effects on relationships between organizational resource readiness with employee competency analysis ($\beta_{63} = 0.150$, $p < 0.05$), and individual ability support ($\beta_{83} = 0.313$, $p < 0.05$). The finding is consistent with previous research in that survival culture affects human resource management and performance of the project team (Kappos & Rivard, 2008). The efficiency of cross-cultural training is based on human capital management (Rodrigues, Bu, & Min, 2000). The evaluation of training local managers could be the establishment of corporate culture (Zhao, 2005). **Therefore, hypotheses 17a and 17b are supported.** Summarily, survival culture moderates the relationship between organizational resource readiness with employee competency analysis and individual ability support.

However, survival culture has no significant moderating effects on the relationship between organizational resource readiness with continuous learning enhancement ($\beta_{103} = -0.106$, $p > 0.10$), strategic-development connectivity ($\beta_{123} = 0.031$, $p > 0.10$), and innovation creativity focus ($\beta_{143} = 0.067$, $p > 0.10$). The finding is consistent with previous research in that the implementation of resources in the organization should be moderated by appropriate culture. The successful implementation of resource fulfilment requires a corporate culture that emphasizes the value of sharing common goals over individual pursuits and the value of trust between partners, employees, managers and corporations (Razmi et al., 2008). **Therefore, hypotheses 17c, 17d and 17e are not supported.** Briefly, survival culture does not moderate the relationships between organizational resource readiness and continuous learning enhancement, strategic-development connectivity, and innovation creativity focus.

Fourthly, survival culture has a significant moderating effect on the relationship between information technology capability and employee competency analysis ($\beta_{64} = 0.306$, $p < 0.01$), and individual ability support ($\beta_{84} = 0.295$, $p < 0.05$). The finding is consistent with previous research in that information technology supports several parts of human resource development such as in technique, learning, managerial and interpersonal skills (Couger et al., 1995). Moreover, organizational culture also

moderates information technology capability and its implementation (Zhang & Tansuhaj, 2007). **Therefore, hypotheses 18a and 18b are supported.** Summarily, survival culture moderates the relationship between employee competency analysis and individual ability support.

However, survival culture has no significant moderating effects on the relationship between organizational resource readiness and continuous learning enhancement ($\beta_{104} = 0.091$, $p > 0.10$), strategic-development connectivity ($\beta_{124} = -0.015$, $p > 0.10$), and innovation creativity focus ($\beta_{144} = -0.135$, $p > 0.10$). The finding is consistent with previous research in that the implementation of resource and information infrastructure in the organization should be moderated by appropriate culture (Razmi et al., 2008). The successful implementation of information technology capability requires a corporate culture that emphasizes the value of sharing, analyzing and presenting relevant information over individual pursuits and between partners, employees, managers and corporations (Bhatt, 2000). **Therefore, hypotheses 18c, 18d and 18e are not supported.** Briefly, survival culture does not moderate the relationship between information technology capability and continuous learning enhancement, strategic-development connectivity, and innovation creativity focus.

Finally, survival culture has a significant moderating effect on the relationship between environmental complexity force and innovation creativity focus ($\beta_{145} = 0.248$, $p < 0.01$). The finding is consistent with previous research in that organizational culture is the major reason behind the failures of knowledge management initiatives and it is important for successful knowledge management (Pillania, 2006). It impacts the knowledge exchange, the combinative interaction, and the perceived value of firm members (Tseng, 2010). Thus it has a significant effect on knowledge creation (Wang, Su, & Yang, 2011). **Therefore, hypothesis 19e is supported.** In sum, survival culture moderates the relationship between environmental complexity force and innovation creativity focus.

However, the results also present the non-significance of the moderating effects of survival culture on the relationship between environmental complexity force with employee competency analysis ($\beta_{65} = 0.001$, $p > 0.10$), individual ability support ($\beta_{85} = 0.01$), $p > 0.10$), continuous learning enhancement ($\beta_{105} = 0.062$, $p > 0.10$), and strategic-development connectivity ($\beta_{145} = 0.080$, $p > 0.10$). The finding may imply that

the organizational culture is not consistent with the external factor of environmental complexity force because the utilization of the external factor of environmental complexity force should be moderated by appropriate culture. The successful utilization of an external situation requires a corporate culture that emphasizes the flexibility, adaptation, and dynamic capability between employees, managers and corporations (Razmi et al., 2008). **Therefore, hypotheses 19a, 19b, 19c and 19e are not supported.** Summarily, survival culture does not moderate the relationship between environmental complexity force with employee competency analysis, individual ability support, continuous learning enhancement, and strategic-development connectivity.

Moreover, the result of the power of indication is illustrated in that the adjusted R-square are between 0.597 and 0.806, F-statistic tests are between 15.261 and 27.912, Durbin-Watson scores are between 2.072 and 2.244 (which there is in range of 1.50 to 2.50) (Duebin & Watson, 1971), and the maximum VIF is 8.293.

Moreover, the results of control variables indicate that firm size (number of employees) have no significant effect on all five dimensions of human resource development capability consisting of employee competency analysis ($\beta_{66} = 0.091$, $p > 0.10$), individual ability support ($\beta_{86} = 0.063$, $p > 0.10$), continuous learning enhancement ($\beta_{106} = -0.034$, $p > 0.10$), strategic-development connectivity ($\beta_{126} = 0.120$, $p > 0.10$), and innovation creativity focus ($\beta_{146} = -0.094$, $p > 0.10$). The results can be interpreted that human resource development capability is not influenced by firm size. The other control variable is business ownership, which has no significant effect on all five dimension of human resource development capability, consisting of employee competency analysis ($\beta_{67} = -0.170$, $p > 0.10$), individual ability support ($\beta_{87} = -0.015$, $p > 0.10$), continuous learning enhancement ($\beta_{107} = 0.026$, $p > 0.10$) and innovation creativity focus ($\beta_{147} = 0.066$, $p > 0.10$). This excludes the result of equation 16 which shows that business ownership has a negative and significant relationship with strategic-development connectivity ($\beta_{127} = -0.231$, $p < 0.01$). The result can be interpreted that the ownership of the manufacturing firm is related to human resource performance by which company-owned units have a higher human resource management intensity than franchised units (Brand & Croonen, 2010; Chandler & McEvoy, 2000). On the other hand, the result in Table 14 illustrates that survival culture has no direct effect on all five dimensions of human resource development capability

(employee competency analysis, individual ability support, continuous learning enhancement, strategic-development connectivity and innovation creativity focus).

Summary

This chapter presents the results of regression analysis in this research. It consists of two parts. The first indication is that the respondent and sample characteristics are frequency and percentage. The correlation between all the variables are analyzed and presented in a matrix correlation. Descriptive statistics mean and standard deviation are shown in this section. Another highlight of the results is a discussion of hypothesis testing. The results reveal that the characteristics of human resource development system in terms of strategic-development connectivity and innovation creativity focus (as dimension 4 and 5, respectively), are direct, important determinants given to higher employee commitment, operational development, business productivity, firm competitiveness, and firm success. Interestingly, it can be stated that human resource development capability is an additional influence on employee commitment to earn greater positive outcomes. Although, employee competency analysis influences only employee commitment and the other two of dimensions of individual ability support and continuous learning enhancement they have no influence on organizational outcome. However, there may be effects on other capabilities of the organization, and indirect effects on organizational outcome. Employee commitment, operational development and business productivity strongly influence to firm competitiveness and firm success. Moreover, the antecedents of human resource development capability (transformational leadership orientation, human capital policy, organizational resource readiness, information technology capability, and environmental complexity force) seem to be the most influential determinates of human resource development capability. For the moderating role of survival culture, it does not play a moderating role very well in order to impact the relationships among the antecedents and each dimension of human resource development capability. However, it moderated well on organizational resource readiness and information technology capability with employee competency analysis and individual ability support, including on environmental complexity force and innovation creativity focus. Summarily, hypotheses

4, 5, 6, 7, 8, 9 and 13 are fully and significantly supported, Hypotheses 1, 10, 11, 12, 14, 17, 18 and 19 are partially supported, and Hypotheses 2, 3, 15 and 16 are not significantly supported. This research provides the summary of the results of hypotheses testing as presented in Table 15.

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

Table 16: A Summary of the Result of Hypotheses Testing

Hypotheses	Description of Hypothesized Relationships	Results
H1a	Employee competency analysis is positively related to employee commitment.	Supported
H1b	Employee competency analysis is positively related to operational development.	Not Supported
H1c	Employee competency analysis is positively related to business productivity.	Not Supported
H1d	Employee competency analysis is positively related to firm competitiveness.	Not Supported
H1e	Employee competency analysis is positively related to firm success.	Not Supported
H2a	Individual ability support is positively related to employee commitment.	Not Supported
H2b	Individual ability support is positively related to operational development.	Not Supported
H2c	Individual ability support is positively related to business productivity.	Not Supported
H2d	Individual ability support is positively related to firm competitiveness.	Not Supported
H2e	Individual ability support is positively related to firm success.	Not Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H3a	Continuous learning enhancement is positively related to employee commitment.	Not Supported
H3b	Continuous learning enhancement is positively related to operational development.	Not Supported
H3c	Continuous learning enhancement is positively related to business productivity.	Not Supported
H3d	Continuous learning enhancement is positively related to firm competitiveness.	Not Supported
H3e	Continuous learning enhancement is positively related to firm success.	Not Supported
H4a	Strategy-development connectivity is positively related to employee commitment.	Supported
H4b	Strategy-development connectivity is positively related to operational development.	Supported
H4c	Strategy-development connectivity is positively related to business productivity.	Supported
H4d	Strategy-development connectivity is positively related to firm competitiveness.	Supported
H4e	Strategy-development connectivity is positively related to firm success.	Supported
H5a	Innovation creativity focus is positively related to employee commitment.	Supported
H5b	Innovation creativity focus is positively related to operational development.	Supported
H5c	Innovation creativity focus is positively related to business productivity.	Supported
H5d	Innovation creativity focus is positively related to firm competitiveness.	Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H5e	Innovation creativity focus is positively related to firm success.	Supported
H6a	Employee commitment is positively related to business productivity.	Supported
H6b	Employee commitment is positively related to firm competitiveness.	Supported
H7a	Operational development is positively related to business productivity.	Supported
H7b	Operational development is positively related to firm competitiveness.	Supported
H8	Business productivity is positively related to firm competitiveness.	Supported
H9	Firm competitiveness is positively related to firm success.	Supported
H10a	Transformational leadership orientation is positively related to employee competency analysis.	Supported
H10b	Transformational leadership orientation is positively related to individual ability support.	Not Supported
H10c	Transformational leadership orientation is positively related to continuous learning enhancement.	Supported
H10d	Transformational leadership orientation is positively related to strategy-development connectivity.	Supported
H10e	Transformational leadership orientation is positively related to innovation creativity focus.	Not Supported
H11a	Human capital policy is positively related to employee competency analysis.	Not Supported
H11b	Human capital policy is positively related to individual ability support.	Not Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H11c	Human capital policy is positively related to continuous learning enhancement.	Not Supported
H11d	Human capital policy is positively related to strategy-development connectivity.	Supported
H11e	Human capital policy is positively related to innovation creativity focus.	Not Supported
H12a	Organizational resource readiness is positively related to employee competency analysis.	Not Supported
H12b	Organizational resource readiness is positively related to individual ability support.	Supported
H12c	Organizational resource readiness is positively related to continuous learning enhancement.	Supported
H12d	Organizational resource readiness is positively related to strategy-development connectivity.	Not Supported
H12e	Organizational resource readiness is positively related to innovation creativity focus.	Supported
H13a	IT capability is positively related to employee competency analysis.	Supported
H13b	IT capability is positively related to individual ability support.	Supported
H13c	IT capability is positively related to continuous learning enhancement.	Supported
H13d	IT capability is positively related to strategy-development connectivity.	Supported
H13e	IT capability is positively related to innovation creativity focus.	Supported
H14a	Environmental complexity force is positively related to employee competency analysis.	Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H14b	Environmental complexity force is positively related to individual ability support.	Not Supported
H14c	Environmental complexity force is positively related to continuous learning enhancement.	Not Supported
H14d	Environmental complexity force is positively related to strategy-development connectivity.	Not Supported
H14e	Environmental complexity force is positively related to innovation creativity focus.	Supported
H15a	Survival culture will positively moderate the relationships between transformational leadership orientation and employee competence analysis.	Not Supported
H15b	Survival culture will positively moderate the relationships between transformational leadership orientation and individual ability support.	Not Supported
H15c	Survival culture will positively moderate the relationships between transformational leadership orientation and continuous learning enhancement.	Not Supported
H15d	Survival culture will positively moderate the relationships between transformational leadership orientation and strategy-development connectivity.	Not Supported
H15e	Survival culture will positively moderate the relationships between transformational leadership orientation and innovation creativity focus.	Not Supported
H16a	Survival culture will positively moderate the relationships between human capital policy and employee competence analysis.	Not Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H16b	Survival culture will positively moderate the relationships between human capital policy and individual ability support.	Not Supported
H16c	Survival culture will positively moderate the relationships between human capital policy and continuous learning enhancement.	Not Supported
H16d	Survival culture will positively moderate the relationships between human capital policy and strategy-development connectivity.	Not Supported
H16e	Survival culture will positively moderate the relationships between human capital policy and innovation creativity focus.	Not Supported
H17a	Survival culture will positively moderate the relationships between organizational resource readiness and employee competence analysis.	Supported
H17b	Survival culture will positively moderate the relationships between organizational resource readiness and individual ability support.	Supported
H17c	Survival culture will positively moderate the relationships between organizational resource readiness and continuous learning enhancement.	Not Supported
H17d	Survival culture will positively moderate the relationships between organizational resource readiness and strategy-development connectivity.	Not Supported
H17e	Survival culture will positively moderate the relationships between organizational resource readiness and innovation creativity focus.	Not Supported

Table 16: A Summary of the Result of Hypotheses Testing (continued)

Hypotheses	Description of Hypothesized Relationships	Results
H18a	Survival culture will positively moderate the relationships between IT capability and employee competence analysis.	Supported
H18b	Survival culture will positively moderate the relationships between IT capability and individual ability support.	Supported
H18c	Survival culture will positively moderate the relationships between IT capability and continuous learning enhancement.	Not Supported
H18d	Survival culture will positively moderate the relationships between IT capability and strategy-development connectivity.	Not Supported
H18e	Survival culture will positively moderate the relationships between IT capability and innovation creativity focus.	Not Supported
H19a	Survival culture will positively moderate the relationships between environmental complexity force and employee competence analysis.	Not Supported
H19b	Survival culture will positively moderate the relationships between environmental complexity force and individual ability support.	Not Supported
H19c	Survival culture will positively moderate the relationships between environmental complexity force and continuous learning enhancement.	Not Supported
H19d	Survival culture will positively moderate the relationships between environmental complexity force and strategy-development connectivity.	Not Supported
H19e	Survival culture will positively moderate the relationships between environmental complexity force and innovation creativity focus.	Supported

CHAPTER V

CONCLUSION

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

Summary of Results

This research investigates the effects of human resource development capability on employee commitment, operational development, business productivity, firm competitiveness, and firm success of auto parts businesses in Thailand. Moreover, transformational leadership orientation, human capital policy, organizational resource readiness, information technology capability, and environmental complexity force are assigned as the antecedents of human resource development capability. The moderating effects of survival culture are also tested. Survival culture has been requested as moderator, which moderate the relationship between each of five dimension of human resource development capability and its antecedents.

It can be stated that the key research question is, “How does human resource development capability influence firm success?” In detail, there are six specific research questions as follows: 1) How does each dimension of the five dimensions of human resource development capability have an effect on employee commitment, business productivity, operational development, firm competitiveness and firm success? 2) How do employee commitment and operational development have an influence on business productivity? 3) How do employee commitment, operational development and business productivity relate to firm competitiveness? 4) How does firm competitiveness have an influence on firm success? 5) How do transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental

complexity force have an impact on each of the five dimensions of human resource development capability? 6) How does survival culture moderate the influence of leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force on each of the five dimensions of human resource development capability?

The main purpose of this research is to investigate the relationship among human resource development capability and firm success. The specific research purposes are as follows: 1) to investigate the relationship among the five dimensions of human resource development capability (employee competency analysis, individual ability support, continuous learning enhancement, strategy-development connectivity, innovation creativity focus) on employee commitment, business productivity, operational development, firm competitiveness and firm success, 2) to examine the influences of employee commitment and operational development on business productivity, 3) to test the impacts of employee commitment, operational development and business productivity on firm competitiveness, 4) to investigate the relationship between firm competitiveness and firm success, 5) to determine the relationship among transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force and each of the five dimension of human resource development capability and 6) to test the moderating effect of survival culture that has influenced on the relationship among transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force and each of the five dimension of human resource development capability.

This research applies two theories to draw the conceptual model, including the human capital and contingency theories in explaining the relationship and phenomena. For research investigation, the auto parts businesses in Thailand are selected as the research population due to the context that it is of one of ten industries that drive the economic growth of Thailand for the future. The population sample of this research is provided by the Thai Auto Parts Manufacturers Association, accessed in December 2016. For the data collection, the self-administrated questionnaire was employed to gather the data. Therefore, 618 questionnaires were sent to human resource directors and human resource managers, who were the key informants of Thai auto parts

businesses. The mail survey resulted in 155 returned mailings with 128 that were usable; a 21.59 % response rate. Furthermore, the research instrument was developed from the previous research and literature review. To evaluate, all measures of the scale are considered appropriate for further analysis and are accepted for validity and reliability by a pre-test. Statistics used in this research were applied to multiple regression analysis for the hypotheses testing.

According to the first specific research question and research objective, the findings indicate that strategic-development connectivity and innovation creativity focus have a positive relationship with employee commitment, operational development, business productivity, firm competitiveness, and firm success. Interestingly, employee competency analysis has a positive relationship with only employee commitment and no relationship with operational development, business productivity, firm competitiveness, and firm success. Moreover, individual ability support and continuous learning enhancement have no relationship with all of its consequences. Therefore, the relationships among each dimension of human resource development capability and its consequences are based on Hypothesis 1 that is partially supported, Hypotheses 2 and 3 that are not supported, and Hypotheses 4 and 5 that are fully supported.

The second, third and fourth specific research question and research objective, the findings also illustrate the result among consequences that both employee commitment and operational development have a significant, positive effect on business productivity. Moreover, employee commitment, operational development, and business productivity have significant, positive effect on firm competitiveness. Finally, firm competitiveness has significant positive effects on firm success. Therefore, Hypotheses 6, 7, 8 and 9 that are fully supported.

The fifth specific research question and research objective, in terms of the relationships among the antecedents and human resource development, the findings illustrated that transformational leadership orientation has a significant, positive effect on employee competency analysis, continuous learning enhancement and strategic-development connectivity. However, it fails to show a significant relationship effect on individual ability support and innovation creativity focus. Next, human capital policy has a significant, positive effect on only strategic-development connectivity, but it has

no effect on employee commitment, individual ability support, continuous learning enhancement, and innovation creativity focus. Moreover, organizational resource readiness has a significant, positive effect on individual ability support, continuous learning enhancement, and innovation creativity focus; but it has no significant relationship with employee commitment and strategic-development connectivity. Interestingly, information technology capability has a significant positive effect on all dimensions of human resource development capability consisting of employee competency analysis, individual ability support, continuous learning enhancement, strategic-development connectivity, and innovation creativity focus. Finally, environmental complexity force has a significant, positive effect on employee competency analysis and innovation creativity focus. However, environmental complexity force has no significant effect on individual ability support, continuous learning enhancement, and strategic-development connectivity. Therefore, hypothesis 13 is fully supported and Hypotheses 10, 11, 12 and 14 are partially supported.

Finally, the sixth specific research question and research objective, the results shown that the moderating effects of survival culture influence on relationship between organizational resource readiness and information technology with employee competency analysis and individual ability support. Survival culture also moderate the relationship between environmental complexity force and innovation creativity focus. Therefore, Hypotheses 15, 16 and 17 are partially supported. Accordingly, the summary of all research questions and results is included in Table 17 and Figure 10 below:

Table 17: Summary of the Result and Conclusions of all Hypotheses Testing

Research Questions	Hypotheses	Results	Conclusions
Key research question: How human resource development capability influences firm success?	1-5e	Two of five of human resource development have a direct influence on firm success.	Partial supported
Specific Research Question: (1) How does each dimension of the five dimensions of human resource development capability have an effect on employee commitment, business productivity, operational development, firm competitiveness and firm success?	1-5a 1-5b 1-5c 1-5d 1-5e	- Employee competency analysis has the positive relationship with employee commitment. - Strategic-development connectivity and innovation creativity focus have the positive relationships with employee commitment, operational development, business productivity, firm competitiveness, and firm success. - Individual ability support and continuous learning enhancement have not relationships with employee commitment, operational development, business productivity, firm competitiveness, and firm success.	Partial supported
(2) How do employee commitment and operational development have an influence on business productivity?	6-7a	Employee commitment and operational development have the positive relationships with business productivity.	Fully supported
(3) How do employee commitment, operational development and business productivity relate to firm competitiveness?	6-7b and 8	Employee commitment, operational development and business productivity have the positive relationship with firm competitiveness.	Fully supported
(4) How does firm competitiveness have an influence on firm success?	9	Firm competitiveness have the positive relationship with firm success.	Strongly supported

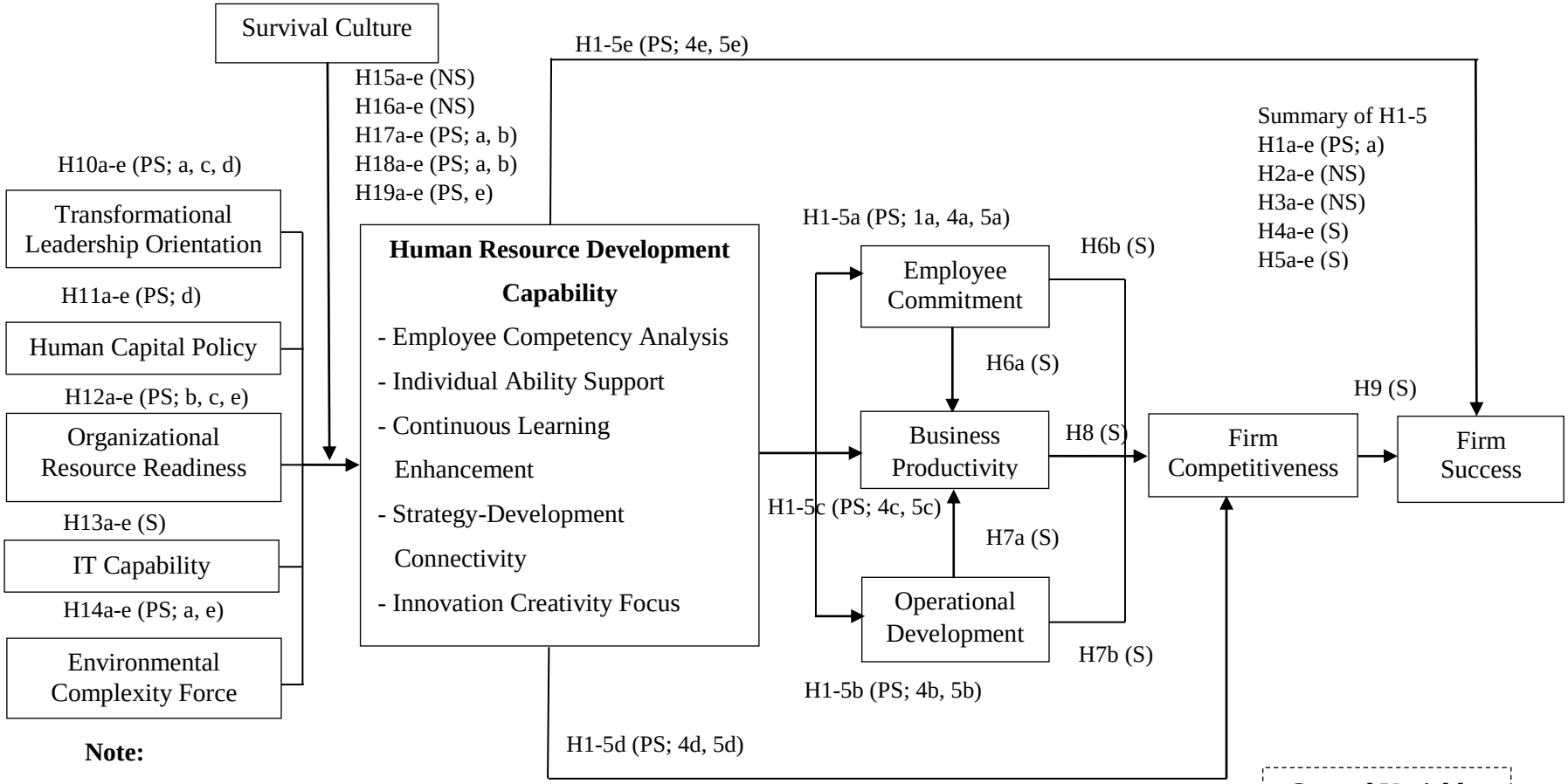
Table 17: Summary of the Result and Conclusions of all Hypotheses Testing (continued)

Research Questions	Hypotheses	Results	Conclusions
(5) How do transformational leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force have an impact on each of the five dimension of human resource development capability?	10a-e 11a-e 12a-e 13a-e 14a-e	- Transformational leadership orientation have the positive relationships with employee competency analysis, continuous learning enhancement and strategic-development connectivity, but it have not the relationships with individual ability support and innovation creativity focus. - Human capital policy has the positive relationships with strategic-development connectivity, but it have not the relationship with employee competency analysis, individual ability support, continuous learning enhancement, and innovation creativity focus. - Organizational resource readiness have the positive relationships with individual ability support, continuous learning enhancement and innovation creativity focus, but it have not the relationship with employee competency analysis and strategic-development connectivity. - Information technology capability have the positive relationships with all of human resource development capability. - Environmental complexity force have the positive relationships with employee competency analysis and innovation creativity focus, but it have not the relationships with individual ability supports, continuous learning enhancement, and strategic-development connectivity.	Partially supported

Table 17: Summary of the Result and Conclusions of all Hypotheses Testing (continued)

Research Questions	Hypotheses	Results	Conclusions
(6) How does survival culture moderate the influence of leadership orientation, human capital policy, organizational resource readiness, IT capability, environmental complexity force on each of the five dimension of human resource development capability?	15a-e 16a-e 17a-e 18a-e 19a-e	- Survival culture moderates the relationship between organizational resource readiness and information technology with employee competency analysis and individual ability support. Survival culture also moderate the relationship between environmental complexity force and innovation creativity focus. - Survival culture not moderates the relationships between leadership orientation and human capital policy, and it also not moderate the relationship between environmental complexity force with employee competency analysis, individual ability support, continuous learning enhancement, and strategic-development connectivity.	Partially supported

Figure 10: Summary of Hypothesis Testing Results



Note:

(S) = Hypotheses Supported

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

(NS) = Hypotheses Not Supported

Theoretical and Managerial Contribution

Theoretical Contribution

This research aims to investigate the relationships among human resource development capability, employee commitment, operational development, business productivity, firm competitiveness, and firm success in combination with the antecedent variables and the moderating effects as shown in Figure 1. Interestingly, the core theoretical contribution relates to conceptualizing the comprehensive view of human resource development capability as a multidimensional construct, which are newly-developed constructs and dimensions, differentiating from prior human resource development literature. The processes of clarifying the linkage of the conceptual framework were based on two theories, the human capital and contingency theories. This empirical research sensitizes and explains theories associated with how a business firm achieves and fulfills its goals and, at the same time, maintains its sustained competitive advantage and superior performance in a radical business environment. It clarifies the nature of human resource development capability for future investigation. As a result, this research suggests three major theoretical contributions to the human resource development literature as follows:

Firstly, human resource development capability is the perfect combination of human resource development literature which consists of competency-based analysis, connatural management model, learning organization, strategic human resource development, and knowledge productivity. This research integrates the human capital and contingency theories to generate and explain the conceptual model and expand the boundaries of these theories. Relying on these two theories, firm competitiveness and firm success are subject to business capability in generating modern human resource development for industry. Similarly, this research demonstrated that human resource development capability is required to enhance firm competitiveness and firm success.

The concept of human capital is the sustainable source of competitive advantage. Unlike the resource-based view of the firm (RBV), human capital is the new paradigm that can explain how firms create and maintain their valuable human resources that lead to competitive advantage in an emerging dynamic business environment. Human capital consists of a set of specific and identifiable processes that

allow the organization to add value to the human asset, and it can be used to compare and measure their value that leads to best management (Brooking, 2010). When a specific firm processes these sets of capability, human resource development capability, for example, will result in achieving sustainable competitive advantage. Likewise, the results of this research confirm the core attributes of human capital which lead a firm to achieve sustainable competitive advantage. As a consequence, human resource development capability is a firm capability that enhances firms; giving the ability to achieve its goal and, at the same time, maintain its superior performance and competitiveness. However, it might be too narrow to look at only endogenous determinants. The contingency theory posits that if the firm wants to survive or effectively perform business operations, then the organizational structure and process of a firm must with its contexts: firm characteristics, culture, business environment, market condition, and technology (Jiang et al., 2012; Yorke & Barto, 2013). The suitability between organizational exogenous and endogenous factors are deliberate organizational performance and success. Similarly, the results of this research confirm that the concept of the contingency theory appropriately explains the phenomenon among the antecedents, human resource development capability, and the moderating effect of survival culture.

Secondly, this research has helped to brighten the understanding under the concept beneath human resource development capability by proposing five newly-distinctive dimensions of human resource development capability comprising employee competency analysis, individual ability support, continuous learning enhancement, strategic-development connectivity, and innovation creativity focus. Especially, it has highlighted the importance of strategic-development connectivity and innovation creativity focus in empowering employee commitment, operational development, business productivity, firm competitiveness and, more importantly, firm success. Moreover, the primal mediating role of firm competitiveness between business productivity and firm success has been highlighted. This means that business productivity may play a major role in determining and promoting long-term firm successes.

Lastly, in the mission of promoting human resource development capability, this research suggested that information technology capability is the most influential

effect on human resource development capability. However, the direct effects of transformational leadership orientation, organizational resource readiness and environmental complexity force on human resource development capability are also advertent.

Managerial Contribution

This research aspires to privilege human resource directors and human resource managers who have faced strong pressures of aggressive and volatile competition. Especially in a high-technology industry, as in auto parts businesses, firms are frequently forced to improve and develop their strategic alignment with the internal and external business environment. So, they can effectively provide firms with a source of sustainable competitive advantage and firm success.

Firstly, human resource directors and managers should focus on the management philosophy that promotes connecting between strategy level planning and human resource development system. Also, the firm should always be aware that humans are a valuable resource of the firm which should be given good, clear motivation and guidelines by a human resources department. The firm should have systematic and concrete planning of human resource development in both the present and future, and use human resources as a topic and issue to discuss in firm meetings continuously. This open working environment helps businesses tune-up with the consistency of strategy and human resource development. Moreover, human resource directors and managers should enhance sharing and utilizing the knowledge and experience of employees to create new working processes that favor business competitive advantage. Firms should enhance employees to have creative thinking in new things of operations and allocate an extreme budget to create, research and develop a new things which will help a firm operations to attain excellence. It also likely to increase employee commitment, operational development, business productivity, and firm competitiveness. Concentrating on human resource development capability can result in business success and performance in the long-run. However, human resource directors and managers must watch out for uncontrollable external effects, such as environmental complexity.

Secondly, the results can provide guidelines for the improvement and maintenance of firm competitiveness and firm success as a result of the implementation of human resource development capability, employee commitment, operational development, and business productivity. Thus, firms and human resource managers should be aware of the commitment of the employees because high employee commitment can enhance business productivity and firm competitiveness. Moreover, firms and human resource managers should provide important, continuous operational development because it promotes business productivity and firm competitiveness, which firm competitiveness has the greatest direct influence on firm success.

Thirdly, human resource directors and managers must pay attention to activities that support firms to succeed in human resource development, such as leadership that emphasize support and moderates the human resource development activities. Moreover, the policy that is consistent with human resource development and is linked to the strategy of an organization will cause more efficiency in employee development. There are ways to stimulate the employees in new processes in order to satisfy customer expectation and enhance working operations efficiency.

Fourthly, human resource directors and managers should facilitate their employees with substantial resources. The availability of resources in the organization is one of the most essential determinants of firm success. The appropriate resource allocation to human resource development is an important internal factor that promotes employee training and development activities. Firms should be continuously engrossed in technology, techniques and process development in operations. Moreover, information technology of the infrastructure in collecting, analyzing, storing, and presenting the relevant information is the crucial facility to support human resource development operations. The investment and enhancement in learning and follow-up of the development and changing of information technology will help firms to better apply information technology in the firm’s operations.

Finally, the conceptual model in this research is not complicated, useful, and can be applied to other industries and also be used in other country and culture. Because concepts and theories that be used in this research have been studied from several industries and country. For example, concepts of competency-based analysis, connatural management approach, learning organization, strategic human resource development,

and knowledge productivity. Therefore, the contribution of this research can be used in other context.

Limitations and Suggestions for Future Research

Limitations

In this research, there are four limitations as follows: Firstly, the single population in this research, the auto parts businesses in Thailand, including most of the respondents is over long periods of time in business (over 15 years). It may limit the generalizability of the research. Secondly, the relatively short period time of the data collection and analyze only took approximately 4 months. As a result, it is possible to claim that it has more appropriate research methodology that can examine and study this research. Thirdly, the newly-proposed dimensions of human resource development capability can be also re-proposed to fit the variety of each industry environment and condition. As well, as the antecedents would be fruitful to the literature to expand this research in future research. Lastly, the non-significance of moderating role of survival culture has eliminated more light on the important influential roles of survival culture toward the success of the firm on organizational human resource development capability. However, the explanation and understanding of the moderating variable and its effects are still limited.

Suggestion for Future Research

According to methodological limitations, some suggestions for future research are provided as follows: Firstly, future research may employ other sampling populations with differentiation in types and characteristics, including age of business firm, in order to compare the results and outcomes; and at the same time, to gain more research credibility and confirm the generalizability of the research. Secondly, other research methodology may be employed to examine this conceptual framework of human resource development capability. For example, qualitative in-depth interviews may help to explore up-to-date points of view of reality from human resource directors and human resource managers. This qualitative methodology stimulates the whole picture and the comprehensive understanding of human resource development capability.

Moreover, other statistical techniques like the structural equation modeling (SEM) may also highlight the hidden relationships among all constructs within the conceptual framework of human resource development capability. Thirdly, some interesting variables, employees, and firm capability may be added to the framework, which will encourage the understanding and greater explanation of employee roles in supporting the capability, performance and success of the organization. Fourthly, future research may be studied on the moderating effect of culture that is consistent with each antecedent of human resource development capability. Finally, this conceptual framework can be applied to comparison research between labor abundance country and capital abundance country because both are different in important of human resource. Therefore, it is interesting that the results will be from different cultures.

BIBLIOGRAPHY

BIBLIOGRAPHY

Aaker, D. A., Kumar, V. and Day, T. X. (2001). *Marketing Research*. New York: John Wiley and Sons.

Ababneh, R. (2013). Antecedents and outcomes of career development in Jordanian public sector. *Journal of Emerging Trends in Economics and Management Sciences*, 4(4), 417-426.

Abushaiba, I. A. and Zainuddin, Y. (2012). Performance measurement system design, competitive capability, and performance consequences-A conceptual like. *International Journal of Business and Social Science*, 3(11), 184-193.

Adekiya, A. A. and Ibrahim, F. (2016). Entrepreneurship intention among students. The antecedent role of culture and entrepreneurship training and development. *The International Journal of Management Education*, 14(2), 116-132.

Admiraal, W. and Lockhorst, D. (2009). E-Learning in small and medium-sized enterprises across Europe attitudes towards technology, learning and training. *International Small Business Journal*, 27(6), 743-767.

Agarwala, T. (2003). Innovative human resource practices and organizational commitment: An empirical investigation. *International Journal of Human Resource Management*, 14(2), 175-197.

Ahmad, S. and Schroeder, R. G. (2003). The impact of human resource management practices on operational performance: recognizing country and industry differences. *Journal of Operations Management*, 21(1), 19-43.

Alagaraja, M. (2012). HRD and HRM perspectives on organizational performance: A Review of literature. *Human Resource Development Review*, 12(2), 117-143.

Alagaraja, M. and Egan, T. (2013). The strategic value of HRD in lean strategy implementation. *Human Resource Development Quarterly*, 24(1), 1-27.

Alagaraja, M., Cumberland, D. M. and Choi, N. (2015). The mediating role of leadership and people management practices on HRD and organizational performance. *Human Resource Development International*, 18(3), 220-234.

Alhakimi, W. and alzahary, A. (2015). An assessment of organizational readiness for ERP implementation. *Euro Asia Journal of Management*, 44(25), 55-77.

Alhogail, A. (2015). Design and validation of information security culture framework. *Computers in Human Behavior*, 49(1), 567-575.

Allen, N. J. and Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1-18.

Allen, N. J. and Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3), 252-276.

Allen, D. G., Shore, L. M. and Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99-118.

Álvarez, I., Marin, R. and Fonfría, A. (2009). The role of networking in the competitiveness of firms. *Technological Forecasting and Social Change*, 76(3), 410-421.

Ambrozova, E., Koleňák, J. and Pokorný, V. (2016). Connatural management approach to preparation and development of individuals in the business environment. *Verslas: Teorija ir Praktika*, 17(2), 81-88.

Anand, G., Ward, P. T., Tatikonda, M. V. and Schilling, D. A. (2009). Dynamic capabilities through continuous improvement infrastructure. *Journal of Operations Management*, 27(6), 444-461.

Anderson, S.W., and Lanen, W. N. (1999). Economic transition, strategy and the evolution of management accounting practices: The case of India. *Accounting, Organizations and Society*, 24(5), 379–412.

Ansoff, H.I. (1965). *Corporate Strategy.* New York: McGraw-Hill.

App, S., Merk, J. and Büttgen, M. (2012). Employer branding: sustainable HRM as a competitive advantage in the market for high-quality employees. *Management Revue*, 23(3), 262-278.

Aragón-Sánchez, A., Barba-Aragón, I. and Sanz-Valle, R. (2003). Effects of training on business results1. *The International Journal of Human Resource Management*, 14(6), 956-980.

Armstrong, A. and Foley, P. (2003). Foundations for a learning organization: organization learning mechanisms. *The Learning Organization*, 10(2), 74-82.

Ashill, N. J. and Jobber, D. (2014). The effects of the external environment on marketing decision-maker uncertainty. *Journal of Marketing Management*, 30(3-4), 268-294.

Atuahene-Gima, K. and Murray J. (2004). Antecedents and outcomes of marketing strategy comprehensiveness. *Journal of Marketing*, 68(4), 33-46.

Avolio, B. J., Zhu, W., Koh, W. and Bhatia, P. (2004). Transformational leadership and organizational commitment: mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 25(8), 951-968.

Azadegan, A., Patel, P. C., Zangoueinezhad, A. and Linderman, K. (2013). The effect of environmental complexity and environmental dynamism on lean practices. *Journal of Operations Management*, 31(4), 193-212.

Babushe, M. T. and Narendranath, K. (2013). HRD climate and job satisfaction in the public sector of Ethiopia: An empirical study in Amhara and Benishangul-Gumuz regions. *Journal of Institute of Public Enterprise*, 36(3/4), 112-137.

Bae, S. O., & Patterson, L. (2014). Comparison and implications of human capital theory at the individual, organization, and country levels. *Journal of Organizational Culture, Communication and Conflict*, 18(1), 1-286.

Bailey, M. (2011). Policy, professionalism, professionality and the development of HR practitioners in the UK. *Journal of European Industrial Training*, 35(5), 487-501.

Baker, W. E. and Sinkula, J. M. (1999). Learning orientation, market orientation, and innovation: integrating and extending models of organizational performance. *Journal of Market-Focused Management*, 4(4), 295-308.

Balakrishnan, P. and Pushpangadan, K. (1998). What do we know about productivity growth in Indian industry?. *Economic and Political Weekly*, 33(33/34), 2241-2246.

Ballot, G., Fakhfakh, F. and Taymaz, E. (2006). Who benefits from training and R&D, the firm or the workers?. *British journal of Industrial Relations*, 44(3), 473-495.

Barnes, S. J. (1997). *Creativity in the Workplace: The Creativity Professional's Perspective.* Lincoln: ETD Collection for University of Nebraska.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.

Barney, J. B. (2000). Firm resources and sustained competitive advantage. *Advances in Strategic Management*, 17(1), 203-227.

Barney, J. B. and Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management (1986-1998*), 37(1), 31-56.

Barling, J., Weber, T. and Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827.

Barry, B. (2002). *Culture and Equality: An Egalitarian Critique of Multiculturalism*. Massachusetts: Harvard University Press.

Barth, H. (2003). Fit among competitive strategy, administrative mechanisms, and performance: a comparative study of small firms in mature and new industries. *Journal of Small Business Management*, 41(2), 133-147.

Bartlett II, J.E., Kotrlik, J.W. and Higgins, C.C. (2001). Organizational research: determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19(1), 43-50.

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45(3), 587-597.

Batt, R. and Colvin, A. J. (2011). An employment systems approach to turnover: Human resources practices, quits, dismissals, and performance. *Academy of Management Journal*, 54(4), 695-717.

Bayo-Moriones, A. and de Cerio, J. M. D. (2001). Quality management and high performance work practices: Do they coexist?. *International Journal of Production Economics*, 73(3), 251-259.

Bass, B. M. and Avolio, B. J. (1989). Potential biases in leadership measures: How prototypes, leniency, and general satisfaction relate to ratings and rankings of transformational and transactional leadership constructs. *Educational and Psychological Measurement*, 49(3), 509-527.

Beaver, G. and Hutchings, K. (2005). Training and developing an age diverse workforce in SMEs: The need for a strategic approach. *Education Training*, 47(8/9), 592-604.

Beaver, G. and Lashley, C. (1998). Barriers to management development in small hospitality firms. *Strategic Change*, 7(4), 223-235.

Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *The Journal of Political Economy*, 70(5), 9-49.

————. (1964). *Human Capital: A Theoretical and Empirical Analysis, With Special Reference to Education.* New York: National Bureau of Economic Research.

————. (2007). *Economic Theory.* New Brunswick, NJ: Transaction Publishers.

Becker, B. E. and Huselid, M. A. (2006). Strategic human resource management: Where do we go from here?. *Journal of Management*, 32(6), 898-925.

Beer, M. and Eisenstat, R. A. (2000). The silent killers of strategy implementation and learning. *Sloan Management Review*, 41(4), 29-40.

Belassi, W. and Tukel, O. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management*, 14(3), 141-151.

Bello-Pintado, A. (2015). Bundles of HRM practices and performance: Empirical evidence from a Latin American context. *Human Resource Management Journal*, 25(3), 311-330.

Bhatt, G. D. (2000). Exploring the relationship between information technology, infrastructure and business process re-engineering. *Business Process Management Journal*, 6(2), 139-163.

Birdi, K., Clegg, C., Patterson, M., Robinson, A., Stride, C. B., Wall, T. D. and Wood, S. J. (2008). The impact of human resource and operational management practices on company productivity: A longitudinal study. *Personnel Psychology*, 61(3), 467-501.

Block, F. L. (1990). *Postindustrial Possibilities: A Critique of Economic Discourse.* Oakland: University of California Press.

Blundell, R., Dearden, L. and Meghir, C. (1996). *The Determinants and Effects of Work-Related Training in Britain (No. R50).* London: Institute for Fiscal Studies.

Boudreau, J. W. and Ramstad, P. M. (2005). Talentship and the new paradigm for human resource management: From professional practices to strategic talent decision science. *People and Strategy*, 28(2), 17-32.

Boyd, B. K. and Fulk, J. (1996). Executive scanning and perceived uncertainty: A multidimensional model. *Journal of Management*, 22(1), 1-21.

Brand, M. J. and Croonen, E. P. (2010). Franchised and small, the most beautiful of all; HRM and performance in plural systems. *Journal of Small Business Management*, 48(4), 605-626.

Bryan, J. (2006). Training and performance in small firms. *International Small Business Journal*, 24(6), 635-660.

Brooking, A. (2010). On the importance of managing intangible assets as part of corporate strategy. In S. C. S. F. Rodrigues (Ed) *Lisbon Unoversity Institute: Proceedings of the Second European Conference on Intellectual Capital*, 29-30 March 2010 (pp. 137-143). Lisbon, Portugal: ISCTE Lisbon University Institute.

Bulut, C. and Culha, O. (2010). The effects of organizational training on organizational commitment. *International Journal of Training and Development*, 14(4), 309-322.

Cadez, S. and Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, 33(7), 836-863.

Cannon, A. R. and John, C. H. S. (2007). Measuring environmental complexity a theoretical and empirical assessment. *Organizational Research Methods*, 10(2), 296-321.

Cater, T. and Pucko, D. (2005). How competitive advantage influences firm performance: the case of Slovenian firms. *Economic and Business Review for Central and South-Eastern Europe*, 7(2), 119-135.

Chaikambang, C., Ussahawanitchakit, P. and Boonlua, S. (2012). Strategic cost management and goal achievement: evidence from food businesses in Thailand. *International Journal of Business Strategy*, 12(4), 1-27.

Chalatharawat, J. and Ussahawanitchakit, P. (2009). Accounting information usefulness for performance evaluation and its impact on the firm success: An empirical investigation of food manufacturing firms in Thailand. *Review of Business Research*, 9(2), 1-25.

Chalofsky, N. and Lincoln, C. (1983). *Up the HRD Ladder*. Boston: Addison-Wesley.

Chamberlin, T., Doutriaux, J. and Hector, J. (2010). Business success factors and innovation in Canadian service sectors: an initial investigation of inter-sectoral differences. *The Service Industries Journal*, 30(2), 225-246.

Chan, L. L., Shaffer, M. A. and Snape, E. (2004). In search of sustained competitive advantage: the impact of organizational culture, competitive strategy and human resource management practices on firm performance. *The International Journal of Human Resource Management*, 15(1), 17-35.

Chandler, G. N. and McEvoy, G. M. (2000). Human resource management, TQM, and firm performance in small and medium-size enterprises. *Entrepreneurship: Theory and Practice*, 25(1), 43-57.

Chapman, C. S. (2005). Not because they are new: Developing the contribution of enterprise resource planning systems to management control research. *Accounting, Organizations and Society*, 30(7), 685-689.

Chatman, J. A. and Barsade, S. G. (1995). Personality, organizational culture, and cooperation: Evidence from a business simulation. *Administrative Science Quarterly*, 40, 423-443.

Chatzimouratidis, A., Theotokas, I. and Lagoudis, I. N. (2012). Decision support systems for human resource training and development. *The International Journal of Human Resource Management*, 23(4), 662-693.

Chaudhuri, S. and Bartlett, K. R. (2014). The relationship between training outsourcing and employee commitment to organization. *Human Resource Development International*, 17(2), 145-163.

Chaudhuri, S. and Ray, S. (1997). The competitiveness conundrum: literature review and reflections. *Economic and Political Weekly*, 32(48), 83-91.

Chen, M. Y. C., Lin, C. Y. Y., Lin, H. E. and McDonough, E. F. (2012). Does transformational leadership facilitate technological innovation? The moderating roles of innovative culture and incentive compensation. *Asia Pacific Journal of Management*, 29(2), 239-264.

Chenhall, R. H. and Langfield-Smith, K., (1998). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, Organizations and Society*, 23(3), 243-264.

Cho, H. J. and Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555-575.

Cho, S., Woods, R. H., Jang, S. S. and Erdem, M. (2006). Measuring the impact of human resource management practices on hospitality firms' performances. *International Journal of Hospitality Management*, 25(2), 262-277.

Choo, A. S., Linderman, K. W. and Schroeder, R. G. (2007). Method and psychological effects on learning behaviors and knowledge creation in quality improvement projects. *Management Science*, 53(3), 437-450.

Chuang, C. H. and Liao, H. U. I. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology*, 63(1), 153-196.

Churchill, G. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64-73.

Clarke, N. (2004). HRD and the challenges of assessing learning in the workplace. *International Journal of Training and Development*, 8(2), 140-156.

Coetzer, A. (2006). Employee learning in New Zealand small manufacturing firms. *Employee Relations*, 28(4), 311-325.

Coetzer, A. and Perry, M. (2008). Factors influencing employee learning in small businesses. *Education+ Training*, 50(8/9), 648-660.

Combs, J., Liu, Y., Hall, A., and Ketchen, D. (2006). How much do high performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501-528.

Couger, J. D., Davis, G. B., Dologite, D. G., Feinstein, D. L., Gorgone, J. T., Jenkins, A. M. and Valacich, J. S. (1995). IS'95: Guideline for undergraduate IS curriculum. *MIS Quarterly*, 19(3), 341-359.

Coulter, M.K. (2002). *Strategic Management in Action.* 2nd ed. New Jersey: Prentice Hall.

Cozijnsen, A.J. and Vrakking, W.J. (2013). *Veranderkunde Change Management.* Deventer: Kluwer Academic Publishers.

Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J. and Ketchen Jr, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96(1), 443-456).

Cummings, T. G. (2008). *Handbook of Organization Development*. Thousand Oaks: Sage Publications.

Curtis, B., Hefley, B. and Miller, S. (2009). *People Capability Maturity Model (P-CMM) Version 2.0*. Pittsburgh: Carnegie-Mellon University Pittsburgh Pa Software Engineering.

Dalton, G. W., Lee, T. P., Younger, J. C. and Norman, S. W. (1996). Strategic restructuring. *Human Resource Management (1986-1998*), 35(4), 433 452.

Datta, D. K., Guthrie, J. P. and Wright, P. M. (2005). Human resource management and labor productivity: does industry matter? *Academy of Management Journal*, 48(1), 135-145.

Davenport, S., Carr, A. and Bibby, D. (2002). Leveraging talent: Spin–off strategy at industrial research. *R&D Management*, 32(3), 241-254.

Daveri, F. and Parisi, M. L. (2015). Experience, innovation, and productivity: empirical evidence from Italy's slowdown. *Industrial and Labor Relations Review*, 68(4), 889-915.

Davies, H. and Walters, P. (2004). Emergent patterns of strategy, environment and performance in a transition economy. *Strategic Management Journal*, 25(4), 347-364.

De Kok, J. (2002). The impact of firm-provided training on production testing for firm-size effects. *International Small Business Journal*, 20(3), 271-295.

De Kok, J., & Uhlaner, L. M. (2001). Organization context and human resource management in the small firm. *Small Business Economics*, 17(4), 273-291.

Deb, T. (2010). *Human Resource Development: Theory and Practices*. New Delhi: Ane Books Pvt.

Deepa, E., Palaniswamy, R., & Kuppusamy, S. (2014). Effect of performance appraisal system in organizational commitment, job satisfaction and productivity. *Journal of Contemporary Management Research*, 8(1), 72-82.

Delery, J. E., and Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurationally performance predictions. *Academy of Management Journal*, 39(4), 802-835.

Delery, J. E. and Shaw, J. D. (2001). *Research in Personnel and Human Resources Management*. West Yorkshire: Emerald Group Publishing Limited.

Dervitsiotis, K. N. (2011). The challenge of adaptation through innovation based on the quality of the innovation process. *Total Quality Management & Business Excellence*, 22(5), 553-566.

Dess, G. G.; Lumpkin, G. T. and Eisner, A. B. (2007). *Strategic Management Creating Competitive Advantage.* Boston: McGraw-Hill/Irwin.

Dess, G. D. and Picken, J.C. (1999). *Beyond Productivity: How Leading Companies Achieve Superior Performance by Ever aging Their Human Capital.* New York: American Management Association.

Dess, G. G. and Shaw, J. D. (2001). Voluntary turnover, social capital, and organizational performance. *Academy of Management Review*, 26(3), 446-456.

Devins, D. and Johnson, S. (2003). Training and development activities in SMEs: some findings from an evaluation of the ESF objective 4 programme in Britain. *International Small Business Journal*, 21(2), 213-228.

Ding, D. Z., Akhtar, S. and Ge, G. L. (2006). Organizational differences in managerial compensation and benefits in Chinese firms. *The International Journal of Human Resource Management*, 17(4), 693-715.

Drazin, R. and Van de Ven, A. (1985). Alternative forms of fit in contigenct theory. *Administrative Science Quarity*, 30, 514-539.

Dvir, T., Eden, D., Avolio, B. J. and Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45(4), 735-744.

Dzinkowski, R. (2000). The value of intellectual capital. *Journal of Business Strategy*, 21(4), 3-4.

Edvinsson, L. and Malone, M. S. (1997). *Intellectual Capital: Realizing your Company's True Value by Finding Its Hidden Brainpower*. New York: Harper Publications.

Ehlen, C., Van Der Klink, M., Roentgen, U., Curfs, E. and Boshuizen, H. (2013). Knowledge productivity for sustainable innovation: social capital as HRD target. *European Journal of Training and Development*, 38(1/2), 54-74.

Elliott, R. F. (1991). *Labor Economics: a Comparative Text*. New York: McGraw-Hill Education.

Ely, R. J. (2004). A field study of group diversity, participation in diversity education programs, and performance. *Journal of Organizational Behavior*, 25(6), 755-780.

Erkutlu, H. (2012). The impact of organizational culture on the relationship between shared leadership and team proactivity. *Team Performance Management: An International Journal*, 18(1/2), 102-119.

Evans, W. R. and Davis, W. D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of Management*, 31(5), 758-775.

Faems, D., Sels, L., De Winne, S. and Maes, J. (2005). The effect of individual HR domains on financial performance: evidence from Belgian small businesses. *The International Journal of Human Resource Management*, 16(5), 676-700.

Fernald Jr, L., Solomon, G. and Bradley, D. (1999). Small business training and development in the United States. *Journal of Small Business and Enterprise Development*, 6(4), 310-325.

Fey, C. F. adn Björkman, I. (2001). The effect of human resource management practices on MNC subsidiary performance in Russia. *Journal of International Business Studies*, 32(1), 59-75.

Forde, C. adn MacKenzie, R. (2004). Cementing skills: training and labour use in UK construction. *Human Resource Management Journal*, 14(3), 74-88.

Froehlich, D., Segers, M. and Van den Bossche, P. (2014). Informal workplace learning in Austrian banks: The influence of learning approach, leadership style, and organizational learning culture on managers' learning outcomes. *Human Resource Development Quarterly*, 25(1), 29-57.

Fui-Hoon Nah, F., Lee-Shang Lau, J. adn Kuang, J. (2001). Critical factors for successful implementation of enterprise systems. *Business Process Management Journal*, 7(3), 285-296.

Garavan, T. N., Wilson, J. P., Cross, C., Carbery, R., Sieben, I., de Grip, A. and McCracken, M. (2008). Mapping the context and practice of training, development and HRD in European call centres. *Journal of European Industrial Training*, 32(8/9), 612-728.

Gardner, T. M., Wright, P. M. and Moynihan, L. M. (2011). The impact of motivation, empowerment, and skill-enhancing practices on aggregate voluntary turnover: The mediating effect of collective affective commitment. *Personnel Psychology*, 64(2), 315-350.

Garvin, D. A. (1993). Building a learning organization. *Harvard Business Review*, 71(4), 78-91.

Ginsberg, A. and Venkatraman, N. (1985). Contingency perspectives of organizational strategy: a critical review of the empirical research. *Academy of Management Review*, 10(3), 421-434.

Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33(3), 114-135.

Gray, C. and Mabey, C. (2005). Management development key differences between small and large businesses in Europe. *International Small Business Journal*, 23(5), 467-485.

Goh, S. C. and Ryan, P. J. (2002). Learning capability, organization factors and firm performance. In H. Tsoukas (Ed.), *Third European Conference on Organizational Knowledge, Learning and Capabilities*, 5-6 April 2002 (pp.1-12). Athens, Greece.

Gold, J. and Thorpe, R. (2008). Training, it's a load of crap!': The story of the hairdresser and his 'Suit. *Human Resource Development International*, 11(4), 385-399.

Gong, Y., Law, K. S., Chang, S. and Xin, K. R. (2009). Human resources management and firm performance: The differential role of managerial affective and continuance commitment. *Journal of Applied Psychology*, 94(1), 263-275.

González-Benito, J., Da Rocha, D. R. and Queiruga, D. (2010). The environment as a determining factor of purchasing and supply strategy: An empirical analysis of Brazilian firms. *International Journal of Production Economics*, 124(1), 1-10.

Green, S., Boissoles, J. and Boulet, C. (1988). Accurate collision-induced line-coupling parameters for the fundamental band of CO in He: Close coupling and coupled states scattering calculations. *Journal of Quantitative Spectroscopy and Radiative Transfer*, 39(1), 33-42.

Gumusluoglu, L. and Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473.

Gupta, A. K. and Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management journal*, 27(1), 25-41.

Hackman, J. R. (1986). *The Psychology of Self-Management in Organizations*. Washington, D. C.: American Psychological Association.

Hair, J. F. J., Anderson, R. E., Tatham, R. L. and Black, W. C.(2006). *Multivariate Data Analysis.* New York: Macmillan.

Hair, Jr. J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. New Jersey: Prentice Hall.

Halkos, G. E. and Tzeremes, N. G. (2007). Productivity efficiency and firm size: An empirical analysis of foreign owned companies. *International Business Review*, 16(6), 713-731.

Hamlin, B. (2002). In support of evidence-based management and research-informed HRD through HRD professional partnerships: an empirical and comparative study. *Human Resource Development International*, 5(4), 467-491.

Hamlin, B. and Stewart, J. (2011). What is HRD? A definitional review and synthesis of the HRD domain. *Journal of European Industrial Training*, 35(3), 199-220.

Harbison, F. and Myers, C. A. (1964). Education and employment in the newly developing economies. *Comparative Education Review*, 8(1), 5-10.

Harrison, R. and Kessels, J. (2004), *Human Resource Development in a Knowledge Economy: An Organizational View*. London: Palgrave Macmillan.

Hassan, R. A., Fuwad, B. A. and Rauf, A. I. (2010). Pre-training motivation and the effectiveness of transformational leadership training: An experiment. *Academy of Strategic Management Journal*, 9(2), 1-8.

Hayton, J. C. and Cacciotti, G. (2013). Is there an entrepreneurial culture? A review of empirical research. *Entrepreneurship & Regional Development*, *25*(9-10), 708-731.

He, B. (2004). In defending a moderate concept of cultural equality. In *Refereed paper Presented to Australian Political Studies Association Conference, University of Adelaide*, 29, 1-26.

Hekelova, E. and Srdosova, K. (2009). *Management of Human Resources in the AutomotiveIindustry: December 2016.* Retrieved from http://www.sjf.stuba.sk/docs/docs/casopis/ZVP2009/ 06_F. SP. Hekelova_Srdosova.pdf

Hitt, M. A., Hoskisson, R. E. and Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4), 767-798.

Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 10(4), 15-41.

Holt, K., Noe, R. A. and Cavanaugh, M. (1996). Managers' developmental responses to 360-degree feedback. *Proceeding of the Annual Meeting of the Society for Industrial and Organizational Psychology*, 26-28 April *1996.*

Homburg, C., Artz, M. and Wieseke, J. (2012). Marketing performance measurement systems : Does comprehensiveness really improve performance? *Journal of Marketing*, 76(May), 56-77.

Hoque, K. and Bacon, N. (2008). Investors in People and training in the British SME sector. *Human Relations*, 61(4), 451-482.

Howell, J. M. and Frost, P. J. (1989). A laboratory study of charismatic leadership. *Organizational Behavior and Human Decision Processes*, 43(2), 243-269.

Huda, K. N., Anika, T. R. and Khaled, M. C. (2014). Strategic human resource development practices: An empirical study of steel manufacturing industries of Bangladesh. *International Management Review*, 10(2), 24-31.

Huda, K. N., Karim, R., Ahmed, F. and Olu-Olu, O. (2007). Practices of strategic human resource development in the RMG sector of Bangladesh: An empirical study. *International Business Management*, 1(1), 7-11.

Hurley, R. F. (2002). Putting people back into organizational learning. *Journal of Business & Industrial Marketing*, 17(4), 270-281.

Hurley, R. F. and Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *The Journal of Marketing*, 62, 42-54.

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, 38(3), 635-672.

Ichniowski, C., Shaw, K. and Prennushi, G. (1997). The effects of human resource management practices on productivity: A study of steel finishing lines. *The American Economic Review*, 87(3), 291-313.

Ilgen, D. R. and Pulakos, E. D. (1999). *The Changing Nature of Performance: Implications for Staffing, Motivation, and Development. Frontiers of Industrial and Organizational Psychology*. San Francisco: Jossey-Bass.

Imtiaz, Q. and Shahid, M. (2013). An analysis of bankers competency in the context of marketing strategies employed in islamic banks of Pakistan. *Journal of Islamic Banking and Finance*, 30(7), 44-51.

Intarapanich, S. and Ussahawanitchakit, P. (2011). Dynamic technology capability, firm competitiveness enhancement and organizational stability: Evidence from IT businesses in Thailand. *Journal of International Business and Economics*, 11(4), 93-120.

International Organization for Standardization. (2017). *Standard: January 2017.* Retrieved from https://www.iso.org/standard/52844.html

Itami, H. and Roehl, T. W. (1987). *Mobilizing Invisible Assets*. Cambridge, MA: Harvard University Press.

Jain, R. and Gulati, S. (2016). HRD systems and organizational performance: Qualitative review of research. *Journal of Institute of Public Enterprise*, 39(1), 86-109.

Jain, R. and Kamble, S. (2013). HRD system in India: conceptual framework, measure development & model fit. *Indian Journal of Industrial Relations*, 49(2), 230-247.

Jameson, S. M. (2000). Recruitment and training in small firms. *Journal of European Industrial Training*, 24(1), 43-49.

Jayaram, J., Droge, C. and Vickery, S. K. (1999). The impact of human resource management practices on manufacturing performance. *Journal of Operations Management*, 18(1), 1-20.

Jetu, F. T. and Riedl, R. (2013). Cultural values influencing project team success: An empirical investigation in Ethiopia. *International Journal of Managing Projects in Business*, 6(3), 425-456.

Ji, L., Tang, G., Wang, X., Yan, M., and Liu, Z. (2012). Collectivistic-HRM, firm strategy and firm performance: An empirical test. *The International Journal of Human Resource Management*, 23(1), 190-203.

Jiang, K., Lepak, D. P., Hu, J. and Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294.

Kandula, S. R. (2001). *Strategic Human Resource Development*. New Delhi: PHI Learning Pvt.

Kappos, A. and Rivard, S. (2008). A three-perspective model of culture, information systems, and their development and use. *MIS Quarterly*, 32(3), 601-634.

Karim, S. and Mitchell, W. (2000). Path-dependent and path-breaking change: Reconfiguring business resources following acquisitions in the US medical sector, 1978-1995. *Strategic Management Journal*, 21, 1061-1081.

Katou, A. A. (2009). The impact of human resource development on organisational performance: Test of a causal model. *Journal of Behavioral and Applied Management*, 10(3), 335-356.

Katou, A. A. and Budhwar, P. S. (2007). The effect of human resource management policies on organizational performance in Greek manufacturing firms. *Thunderbird International Business Review*, 49(1), 1-35.

Kau, A. K. and Wan-Yiun Loh, E. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants. *Journal of Services Marketing*, 20(2), 101-111.

Kazlauskaite, R. and Buciuniene, I. (2008). The role of human resources and their management in the establishment of sustainable competitive advantage. *Inzinerine Ekonomika-Engineering Economics*, 5(60), 78-84.

Kennett, G. (2013). The impact of training practices on individual, organisation, and industry skill development. *Australian Bulletin of Labour*, 39(1), 112-135.

Kessels, J. W. M. (2001), *Verleiden tot Kennisproductiviteit Seducing to Knowledge Productivity*. Enschede: University of Twente Publications.

Kessels, J. (2004). The knowledge revolution and the knowledge economy. *New Frontiers in Human Resource Development*, 11, 165-179.

Kessels, J. W. and Poell, R. F. (2004). Andragogy and social capital theory: The implications for human resource development. *Advances in Developing Human Resources*, 6(2), 146-157.

Kessels, J., Verdonschot, S. and De Jong, T. (2011). Characteristics of learning environments which support knowledge productivity and which facilitate innovation. In IPOD (Ed.), *The Future of Knowledge Intensive Service Work. Theory and Practice of Managing Human and Organizational Resources* (pp. 221-232). Marburg: Metropolis-Verlag.

Khalil, A. H. O., Ismail, M., Suandi, T. and Silong, A. D. (2009). Human resource development competencies as predictors of agricultural extension agents' performance in Yemen. *Human Resource Development International*, 12(4), 429-447.

Khan, A., Masrek, M. N. and Nadzar, F. M. (2015). Analysis of competencies, job satisfaction and organizational commitment as indicators of job performance: A conceptual framework. *Education for Information*, 31(3), 125-141.

Khandwalla. P.N. (1972). The effect of different types of competition on the use of management controls. *Journal of Accounting Research*, 10(2), 275-285.

Khanmohammadiotaqsara, M., Khalili, M. and Mohseni, A. (2012). The role of practical training in productivity and profitability of organizations in the third millennium. *Procedia-Social and Behavioral Sciences*, 47, 1970-1975.

Kotey, B. and Slade, P. (2005). Formal human resource management practices in small growing firms. *Journal of Small Business Management*, 43(1), 16-40.

Kratzer, J., Gemünden, H. G. and Lettl, C. (2008). Balancing creativity and time efficiency in multi-team R&D projects: the alignment of formal and informal networks. *R&D Management*, 38(5), 538-549.

Krejcie, R. V. and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.

Kumar, S., Nangia, V. K. and Rangnekar, S. (2012). Human resource performance in Indian banks: Some DEA evidence. *IUP Journal of Bank Management*, 11(3), 76-89.

Kwantes, C. T. (2003). Organizational citizenship and withdrawal behaviors in the USA and India: Does commitment make a difference?. *International Journal of Cross Cultural Management*, 3(1), 5-26.

————. (2007). Organizational commitment, intellectual capital and organizational competitiveness. *South Asian Journal of Management*, 14(3), 28-43.

Kwok, W. C. and Sharp, D. J. (1998). A review of construct measurement issues in behavioral accounting research. *Journal of Accounting Literature*, 17, 137-174.

Lakkoju, S. (2014). An empirical analysis of managerial and non-managerial HRD climate perceptions in SBI and KVB through internal and external comparison: a case study conducted in Andhra Pradesh. *Decision*, 41(1), 51-72.

Lange, T., Ottens, M. and Taylor, A. (2000). SMEs and barriers to skills development: a Scottish perspective. *Journal of European Industrial Training*, 24(1), 5-11.

Laonamtha, U., Ussahawanitchakit, P. and Boonlua, S. (2013). Modern cost management capability and firm performance: An empirical assessment of auto parts businesses in Thailand. *Review of Business Research*, 13(4), 77-102.

Latruffe, L. (2010). *Competitiveness, Productivity and Efficiency in the Agricultural and Agri-food Sectors*. Paris, France: OECD Publishing.

Lawler, E. E., Mohrman, S. A., and Ledford, G. E. (1998). *Strategies for High Performance Organizations: the CEO Report: Employee Involvement, TQM, and Reengineering Programs in Fortune 1000 Corporations*. Jossey-Bass.

Lawrence, P. R. and Lorsch, J. W. (1967). *Organization and Environment: Managing Differentiation and Integration*. Boston: Harvard Graduate School of Business Administration, Division of Research.

Leede, J. D. and Looise, J. K. (2005). Innovation and HRM: Towards an integrated framework. *Creativity and Innovation Management*, 14(2), 108-117.

Leonard-Barton, D. (1995). *Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation.* Massachusetts: Harvard Business Review Press.

Levac, L. (2008). Transformational leadership without equality is neither: Challenging the same old system. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, 33(1), 37-48.

Lewis, E. F., Hardy, M. and Snaith, B. (2013). An analysis of survey reporting in the imaging professions : Is the issue of non-response bias being adequately addressed? *Radiography*, 19(3), 240–245.

Lippman, S. A., and Rumelt, R. P. (1982). Uncertain imitability: An analysis of interfirm differences in efficiency under competition. *The Bell Journal of Economics*, 13(2), 418-438.

Loan-Clarke, J., Smith, A. and Whittaker, J. (2000). Competence-based management development in small and medium-sized enterprises: a multi-stakeholder analysis. *International Journal of Training and Development*, 4(3), 176-195.

Loch, C. H., Chick, S. and Huchzermeier, A. (2007). Can European manufacturing companies compete?: Industrial competitiveness, employment and growth in Europe. *European Management Journal*, 25(4), 251-265.

London, M. and Smither, J. W. (1999). Empowered self-development and continuous learning. *Human Resource Management*, 38(1), 3-15.

Lorenzet, S. J., Cook, R. G. and Ozeki, C. (2006). Improving performance in very small firms through effective assessment and feedback. *Education+ Training*, 48(8/9), 568-583.

Macpherson, A. and Jayawarna, D. (2007). Training approaches in manufacturing SMEs: Measuring the influence of ownership, structure and markets. *Education+ Training*, 49(8/9), 698-719.

Malhotra, Y. (Ed.). (2000). Role of organizational controls in knowledge management: Is knowledge management really an 'Oxymoron'. *Knowledge Management and Virtual Organizations* (pp. 245-257). Hershey, PA: Idea Group Publishing.

Man, T. W., Lau, T. and Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123-142.

Marginson, S. (1993). *Education and Public Policy in Australia.* Cambridge: Cambridge University Press.

———. (2017). Limitations of human capital theory. *Studies in Higher Education*, DOI: 10.1080/03075079.2017.1359823, 1-15

Mark, G. and Su, N. M. (2010). Making infrastructure visible for nomadic work. *Pervasive and Mobile Computing*, 6(3), 312-323.

Marshall, J. N., Alderman, N., Wong, C. and Thwaites, A. (1995). The impact of management training and development on small and medium-sized enterprises. *International Small Business Journal*, 13(4), 73-90.

Martell, K. and Carroll, S. J. (1995). Which executive human resource management practices for the top management team are associated with higher firm performance?. *Human Resource Management*, 34(4), 497-512.

Mathieu, J. E. and Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.

Matlay, H. (2002). Training and HRD strategies in family and non-family owned small businesses: a comparative approach. *Education+ Training*, 44(8/9), 357-369.

Matlay, H. (2004). Contemporary training initiatives in Britain: a small business perspective. *Journal of Small Business and Enterprise Development*, 11(4), 504-513.

McCole, P., Morrow, T., Ponsonby, S. and Kelly, B. (2001). The potential training impact of technology on SMEs in Northern Ireland. *Journal of European Industrial Training*, 25(2/3/4), 90-97.

McCray, C. R. (2009). Constructing a positive intrasection of race and class for the 21st Century. *Journal of School Leadership*, 18(2), 249-267.

Menon, A., Bharadwaj, S.G., Adidam, P.T. and Edison, S.W. (1999). Antecedents and consequences of marketing strategy making: A model and a test. *Journal of Marketing*, 63, 18-40.

Meyer, J. P. and Smith, C. A. (2000). HRM practices and organizational commitment: Test of a mediation model. *Canadian Journal of Administrative Sciences*, 17(4), 319-331.

Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D. and Jakson, D. N. (1989). Organizational commitment and job performance: It's the nature of commitment that counts. *Journal of Applied Psychology*, 74(1), 152-156.

Misanchuk, E. R. (1984). Analysis of multi-component educational and training needs. *Journal of Instructional Development*, 7(1), 28-33.

Morrow, P. and McElroy, J. (2007). Efficiency as a mediator in turnover—organizational performance relations. *Human Relations*, 60(6), 827-849.

Moynihan, D. P., Pandey, S. K. and Wright, B. E. (2011). Setting the table: How transformational leadership fosters performance information use. *Journal of Public Administration Research and Theory*, 22(1), 143-164.

Murray, P. (2003). Organisational learning, competencies, and firm performance: empirical observations. *The Learning Organization*, 10(5), 305-316.

Nadler, L. and Nadler, Z. (1989). *Developing Human Resources.* 3rd ed. Sanfrancisco, CA: Jossey-Bass.

Nalbantian, H., Guzzo, R. A., Kieffer, D. and Doherty, J. (2004). *Play to Your Strengths*. New York: McGravv-Hill.

Nath, D. and Sudharshan, D. (1994). Measuring strategy coherence through patterns of strategic choices. *Strategic Management Journal*, 15(1), 43-61.

National Science and Technology Development Agency. (2016). *Automotive and auto parts industry of Thailand*: December 2016. Retrieved from http://www.technology.in.th/industrial-data/doku.php?id=automotive-industry:newstart-status.

National Science and Technology Development Agency. (2016). *Thailand Spring up*: *December 2016*. Retrieved from http://www.nstda.or.th/news/21946-mou.

Neffke, F., & Henning, M. (2013). Skill relatedness and firm diversification. *Strategic Management Journal*, 34(3), 297-316.

Neuman, W. L. (2006). *Social Research Methods: Qualitative and Quantiative Approaches*. Toronto: Pearson.

Ng, R. C. H., Chan, S. C. and Wong, V. K. K. (2006). Novel Sustainable and Structured Model, System and Methodology for Engineering Competency Development. In O. D. Patterson (Ed.), *Proceeding of the Advanced Semiconductor Manufacturing Conference, 2006. ASMC 2006. The 17th Annual SEMI/IEEE,* 22-24 May 2006 (pp. 367-371). Boston, Massachusetts, United State of America.

Nicolau, J. L. (2005). Valuing the business environment on a daily basis. *European Journal of Operational Research*, 164(1), 217-224.

Nolan, C. T. and Garavan, T. N. (2016). Human resource development in SMEs: A systematic review of the literature. *International Journal of Management Reviews*, 18(1), 85-107.

Norton, T. A., Zacher, H. and Ashkanasy, N. M. (2014). Organisational sustainability policies and employee green behaviour: The mediating role of work climate perceptions. *Journal of Environmental Psychology*, 38, 49-54.

Nunnally, J. C. and Bernstein, I. H. (1994). *Psychometric Theor.* 3rd ed. New York : McGraw-Hill.

Oeij, P. R. A., De Looze, M. P., Ten Have, K., Van Rhijn, J. W. and Kuijt-Evers, L. F. M. (2011). Developing the organization's productivity strategy in various sectors of industry. *International Journal of Productivity and Performance Management*, 61(1), 93-109.

Oliver, G. (2008). Information culture: exploration of differing values and attitudes to information in organisations. *Journal of Documentation*, 64(3), 363-385.

Onyango, W. P. (2015). Effects of transformational leadership styles on talent management: A case of micro, small and medium size enterprises in Migori County, Kenya. *Journal of Poverty, Investment and Development*, 10, 51-60.

Osman, M. R., Yusuff, R. M., Tang, S. H. and Jafari, S. M. (2006). ERP systems implementation in Malaysia: the importance of critical success factors. *International Journal of Engineering and Technology*, 3(1), 125-131.

Paloniemi, S. (2006). Experience, competence and workplace learning. *Journal of Workplace Learning*, 18(7/8), 439-450.

Panya, N. and Ussahawanitchakit, P. (2013). Marketing Resource Richness and Marketing Survival of Auto Parts Businesses in Thailand. *International Journal of Business Research*, 13(3), 115-136.

Park, C. H., Song, J. H., Yoon, S. W. and Kim, J. (2013). A missing link: Psychological ownership as a mediator between transformational leadership and organizational citizenship behaviour. *Human Resource Development International*, 16(5), 558-574.

Pattanayak, B. (2003). Gaining competitive advantage and business success through strategic HRD: an Indian experience. *Human Resource Development International*, 6(3), 405-411.

Patterson, M. G., West, M. A. and Wall, T. D. (2004). Integrated manufacturing, empowerment, and company performance. *Journal of Organizational Behavior*, 25(5), 641-665.

Paul, A. K. and Anantharaman, R. N. (2003). Impact of people management practices on organizational performance: analysis of a causal model. *International journal of human resource management*, 14(7), 1246-1266.

Pearce, C. L. and Conger, J. A. (2003). *Shared leadership: Reframing the Hows and Whys of Leadership*. Thousand Oaks: Sage Publishing.

Pearce, C. L., Yoo, Y. and Alavi, M. (2004). Leadership, Social Work, and Virtual Teams: The Relative Influence of Vertical Versus Shared Leadership in the Nonprofit Secto. *Organizations, Edited by Ronald E. Riggio and Sarah Smith Orr*, 180-199.

Peng, D. X., Schroeder, R. G. and Shah, R. (2008). Linking routines to operations capabilities: A new perspective. *Journal of Operations Management*, 26(6), 730-748.

Perry, J., Badger, B., Lean, J. and Leybourne, S. (2010). Taking over the reins: the needs of individuals who purchase small established enterprises. *The International Journal of Entrepreneurship and Innovation*, 11(1), 57-67.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal*, 14(3), 179-191.

Pfeffer, J. (1994). Competitive advantage through people. *California Management Review*, 36(2), 9-28.

Pfeffer, J. (2000). The human equation: Building profits by putting people first. *Human Resource Management Journal*, 10(2), 91-96.

Phokha, A. and Ussahawanitchakit, P. (2010). Marketing leadership strategy, marketing outcomes and firm sustainability: Evidence from food product businesses in Thailand. *International Journal of Strategic Management*, 11(3), 1-25.

Pigou, A.C. (1932). *The Economics of Welfare.* London: Macmillan (fourth edition).

Pillania, R. K. (2006). State of organizational culture for knowledge management in Indian industry. *Global Business Review*, *7*(1), 119-135.

Ployhart, R. E. and Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, 36(1), 127-150.

Podsakoff, P. M. and MacKenzie, S. B. (1994). Organizational citizenship behavior and sales unit effectiveness. *Journal of Marketing Research*, 3(1), 351-363.

Pongpearchan, P. and Ussahawanitchakit, P. (2011). Strategic entrepreneurship management competency and firm success: A comparative study of SMEs in auto and electronic parts in Thailand. *International Journal of Business Strategy*, 11(2), 197-227.

Porter, M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors.* New York: The Free Press.

Prahalad, C. K. and Hamel, G. (2006). *Strategische Unternehmungsplanung.* Heidelberg: Springer Berlin.

Price, R., Lee, J. and Kozman, T. (2010). Use of competency-based needs analysis in developing employee training program. *International Journal of Business and Public Administration,* 7(1), 117-131.

Pungboonpanich, P. and Ussahawanitchakit, P. (2010). Effects of strategic budgetary collaboration on competitive advantage and organizational success: Evidence from food manufacturing businesses in Thailand. *Journal of International Management Studies*, 10(3), 79-104.

Radhakrishna, A. and Raju, R. S. (2015). A Study on the effect of human resource development on employment relations. *IUP Journal of Management Research*, 14(3), 28-42.

Raj, R. and Srivastava, K. B. (2016). Transformational leadership and innovativeness: The mediating role of organizational learning. *Journal of Management Research (09725814)*, 16(4), 201-219.

Rao, T. V. and Pereira, D. F. (1986), *Recent Experiences in HR.* New Delhi: Oxford and India Book House Publishing.

Rao, T. V. (1990). *The HRD Missionary: Role and Functions of HRD Managers and HRD* D*epartments*. New Delhi: Oxford & India Book House Publishing.

Rauch, A., Frese, M. and Utsch, A. (2005). Effects of human capital and long-term human resources development and utilization on employment growth of small-scale businesses: A causal analysis1. *Entrepreneurship Theory and Practice*, 29(6), 681-698.

Ray, G., Barney, J. B. and Muhanna, W. A. (2004). Capabilities, business processes, and competitive advantage: choosing the dependent variable in empirical tests of the resource-based view. *Strategic Management Journal*, 25(1), 23-37.

Raymond, L., Uwizeyemungu, S., Bergeron, F. and Gauvin, S. (2012). A framework for research on e-learning assimilation in SMEs: a strategic perspective. *European Journal of Training and Development*, 36(6), 592-613.

Razmi, J., Ghodsi, R. and Sangari, M. S. (2008). A fuzzy ANP model to assess the state of organizational readiness for ERP implementation. In A. Orlandi (Ed.). *International Conference*: *Proceedings of the Fourth Conference of Information and Automation for Sustainability, 12-14 December 2008* (pp. 481-488). Colombo, Sri Lanka.

Revilla, E., Prieto, I. M. and Prado, B. R. (2010). Knowledge strategy: Its relationship to environmental dynamism and complexity in product development. *Knowledge and Process Management*, 17(1), 36-47.

Rodrigues, C. A., Bu, N. and Min, B. (2000). Learners training approach preference: national culture as a determinant. *Cross Cultural Management: An International Journal*, 7(1), 23-32.

Rogelberg, S. G. and Stanton, J. M. (2007). Understanding and dealing with organization survey nonresponse. *Organization Research Methods*, 10(2), 195-209.

Rogers, E. (1995). *Diffusion of Innovations*. 4th ed. New York: Free Press.

Roos, G., Fernström, L. and Pike, S. (2004). Human resource management and business performance measurement. *Measuring Business Excellence*, 8(1), 28-37.

Roos, J., Edvinsson, L. and Dragonetti, N. C. (1997). *Intellectual Capital: Navigating the New Business Landscape*. London: Palgrave Macmillan.

Rossett, A. (1987). *Training Needs Assessment*. New Jersey: Educational Technology Publications.

Rumelt, R. P. (1984). Towards a Strategic Theory of the Firm. In Richard B. Lamb (Ed.), *Competitive Strategic Management* (pp. 131-145). New Jersey: Englewood Cliffs.

Sambrook, S. (2003). E-learning in small organisations. *Education+ Training*, 45(8/9), 506-516.

Satish, U. (1997). Behavioral complexity: A review. *Journal of Applied Social Psychology*, 27(23), 2047-2067.

Sauser, B. J., Reilly, R. R. and Shenhar, A. J. (2009). Why projects fail? How contingency theory can provide new insights - A comparative analysis of NASA's mars climate orbiter loss. *International Journal of Project Management*, 27, 665-679.

Schlienger, T. and Teufel, S. (2003). Information security culture-from analysis to change. *South African Computer Journal*, 2003(31), 46-52.

Schmitt, A. and Klarmer, P. (2015), From snapshot to continuity: A dynamic model of organizational adaptation to environmental changes. *Scandinavian Journal of Management*, 31(1), 3-13

Schreyögg, G. and Kliesch-Eberl, M. (2007). How dynamic can organizational capabilities be? Towards a dual-process model of capability dynamization. *Strategic Management Journal*, 28(9), 913-933.

Schuler, R. S. (1992). Strategic human resources management: Linking the people with the strategic needs of the business. *Organizational Dynamics*, 21(1), 18-32.

Schultz, T. W. (1998). Investment in human capital. *The American Economic Review*, 51(1), 1-17.

Sedláková, I. (2015). Innovation as one of the ways of competitiveness of the EU and Slovakia. In A. Giurgiu (Ed.), *The Annals of the University of Oradea* (120-127). Oradea, Romanis: Econimic Sciences.

Senge, P. (1990). *The Fifth Discipline; the Art and Practice of the Learning Organization.* New York: Double Day.

Senge, P. M., Lichtenstein, B. B., Kaeufer, K., Bradbury, H. and Carroll, J. S. (2007). Collaborating for systemic change. *MIT Sloan Management Review*, 48(2), 44-53.

Shaw, J. D., Gupta, N. and Delery, J. E. (2005). Alternative conceptualizations of the relationship between voluntary turnover and organizational performance. *Academy of Management Journal*, 48(1), 50-68.

Sheehan, M., N. Garavan, T. and Carbery, R. (2013). Innovation and human resource development (HRD). *European Journal of Training and Development*, 38(1/2), 2-14.

Shipton, H., Zhou, Q. and Mooi, E. (2013). Is there a global model of learning organizations? An empirical, cross-nation study. *The International Journal of Human Resource Management*, 24(12), 2278-2298.

Short, D. C., Bing, J. W. and Kehrhahn, M. T. (2003). Will human resource development survive?. *Human Resource Development Quarterly*, 14(3), 239–243.

Sicilia, M. Á. and Lytras, M. D. (2005). Scenario-oriented reusable learning object characterisations. *International Journal of Knowledge and Learning*, 1(4), 332-341.

Singh, K. (2000). Effect of human resources management (HRM) practices on firm performance in India. *Indian journal of Industrial Relations*, 36(1), 1-23.

————. (2011). HRD practices & managerial effectiveness: role of organisation culture. *Indian Journal of Industrial Relations*, 47(1), 138-148.

Smith, R. (1988). *Human Resource Development: An Overview*. Washington, DC: Office of Educational Research and Improvement.

Smith, T. and Barrett, R. (2014). Informal e-learning: the case of small business owners. *Education+ Training*, 56(2/3), 219-232.

Sonntag, V. (2000). Sustainability—in light of competitiveness. *Ecological Economics*, 34(1), 101-113.

Spreng, R. A., Harrell, G. D. and Mackoy, R. D. (1995). Service recovery: impact on satisfaction and intentions. *Journal of Services Marketing*, 9(1), 15-23.

Sriboonlue, P. and Ussahawanitchakit, P. (2014). Strategic renewal capability and business success: Evidence from auto parts businesses in Thailand. *Journal of International Finance and Economics*, 14(2), 45-62.

Stevens, M. (1994). An investment model for the supply of training by employers. *The Economic Journal*, 104(424), 556-570.

Stewart, T. and Ruckdeschel, C. (1998). *Intellectual Capital: The New Wealth of Organizations*. New York: Doubleday.

Stock, R. M. and Zacharias, N. A. (2011). Patterns and performance outcomes of innovation orientation. *Journal of the Academy of Marketing Science*, 39(6), 870-888.

Stone, R. (2002). *Human Resource Management*. New Jersey: John Wiley & Sons.

Stríženec, M. (2013). Novšie trendy empirického výskumu v psychológii náboženstva. *Feedback*, 3(2), 133-142.

Swanson, R. A. (1995). Human resource development: Performance is the key. *Human Resource Development Quarterly*, 6(2), 207-213.

————. (2001). Human resource development and its underlying theory. *Human Resource Development International*, 4(3), 299-312.

Swanson, R. A. and Holton, E. F. (2001). *Foundations of Human Resource Development*. Oakland: Berrett-Koehler Publishers.

———. (2009). *Foundations of Human Resource Development.* 2nd ed. San Francisco, CA: Berrett-Koehler.

Swanson, S. R. and Kelley, S. W. (2001). Service recovery attributions and word-of-mouth intentions. *European Journal of Marketing*, 35(1/2), 194-211.

Sultan, A. and Jain, D. (2016). Competitiveness of agro-food processing firms: Productivity approach. *Skyline Business Journal*, 12(1), 56-64.

Sun, W., Xu, A. and Shang, Y. (2014). Transformational leadership, team climate, and team performance within the NPD team: Evidence from China. *Asia Pacific Journal of Management*, 31(1), 127-147.

Takeno, T., Okamoto, A., Uetake, T. and Sugawara, M. (2001). Collaboration of small and medium sized companies and business resources sharing. In *Proceedings of 7th International Conference on Concurrent Enterprising*, 27-29 June (pp. 137-145). Bremen: Life Cycle Management and Extended Products.

Tănase, D. (2011). The role of productivity in the increase of economic competitiveness. *Annals of Eftimie Murgu University Resita, Fascicle II, Economic Studies* (pp. 352-356). Resity, Romania: Eftimie Murgu.

Thai Auto Parts Manufacturers Association. (2016). *TAPMA'S Member: December 2016.* Retrieved from http://www.thaiautoparts.or.th/index.php?op=member-index.

Teece, D. J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.

Thorgren, S., Wincent, J. and Ortqvist, D. (2009). Designing interorganizational networks for innovation: An empirical examination of network configuration, formation and governance. *Journal of Engineering and Technology Management*, 26(3), 148-166.

Thoumrungroje, A. (2013). *Handbook of Research Methodology in International Business.* Bangkok: Triple Education.

Tracey, J. B., Tannenbaum, S. I. and Kavanagh, M. J. (1995). Applying trained skills on the job: The importance of the work environment. *Journal of Applied Psychology*, 80(2), 239.

Tseng, S. M. (2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management*, 14(2), 269-284.

Turulja, L. and Bajgorić, N. (2016). Human Resources or information technology: What is more important for companies in the digital era?. *Business Systems Research Journal*, 7(1), 35-45.

Tzokas, N., Saren, M. and Brownlie, D. (1997). Generating marketing resources by means of R&D activities in high technology firms. *Industrial Marketing Management*, *26*(4), 331-340.

Ussahawanitchakit, P. (2012). Competitive environment, organizational innovation and competitive advantage of electronics business in Thailand. *International Journal of Business Research*, 12(2), 1-8.

Van Praag, C. M. and Cramer, J. S. (2001). The roots of entrepreneurship and labour demand: Individual ability and low risk aversion. *Economica*, 68(269), 45-62.

Van Woerkom, M. and Poell, R. (Eds.). (2010). *Workplace learning: Concepts, measurement and application*. Abingdon: Routledge.

Vandenberghe, C., Bentein, K. and Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of Vocational Behavior*, 64(1), 47-71.

Venkatraman, N. and Camillus J. C. (1984). Exploring the concept of Fit in stragtegic management. *Academy of Management Review*, 9(3), 513-525.

Verdonschot, S. G. M. (2009). *Learning to Innovate: a Series of Studies to Explore and Enable Learning in Innovation Practices*. Enschede: University of Twente Publications.

Vermeeren, B. (2014). Variability in HRM implementation among line managers and its effect on performance: A 2-1-2 mediational multilevel approach. *The International Journal of Human Resource Management*, 25(22), 3039-3059.

Versloot, B. M., Jong, J. A. and Thijssen, J. G. (2001). Organisational context of structured on-the-job training. *International Journal of Training and Development*, 5(1), 2-22.

Veth, K. N., Emans, B. J., Van der Heijden, B. I., Korzilius, H. P. and De Lange, A. H. (2015). Development (f) or maintenance? An empirical study on the use of and need for HR practices to retain older workers in health care organizations. *Human resource Development Quarterly*, 26(1), 53-80.

Vincent, L. H., Bharadwaj, S. G. and Challagalla, G. N. (2004). *Does Innovation Mediate Firm Performance?: A Meta-Analysis of Determinants and Consequences of Organizational Innovation: December 2016*. Retrieved from: https://smartech.gatech.edu/bitstream/handle/1853/10731/gt_tiger_does_innovation.pdf?sequence=1&isAllowed=y.

Waldman, D. A., Ramirez, G. G., House, R. J. and Puranam, P. (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44(1), 134-143.

Wallace, W. A. and Kreutzfeldt, R. W. (1991). Distinctive characteristics of entities with an internal audit department and the association of the quality of such departments with errors. *Contemporary Accounting Research*, 7(2), 485-512.

Wang, C. L. and Ahmed, P. K. (2003). Organisational learning: a critical review. *The Learning Organization*, 10(1), 8-17.

Wang, D., Su, Z. and Yang, D. (2011). Organizational culture and knowledge creation capability. *Journal of Knowledge Management*, 15(3), 363-373.

Wang, J., Tolson, H., Chiang, T. L. and Huang, T. Y. (2010). An exploratory factor analysis of workplace learning, job satisfaction, and organizational commitment in small to midsize enterprises in Taiwan. *Human Resource Development International*, 13(2), 147-163.

Watkins, K. E. and Marsick, V. J. (1992). Building the learning organisation: a new role for human resource developers. *Studies in Continuing Education*, 14(2), 115-129.

Weick, K. E. and Quinn, R. E. (1999). Organizational change and development. *Annual review of psychology*, 50(1), 361-386.

Wene, C. O. (2007). Technology learning systems as non-trivial machines. *Kybernetes*, 36(3/4). 348-363.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.

Whitmarsh, L. (2009). Behavioural responses to climate change: Asymmetry of intentions and impacts. *Journal of Environmental Psychology*, 29(1), 13-23.

Wright, T. (2013). Information culture in a government organization: Examining records management training and self-perceived competencies in compliance with a records management program. *Records Management Journal*, 23(1), 14-36.

Wright, P. M., Dunford, B. B. and Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27(6), 701-721.

Wright, P. M and McMahan, G. C. (1992). Theoretical Perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320.

Wright, P. M. and Snell, S. A. (1998). Toward a unifying framework for exploring fit and flexibility in strategic human resource management. *Academy of Management Review*, 23(4), 756-772.

Yang, Y., Lee, P. K. and Cheng, T. C. E. (2015). Operational improvement competence and service recovery performance: The moderating effects of role stress and job resources. *International Journal of Production Economics*, 164, 134-145.

Yap, Q. S. and Webber, J. K. (2015). Developing corporate culture in a training department: A qualitative case study of internal and outsourced staff. *Global Conference on Business and Finance Proceeding*. 9(1), 132-145.

Yen, S, H., Campbell, J. K., Irianto, A., Zulyusri and Fadilah, M. (2014). Social capital and organisational commitment at higher education institutions. *Asian Academy of Management Journal*, 19(2), 1-21.

Yeung, A. K. and Berman, B. (1997). Adding value through human resources: Reorienting human resource measurement to drive business performance. *Human Resource Management*, 36(3), 321-335.

Yin, X. and Zajac, E. J. (2004). The strategy/governance structure fit relationship: Theory and evidence in franchising arrangements. *Strategic Management Journal*, 25(4), 365-383.

Yorks, L. and Barto, J. (2013). Invited reaction: The strategic value of HRD in lean strategy implementation. *Human Resource Development Quarterly*, 24(1), 29-33.

Zacharatos, A., Barling, J. and Iverson, R. D. (2005). High-performance work systems and occupational safety. *Journal of Applied Psychology*, 90(1), 77-93.

Zacharatos, A., Sandy Hershcovis, M., Turner, N. and Barling, J. (2007). Human resource management in the North American automotive industry: A meta-analytic review. *Personnel Review*, 36(2), 231-254.

Zavyalova, E. (2009). Management by values as a core tool of HRD during the economic transition: an example of Russian enterprises. *Human Resource Development International*, 12(4), 449-457.

Zeithaml, V.A., Varadarajan, P.R. and Zeithaml, C.P. (1988). The contingency approach: Its foundations and relevance to theory building and research in marketing. *European Journal of Marketing*, 22(7), 37-64.

Zientara, P. (2009). Employment of older workers in Polish SMEs: employer attitudes and perceptions, employee motivations and expectations. *Human Resource Development International*, 12(2), 135-153.

Zhang, M. and Tansuhaj, P. S. (2007). Organizational culture, information technology capability, and performance: the case of born global firms. *Multinational Business Review*, 15(3), 43-78.

Zhao, C. L. (2005). Management of corporate culture through local managers' training in foreign companies in China: a qualitative analysis. *International Journal of Training and Development*, 9(4), 232-255.

Zhou, K. Z., Brown, J. R. and Dev, C. S. (2009). Market orientation, competitive advantage, and performance: A demand-based perspective. *Journal of Business Research*, 62(11), 1063-1070.

Zwick, T. (2006). The impact of training intensity on establishment productivity. *Industrial Relations: A Journal of Economy And Society*, 45(1), 26-46.

APPENDICES

APPENDIX A

Respondent Characteristics

TableA1: Demographic Characteristic of Respondents

Description	Categories	Frequency	Percentage
Gender	Male	58	45.31
	Female	70	54.69
	Total	128	100.00
Age	Less than 30 years old	6	4.69
	30 – 40 years old	37	28.90
	41 – 50 years old	57	44.53
	More than 50 years old	28	21.88
	Total	128	100.00
Marital Status	Single	31	24.22
	Married	89	69.53
	Divorced/Separated	8	6.25
	Total	128	100.00
Level of Education	Bachelor's degree or lower	73	57.03
	Higher than Bachelor's degree	55	42.97
	Total	128	100.00
Work Experiences	Less than 5 years	11	8.59
	5 – 10 years	17	13.28
	11 – 15 years	26	20.31
	More than 15 years	74	57.82
	Total	128	100.00
Average Monthly Income	Less than 50,000 Baht	35	27.34
	50,001 – 70,000 Baht	35	27.34
	70,001 – 90,000 Baht	28	21.88
	More than 90,000 Baht	30	23.44
	Total	128	100.00
Current Position	Human resource director	13	10.16
	Human resource manager	115	89.84
	Total	128	100.00

Table A2: Characteristics of Auto Parts Businesses

Description	Categories	Frequency	Percentage
Business Investment	Domestic Investment	63	49.22
	International Investment	65	50.78
	Total	128	100.00
Business Entity	Limited Companies	123	96.09
	Partnership	5	3.91
	Total	128	100.00
Business Ownership	Single Units	53	41.41
	Franchised Units	75	58.59
	Total	128	100.00
Business Location	Northern Region	1	0.78
	Central Region	54	42.19
	Eastern Region	30	23.44
	Northeastern Region	2	1.56
	Bangkok	41	32.03
	Total	128	100.00
Periods of Time in Business	Less than 5 years	1	0.78
	5 – 10 years	7	5.47
	11 – 15 years	12	9.38
	More than 15 years	108	84.37
	Total	128	100.00
Number of Full Time Employees	Less than 300 employees	64	50.00
	More than 300 employees	64	50.00
	Total	128	100.00
Operational Capital	Less than 50,000,000 Baht	36	28.13
	50,000,001 – 75,000,000 Baht	22	17.19
	75,000,001 – 100,000,000 Baht	16	12.50
	More than 100,000,000 Baht	54	42.18
	Total	128	100.00
Firm's Average Revenues per Years	Less than 50,000,000 Baht	13	10.16
	50,000,001 – 75,000,000 Baht	12	9.38
	75,000,001 – 100,000,000 Baht	26	20.31
	More than 100,000,000 Baht	77	60.15
	Total	128	100.00

Table A2: Characteristics of Auto Parts Businesses (Continues)

Description	Categories	Frequency	Percentage
Labor Union	Firm' Employees have Labor Union	37	28.91
	Firm' Employees have not Labor Union	91	71.09
	Total	128	100.00

APPENDIX B

Test of Non-Response Bias

Test of Non-Response Bias

Table B1: Chi-Square Statistic

Firm Characteristic	Early Group	Late Group	Value	Pearson Chi-Square-Asymp. Sig (2-tailed)
Business Investment			1.532	0.216
- Domestic Investment	35	28		
- International Investment	29	36		
Business Ownership			3.896	0.051
- Single Units	32	21		
- Franchise Units	32	43		
Periods of Time in Business			1.180	0.758
- Less than 5 years	1	0		
- 5 – 10 years	4	3		
- 11 – 15 years	6	6		
- More than 15 years	53	55		
Number of Full Time Employee			0.125	0.724
- Less than 300 employees	33	31		
- More than 300 employees	31	33		
Operational Capital			4.607	0.203
- Less than 50,000,000 Baht	22	14		
- 500,000,001 – 75,000,000 Baht	13	9		
- 75,000,001 – 100,000,000 Baht	7	9		
- More than 100,000,000 Baht	22	32		
Firm's Average Revenue per Years			2.989	0.393
- Less than 50,000,000 Baht	9	4		
- 500,000,001 – 75,000,000 Baht	7	5		
- 75,000,001 – 100,000,000 Baht	10	15		
- More than 100,000,000 Baht	37	40		
Labor Union			2.724	0.256
- Have Labor Union	15	22		
- Not have Labor Union	49	42		
Total	64	64		

N of Valid Cases = 128

APPENDIC C

Item Factor Loading and Reliability

Analysis in Pre-Test

Table C: Item Factor Loading and Reliability Analysis in Pre-Test[a]

Construct	Items	Factor Loading	Reliability (Alpha)
Firm Success (FSC)	FSC1	0.849	0.938
	FSC2	0.886	
	FSC3	0.926	
	FSC4	0.902	
	FSC5	0.857	
	FSC6	0.802	
Employee Competency Analysis (ECA)	ECA1	0.777	0.833
	ECA2	0.784	
	ECA3	0.917	
	ECA4	0.887	
Individual Ability Support (IAS)	IAS1	0.718	0.836
	IAS2	0.854	
	IAS3	0.869	
	IAS4	0.892	
Continuous Learning Enhancement (CLE)	CLE1	0.782	0.805
	CLE2	0.927	
	CLE3	0.848	
	CLE4	0.849	
Strategy-Development Connectivity (SDC)	SDC1	0.705	0.873
	SDC2	0.715	
	SDC3	0.844	
	SDC4	0.904	
	SDC5	0.789	
Innovation Creativity Focus (ICF)	ICF1	0.836	0.894
	ICF2	0.926	
	ICF3	0.887	
	ICF4	0.804	
Employee Commitment (ECM)	ECM1	0.806	0.889
	ECM2	0.859	
	ECM3	0.942	
	ECM4	0.884	

[a]n=30

Table C: Item Factor Loading and Reliability Analysis in Pre-Test[a] (Continued)

Construct	Items	Factor Loading	Reliability (Alpha)
Operational Development (OPD)	OPD1	0.909	0.905
	OPD2	0.877	
	OPD3	0.941	
	OPD4	0.916	
Business Productivity (BNP)	BNP1	0.809	0.897
	BNP2	0.893	
	BNP3	0.791	
	BNP4	0.859	
Firm Competitiveness (FCP)	FCP1	0.879	0.886
	FCP2	0.918	
	FCP3	0.848	
	FCP4	0.946	
Transformational Leadership Orientation (TLO)	TLO1	0.759	0.898
	TLO2	0.928	
	TLO3	0.934	
	TLO4	0.895	
Human Capital Policy (HCP)	HCP1	0.728	0.889
	HCP2	0.874	
	HCP3	0.862	
	HCP4	0.912	
Organizational Resource Readiness (ORR)	ORR1	0.679	0.881
	ORR2	0.865	
	ORR3	0.771	
	ORR4	0.880	
Information Technology Capability (ITC)	ITC1	0.705	0.911
	ITC2	0.916	
	ITC3	0.894	
	ITC4	0.914	
Environmental Complexity Force (ECF)	ECF1	0.914	0.896
	ECF2	0.960	
	ECF3	0.861	
	ECF4	0.786	

[a]n=30

Table C: Item Factor Loading and Reliability Analysis in Pre-Test[a] (Continued)

Construct	Items	Factor Loading	Reliability (Alpha)
Survival Culture (SVC)	SVC1	0.809	0.897
	SVC2	0.860	
	SVC3	0.823	
	SVC4	0.827	

[a]n=30

APPENDIX D

Diagnosis of Primary Assumption for Regression Analysis

Table D1: Durbin and Watson Statistic

Equation	R	R Squares	Adjusted R Squares	Durbin – Watson Value
1	0.789	0.622	0.600	2.096
2	0.767	0.588	0.564	1.902
3	0.778	0.606	0.582	1.979
4	0.809	0.654	0.643	1.864
5	0.775	0.601	0.578	1.894
6	0.878	0.770	0.761	2.117
7	0.697	0.486	0.456	1.792
8	0.872	0.760	0.754	2.212
9	0.788	0.621	0.599	2.028
10	0.802	0.650	0.610	2.072
11	0.793	0.629	0.607	2.080
12	0.814	0.663	0.624	2.018
13	0.791	0.626	0.624	2.180
14	0.799	0.639	0.597	2.204
15	0.867	0.751	0.737	2.181
16	0.874	0.764	0.737	2.244
17	0.789	0.623	0.600	2.119
18	0.819	0.671	0.633	2.139

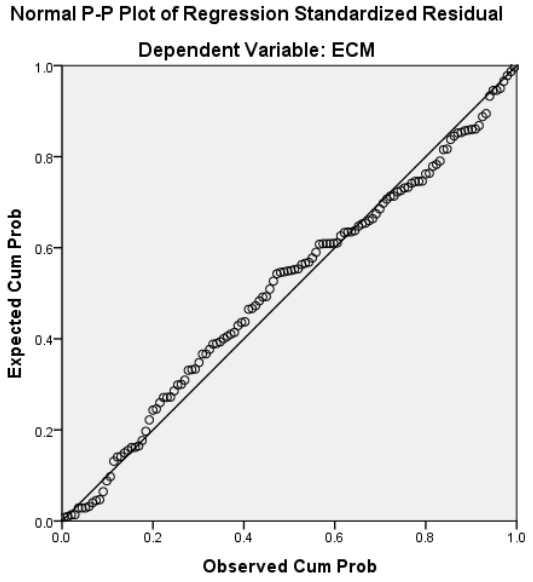
Normality

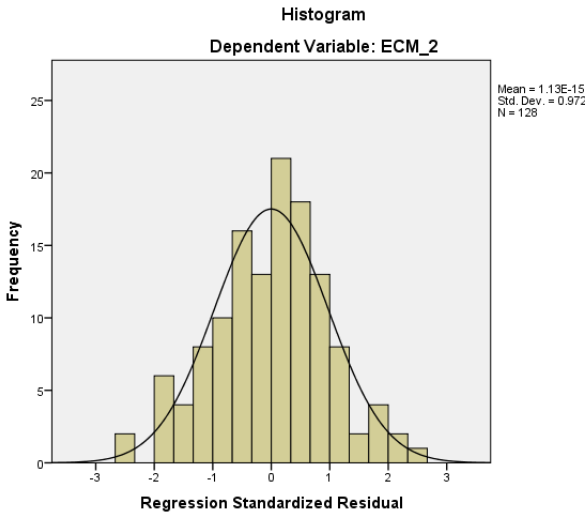
Table D2: Kolmogorov – Smirnov Value

Equation	Kolmogorov - Smirnov		
	Statistic	Degree of freedom	sig
1	0.045	128	0.200
2	0.050	128	0.200
3	0.104	128	**0.002*** **
4	0.068	128	0.200
5	0.081	128	**0.040** **
6	0.057	128	0.200
7	0.111	128	**0.001*** **
8	0.061	128	0.200
9	0.056	128	0.200
10	0.088	128	**0.017** **
11	0.062	128	0.200
12	0.062	128	0.200
13	0.055	128	0.200
14	0.100	128	**0.003*** **
15	0.053	128	0.200
16	0.068	128	0.200
17	0.076	128	**0.065** *
18	0.072	128	0.179

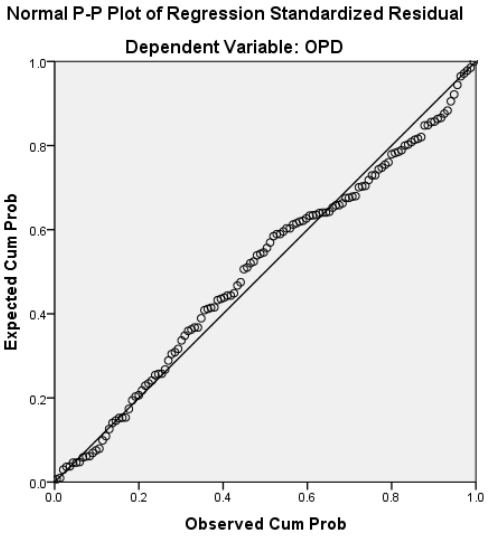
***p<0.01, **p<0.05, *p<0.1

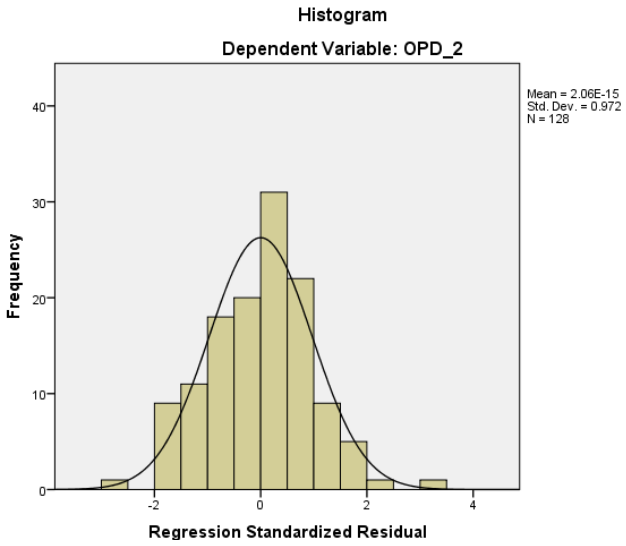
Normality (Continued)





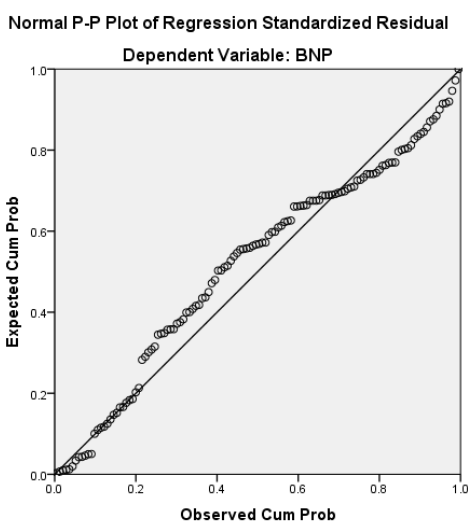
Equation 1: ***ECM*** = $\alpha_1 + \beta_1 ECA + \beta_2 IAS + \beta_3 CLE + \beta_4 SDC + \beta_5 ICF + \beta_6 FS + \beta_7 OS + \varepsilon_1$

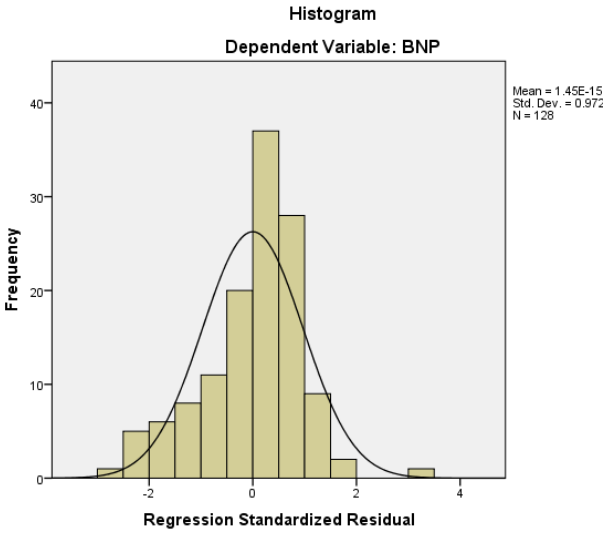




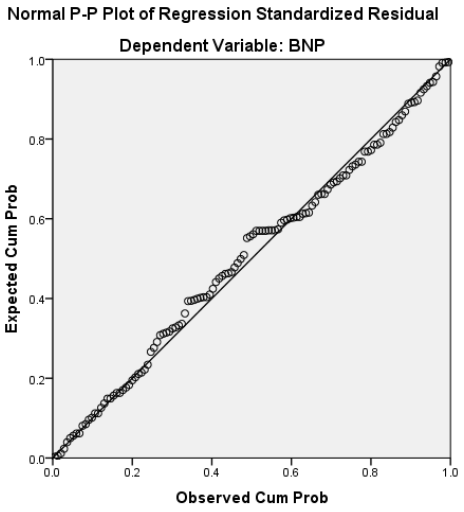
Equation 2: ***OPD*** = $\alpha_2 + \beta_8 ECA + \beta_9 IAS + \beta_{10} CLE + \beta_{11} SDC + \beta_{12} ICF + \beta_{13} FS + \beta_{14} OS + \varepsilon_2$

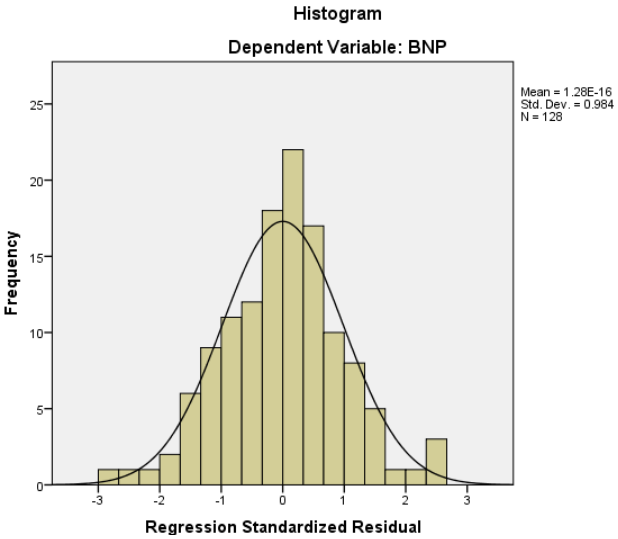
Normality (Continued)





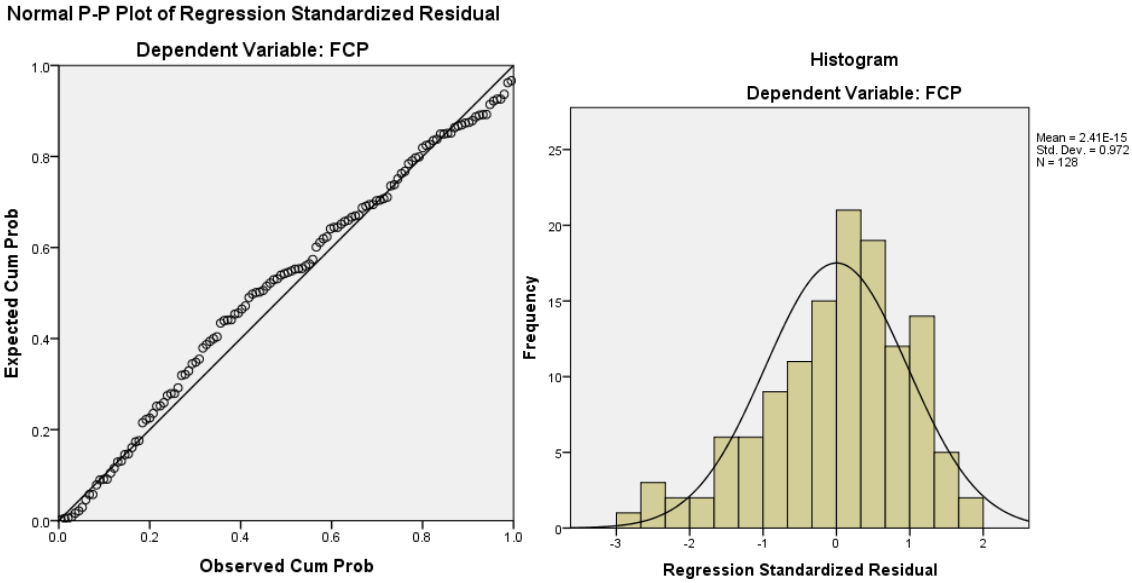
Equation 3: ***BNP*** = $\alpha_3 + \beta_{15}ECA + \beta_{16}IAS + \beta_{17}CLE + \beta_{18}SDC + \beta_{19}ICF + \beta_{20}FS + \beta_{21}OS + \varepsilon_3$



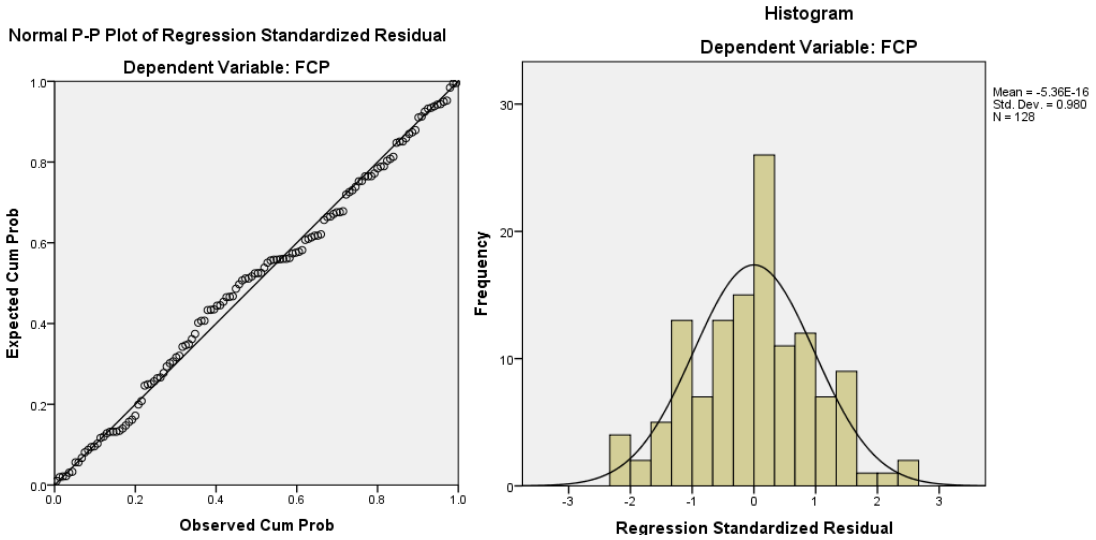


Equation 4: ***BNP*** = $\alpha_4 + \beta_{22}ECM + \beta_{23}OPD + \beta_{24}FS + \beta_{25}OS + \varepsilon_4$

Normality (Continued)

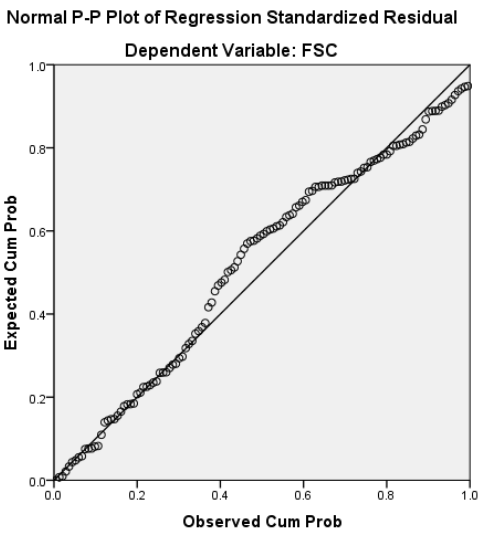


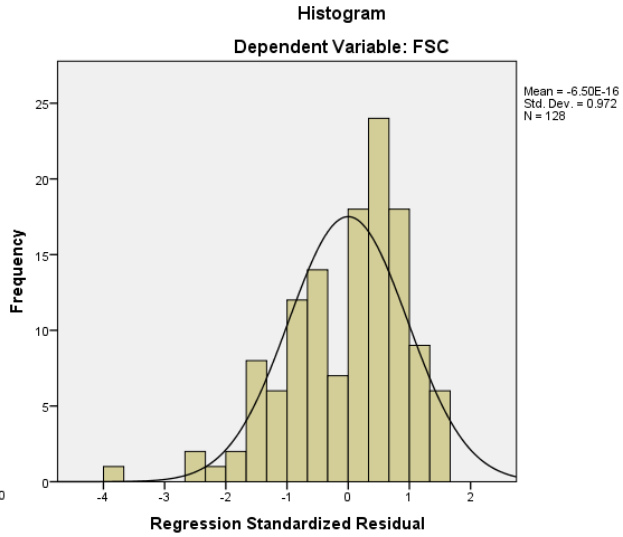
Equation 5: $FCP = \alpha_5 + \beta_{26}ECA + \beta_{27}IAS + \beta_{28}CLE + \beta_{29}SDC + \beta_{30}ICF + \beta_{31}FS + \beta_{32}OS + \varepsilon_5$



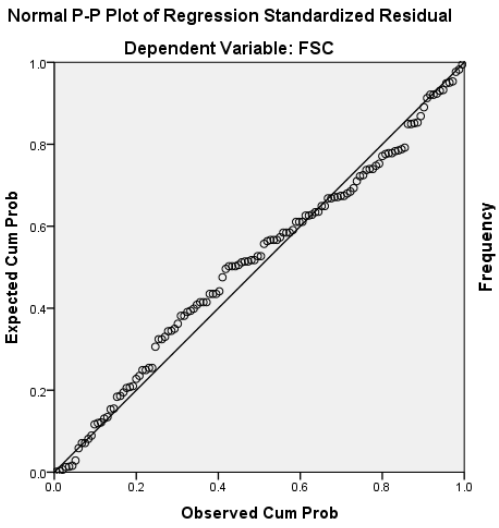
Equation 6: $FCP = \alpha_6 + \beta_{33}ECM + \beta_{34}ODP + \beta_{35}BNP + \beta_{36}FS + \beta_{37}OS + \varepsilon_6$

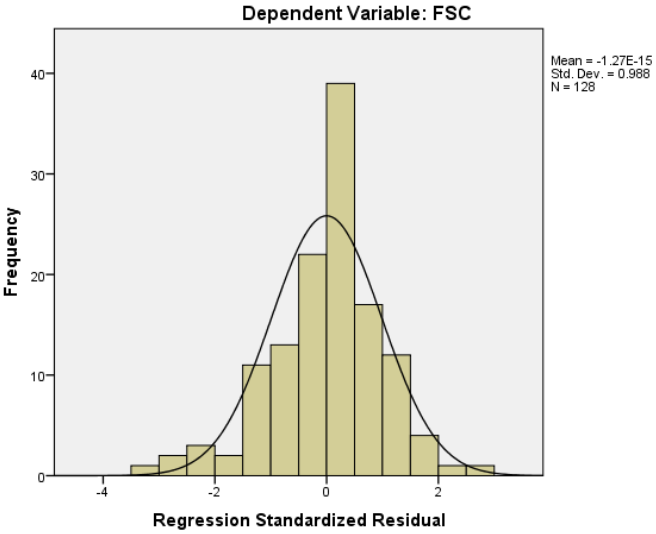
Normality (Continued)





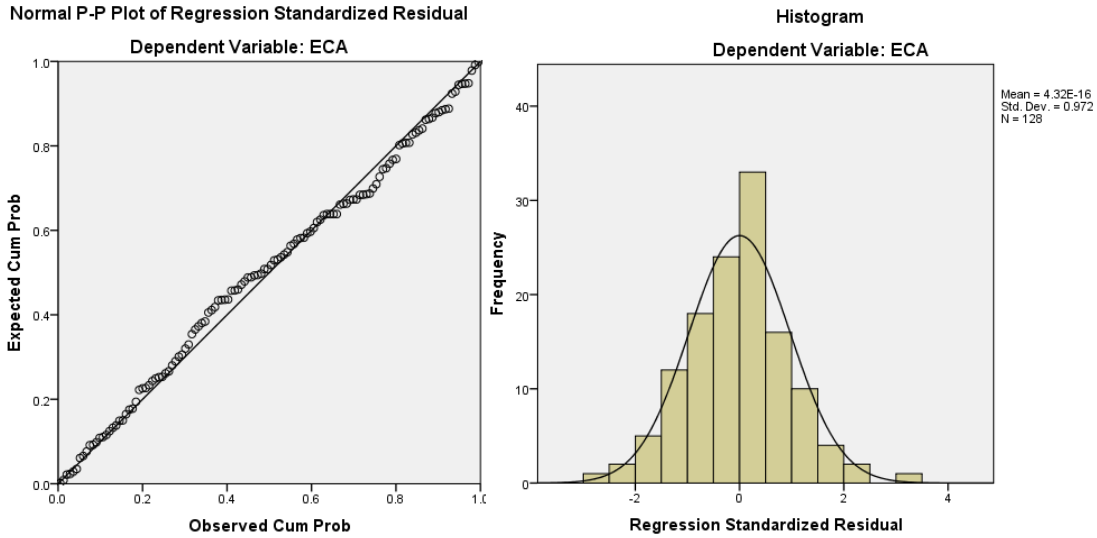
Equation 7: $FSC = \alpha_7 + \beta_{38}ECA + \beta_{39}IAS + \beta_{40}CLE + \beta_{41}SDC + \beta_{42}ICF + \beta_{43}FS + \beta_{44}OS + \varepsilon_7$



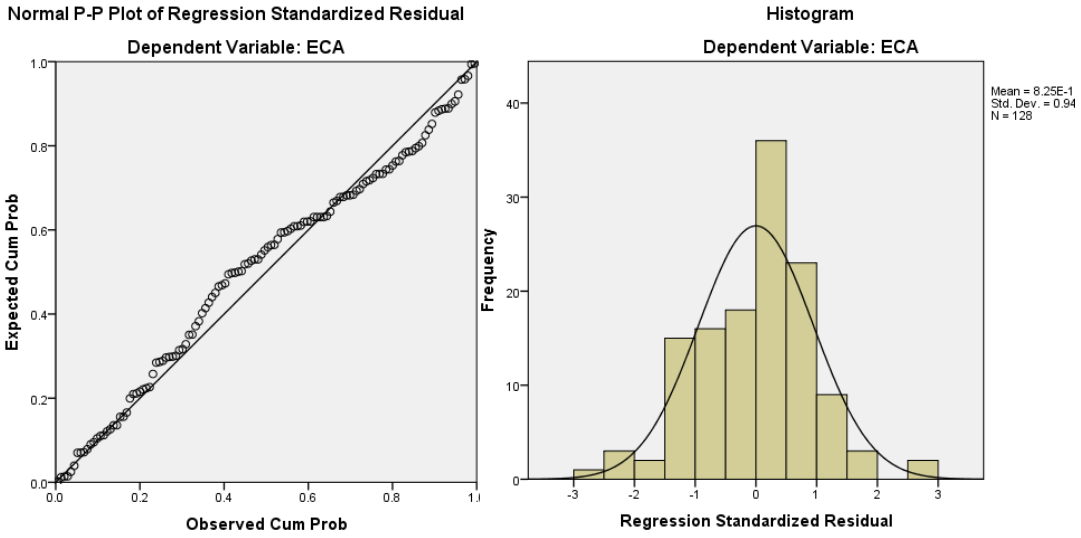


Equation 8: $FSC = \alpha_8 + \beta_{45}FCP + \beta_{46}FS + \beta_{47}OS + \varepsilon_8$

Normality (Continued)

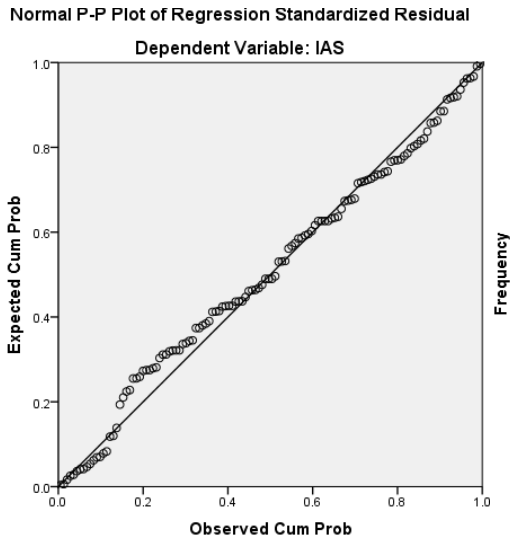


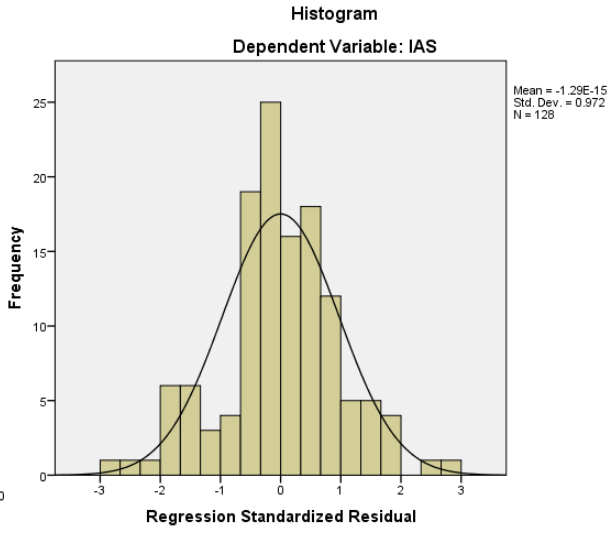
Equation 9: $ECA = \alpha_9 + \beta_{48}TLO + \beta_{49}HCP + \beta_{50}ORR + \beta_{51}ITC + \beta_{52}ECF + \beta_{53}FS + \beta_{54}OS + \varepsilon_9$



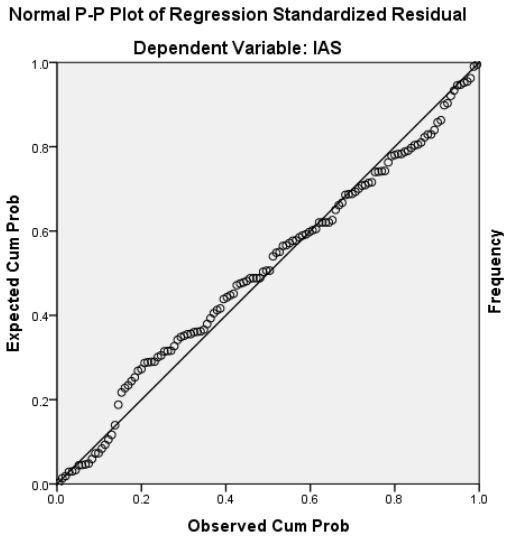
Equation 10: $ECA = \alpha_{10} + \beta_{55}TLO + \beta_{56}HCP + \beta_{57}ORR + \beta_{58}ITC + \beta_{59}ECF + \beta_{60}SVC + \beta_{61}(TLO * SVC) + \beta_{62}(HCP * SVC) + \beta_{63}(ORR * SVC) + \beta_{64}(ITC * SVC) + \beta_{65}(ECF * SVC) + \beta_{66}FS + \beta_{67}OS + \varepsilon_{10}$

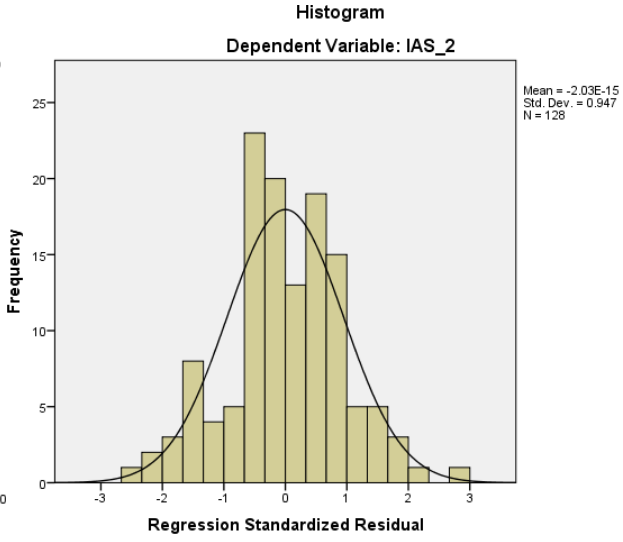
Normality (Continued)





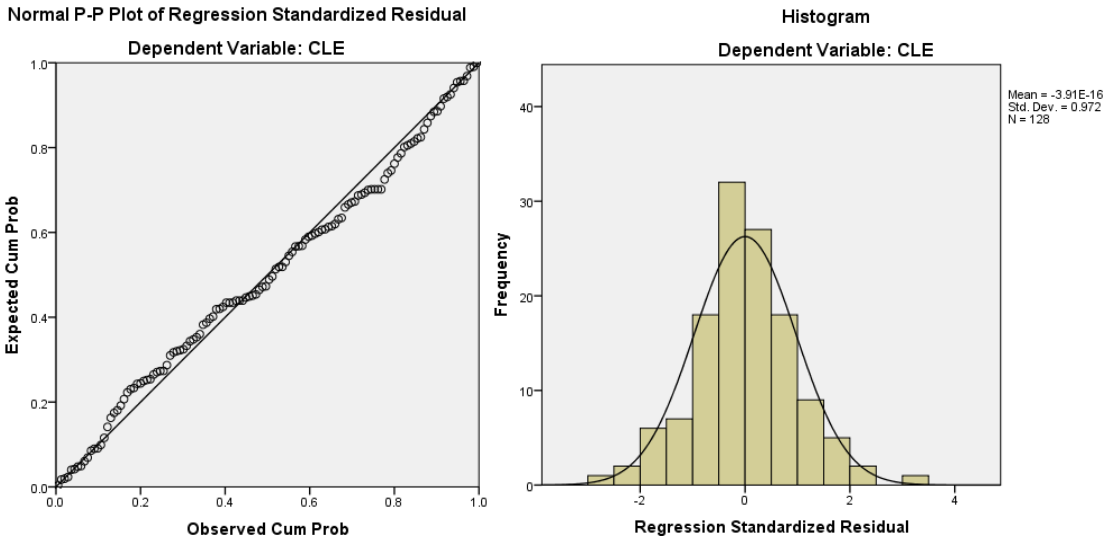
Equation 11: $IAS = \alpha_{11} + \beta_{68}TLO + \beta_{69}HCP + \beta_{70}ORR + \beta_{71}ITC + \beta_{72}ECF + \beta_{73}FS + \beta_{74}OS + \varepsilon_{11}$



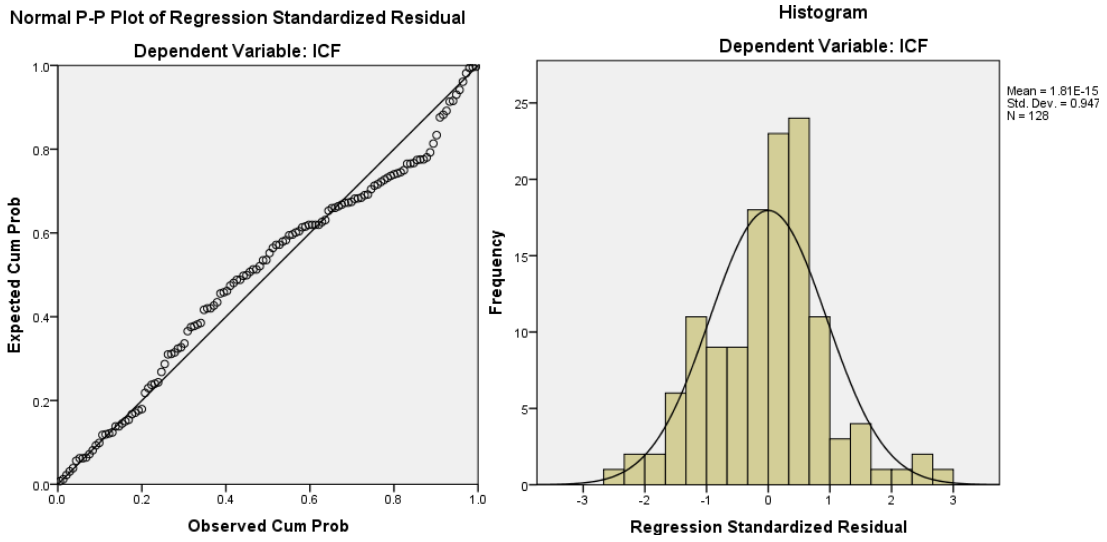


Equation 12: $IAS = \alpha_{12} + \beta_{75}TLO + \beta_{76}HCP + \beta_{77}ORR + \beta_{78}ITC + \beta_{79}ECF + \beta_{80}SVC + \beta_{81}(TLO * SVC) + \beta_{82}(HCP * SVC) + \beta_{83}(ORR * SVC) + \beta_{84}(ITC * SVC) + \beta_{85}(ECF * SVC) + \beta_{86}FS + \beta_{87}OS + \varepsilon_{12}$

Normality (Continued)

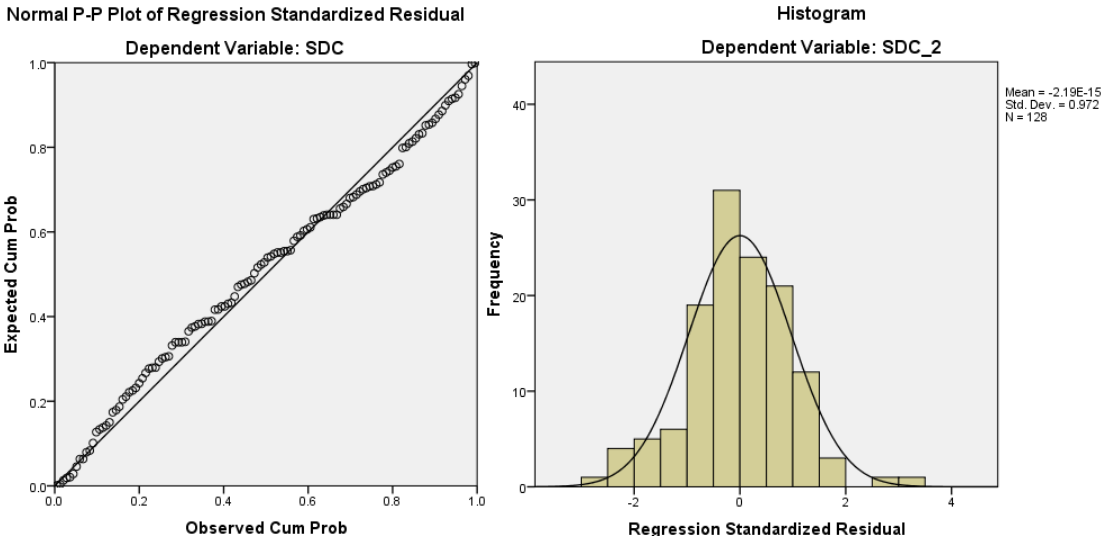


Equation 13: CLE = $\alpha_{13} + \beta_{88}TLO + \beta_{89}HCP + \beta_{90}ORR + \beta_{91}ITC + \beta_{92}ECF + \beta_{93}FS + \beta_{94}OS + \varepsilon_{13}$

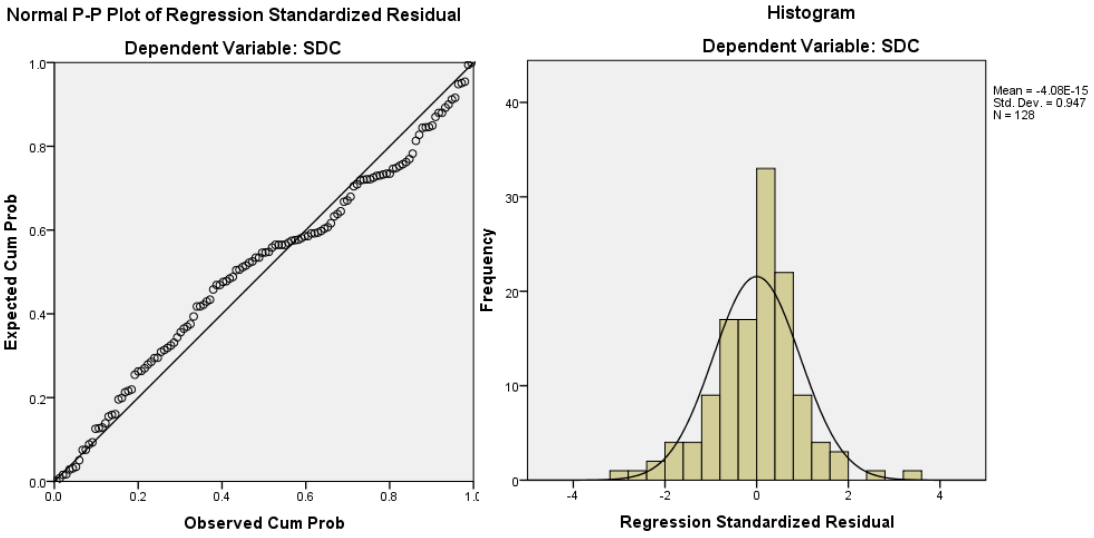


Equation 14: CLE = $\alpha_{14} + \beta_{95}TLO + \beta_{96}HCP + \beta_{97}ORR + \beta_{98}ITC + \beta_{99}ECF + \beta_{100}SVC + \beta_{101}(TLO * SVC) + \beta_{102}(HCP * SVC) + \beta_{103}(ORR * SVC) + \beta_{104}(ITC * SVC) + \beta_{105}(ECF * SVC) + \beta_{106}FS + \beta_{107}OS + \varepsilon_{14}$

Normality (Continued)

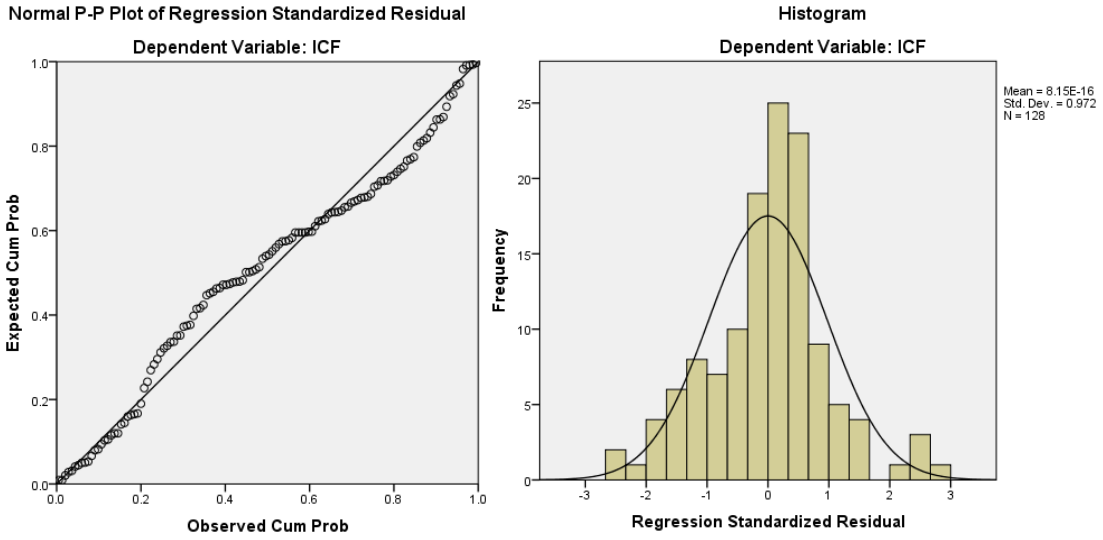


Equation 15: $SDC = \alpha_{15} + \beta_{108}TLO + \beta_{109}HCP + \beta_{110}ORR + \beta_{111}ITC + \beta_{112}ECF + \beta_{113}FS + \beta_{114}OS + \varepsilon_{15}$

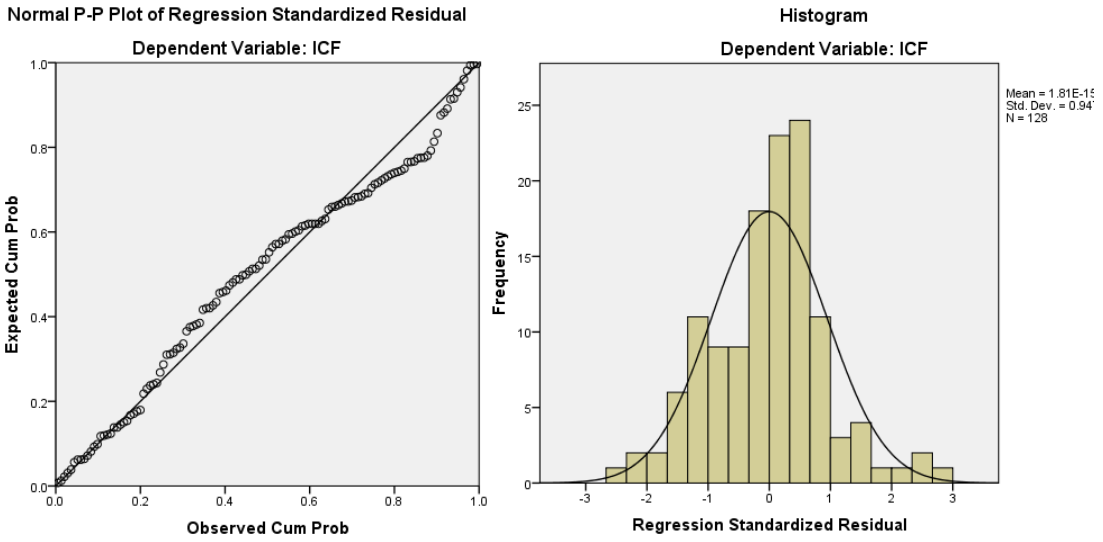


Equation 16: $SDC = \alpha_{16} + \beta_{115}TLO + \beta_{116}HCP + \beta_{117}ORR + \beta_{118}ITC + \beta_{119}ECF + \beta_{120}SVC + \beta_{121}(TLO * SVC) + \beta_{122}(HCP * SVC) + \beta_{123}(ORR * SVC) + \beta_{124}(ITC * SVC) + \beta_{125}(ECF * SVC) + \beta_{126}FS + \beta_{127}OS + \varepsilon_{16}$

Normality (Continued)



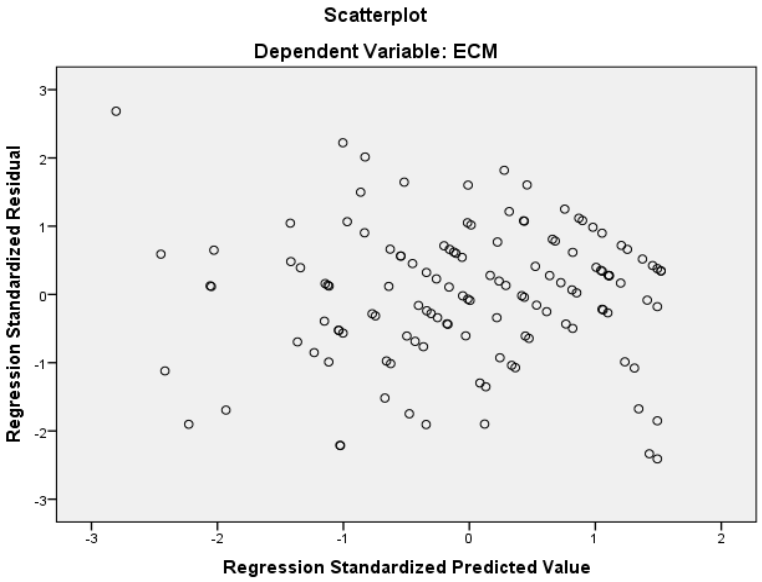
Equation 17: ICF = $\alpha_{17} + \beta_{128}TLO + \beta_{129}HCP + \beta_{130}ORR + \beta_{131}ITC + \beta_{132}ECF + \beta_{133}FS + \beta_{134}OS + \varepsilon_{17}$



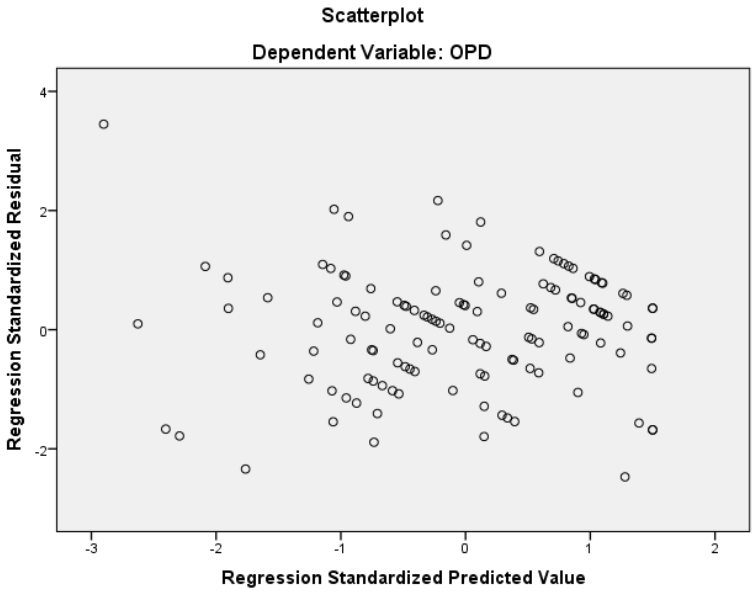
Equation 18: ICF = $\alpha_{18} + \beta_{135}TLO + \beta_{136}HCP + \beta_{137}ORR + \beta_{138}ITC + \beta_{139}ECF + \beta_{140}SVC + \beta_{141}(TLO * SVC) + \beta_{142}(HCP * SVC) + \beta_{143}(ORR * SVC) + \beta_{144}(ITC * SVC) + \beta_{145}(ECF * SVC) + \beta_{146}FS + \beta_{147}OS + \varepsilon_{18}$

Heteroscedasticity

Equation 1: ***ECM*** = $\alpha_1 + \beta_1 ECA + \beta_2 IAS + \beta_3 CLE + \beta_4 SDC + \beta_5 ICF + \beta_6 FS + \beta_7 OS + \varepsilon_1$

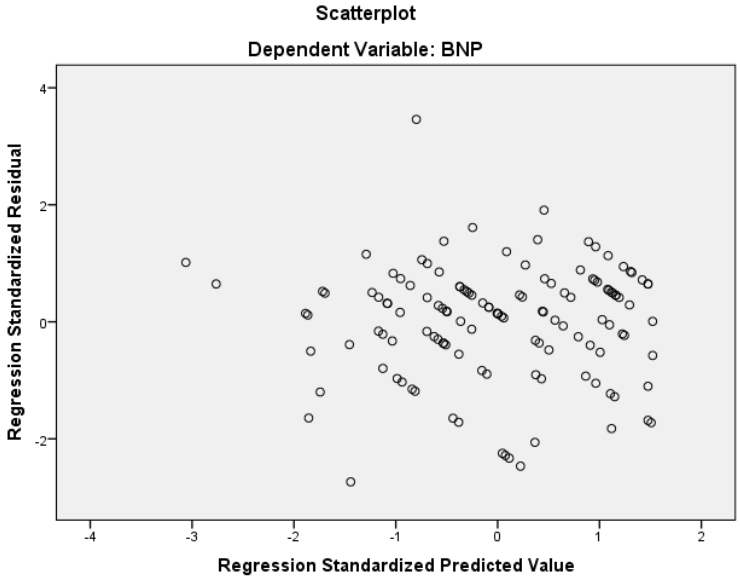


Equation 2: ***OPD*** = $\alpha_2 + \beta_8 ECA + \beta_9 IAS + \beta_{10} CLE + \beta_{11} SDC + \beta_{12} ICF + \beta_{13} FS + \beta_{14} OS + \varepsilon_2$

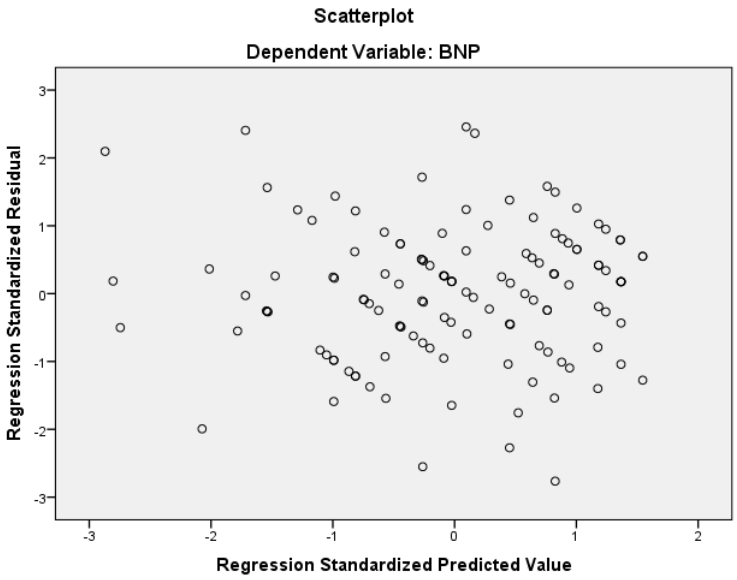


Heteroscedasticity (Continued)

Equation 3: $BNP = \alpha_3 + \beta_{15}ECA + \beta_{16}IAS + \beta_{17}CLE + \beta_{18}SDC + \beta_{19}ICF + \beta_{20}FS + \beta_{21}OS + \varepsilon_3$

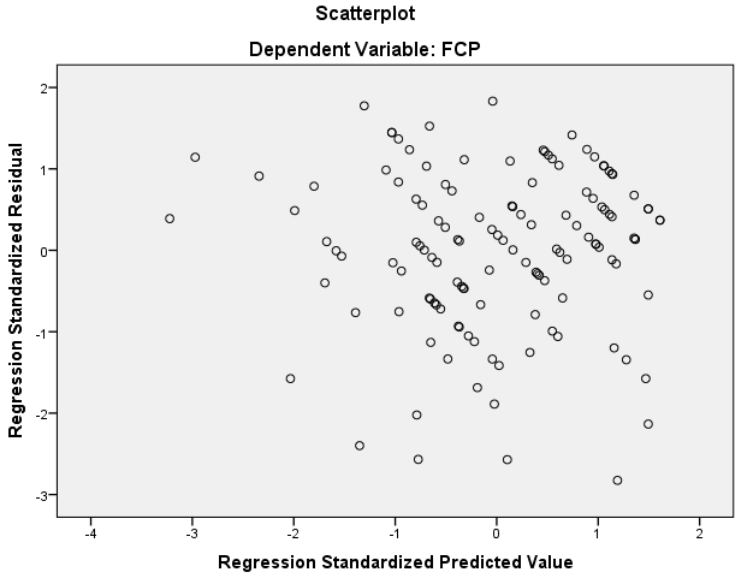


Equation 4: $BNP = \alpha_4 + \beta_{22}ECM + \beta_{23}OPD + \beta_{24}FS + \beta_{25}OS + \varepsilon_4$

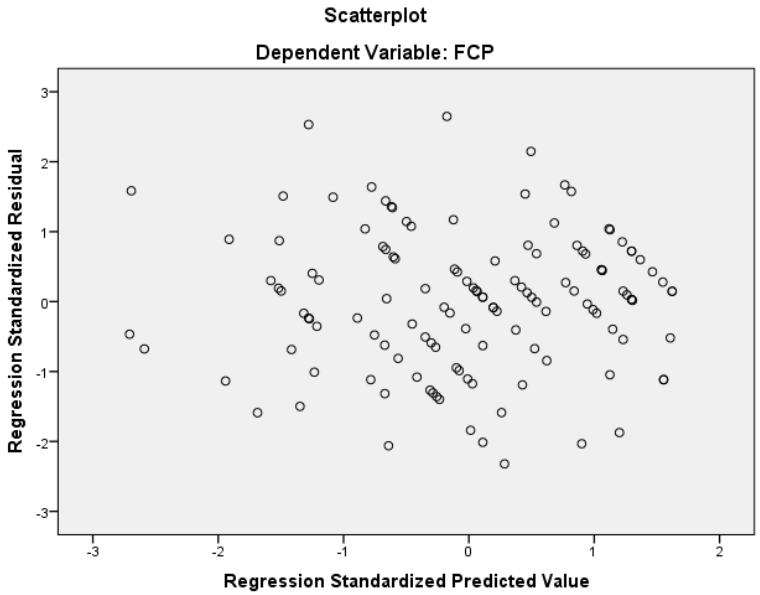


Heteroscedasticity (Continued)

Equation 5: $FCP = \alpha_5 + \beta_{26}ECA + \beta_{27}IAS + \beta_{28}CLE + \beta_{29}SDC + \beta_{30}ICF + \beta_{31}FS + \beta_{32}OS + \varepsilon_5$

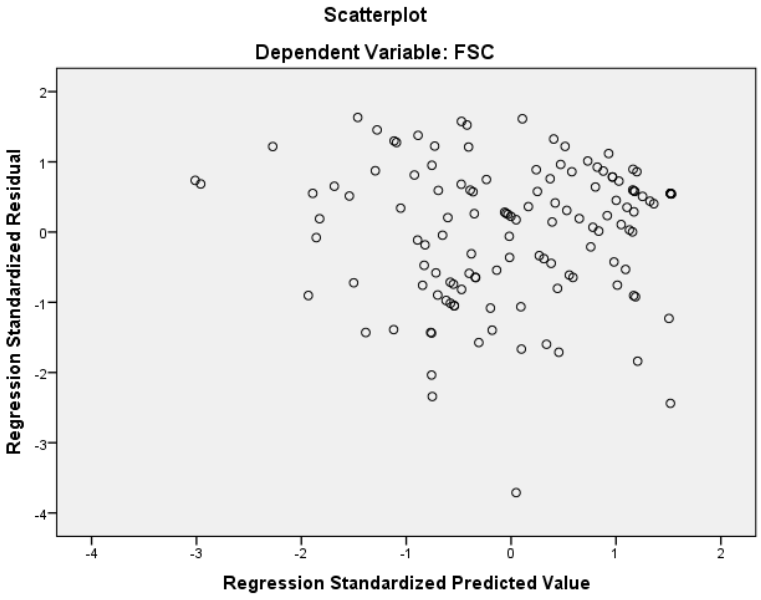


Equation 6: $FCP = \alpha_6 + \beta_{33}ECM + \beta_{34}ODP + \beta_{35}BNP + \beta_{36}FS + \beta_{37}OS + \varepsilon_6$

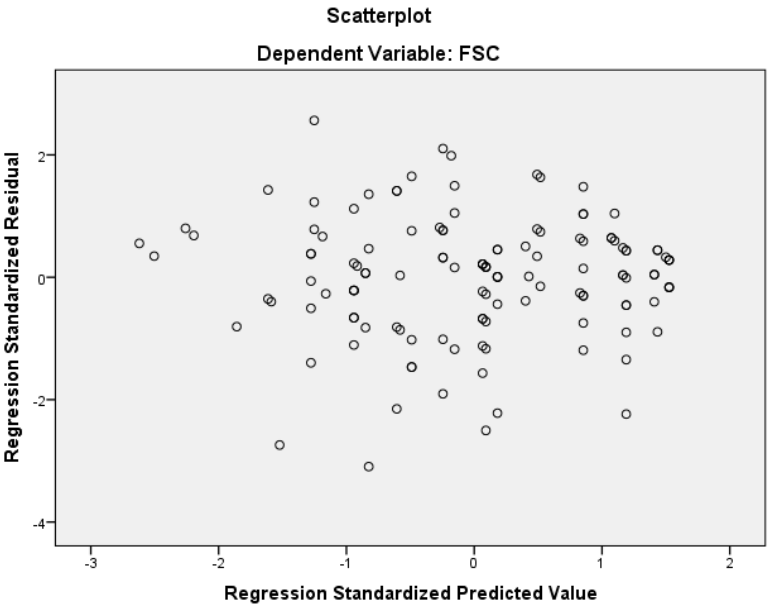


Heteroscedasticity (Continued)

Equation 7: $FSC = \alpha_7 + \beta_{38}ECA + \beta_{39}IAS + \beta_{40}CLE + \beta_{41}SDC + \beta_{42}ICF + \beta_{43}FS + \beta_{44}OS + \varepsilon_7$

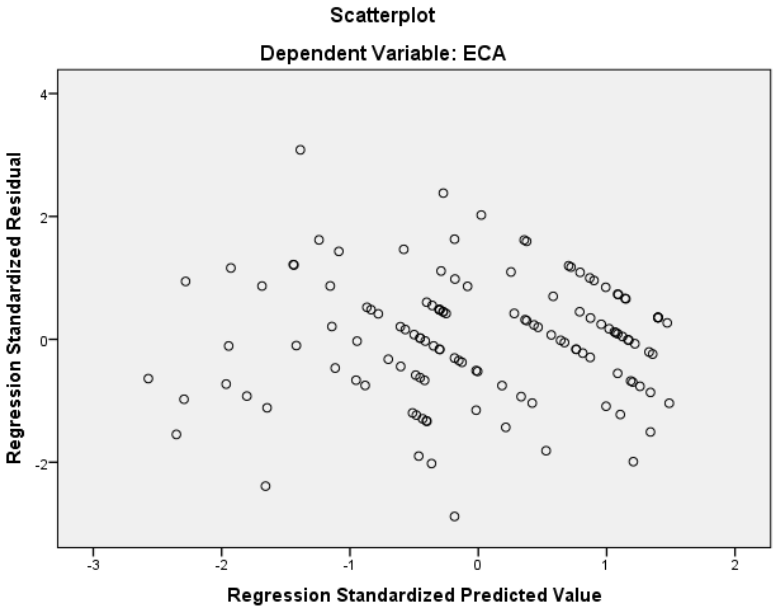


Equation 8: $FSC = \alpha_8 + \beta_{45}FCP + \beta_{46}FS + \beta_{47}OS + \varepsilon_8$

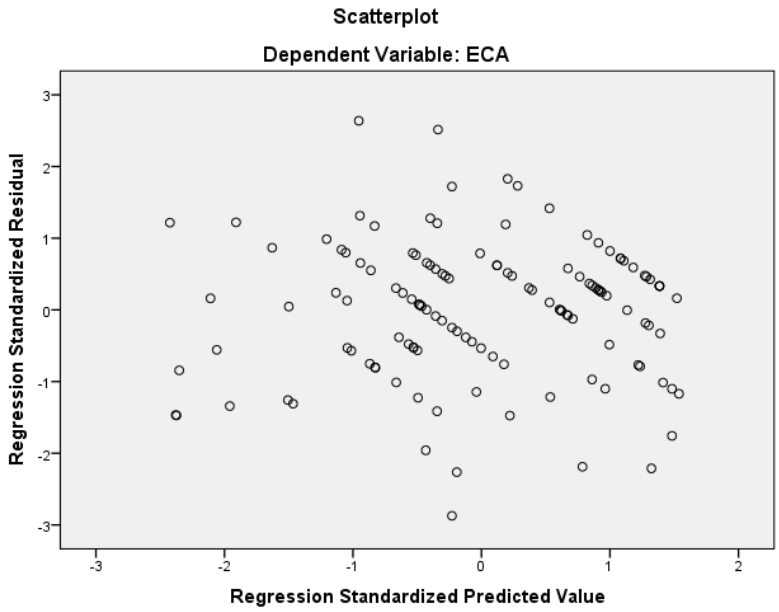


Heteroscedasticity (Continued)

Equation 9: $ECA = \alpha_9 + \beta_{48}TLO + \beta_{49}HCP + \beta_{50}ORR + \beta_{51}ITC + \beta_{52}ECF + \beta_{53}FS + \beta_{54}OS + \varepsilon_9$

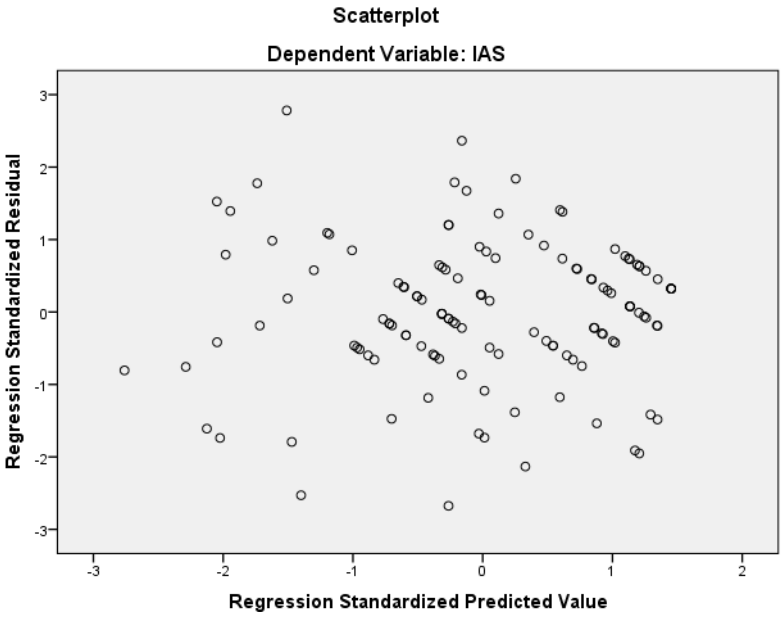


Equation 10: $ECA = \alpha_{10} + \beta_{55}TLO + \beta_{56}HCP + \beta_{57}ORR + \beta_{58}ITC + \beta_{59}ECF + \beta_{60}SVC + \beta_{61}(TLO * SVC) + \beta_{62}(HCP * SVC) + \beta_{63}(ORR * SVC) + \beta_{64}(ITC * SVC) + \beta_{65}(ECF * SVC) + \beta_{66}FS + \beta_{67}OS + \varepsilon_{10}$

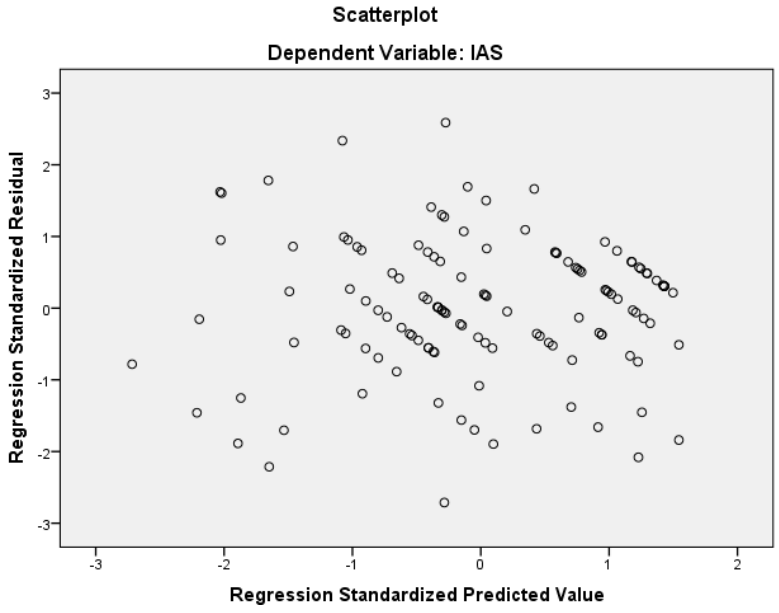


Heteroscedasticity (Continued)

Equation 11: $IAS = \alpha_{11} + \beta_{68}TLO + \beta_{69}HCP + \beta_{70}ORR + \beta_{71}ITC + \beta_{72}ECF + \beta_{73}FS + \beta_{74}OS + \varepsilon_{11}$

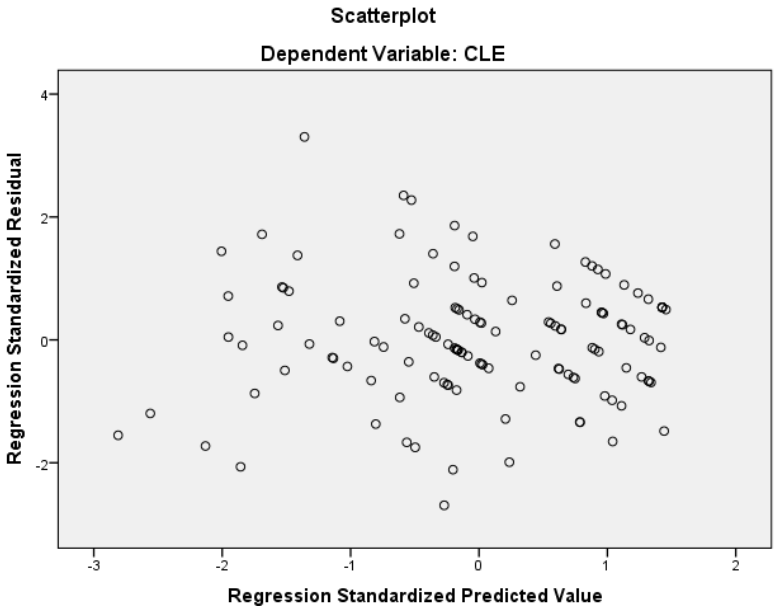


Equation 12: $IAS = \alpha_{12} + \beta_{75}TLO + \beta_{76}HCP + \beta_{77}ORR + \beta_{78}ITC + \beta_{79}ECF + \beta_{80}SVC + \beta_{81}(TLO * SVC) + \beta_{82}(HCP * SVC) + \beta_{83}(ORR * SVC) + \beta_{84}(ITC * SVC) + \beta_{85}(ECF * SVC) + \beta_{86}FS + \beta_{87}OS + \varepsilon_{12}$

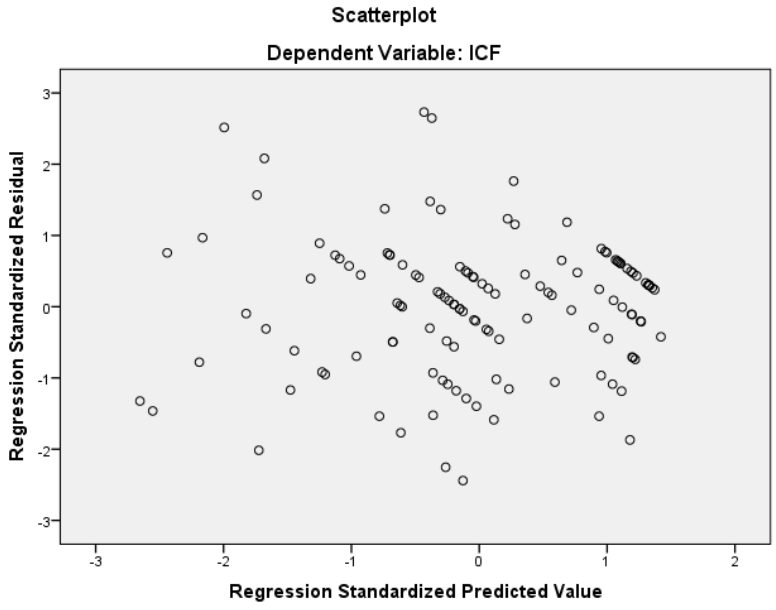


Heteroscedasticity (Continued)

Equation 13: CLE = $\alpha_{13} + \beta_{88}TLO + \beta_{89}HCP + \beta_{90}ORR + \beta_{91}ITC + \beta_{92}ECF + \beta_{93}FS + \beta_{94}OS + \varepsilon_{13}$

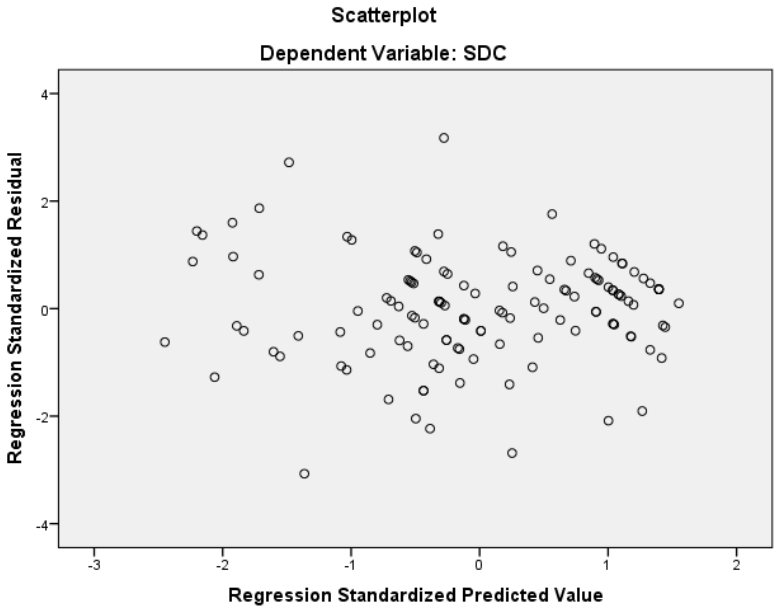


Equation 14: CLE = $\alpha_{14} + \beta_{95}TLO + \beta_{96}HCP + \beta_{97}ORR + \beta_{98}ITC + \beta_{99}ECF + \beta_{100}SVC + \beta_{101}(TLO * SVC) + \beta_{102}(HCP * SVC) + \beta_{103}(ORR * SVC) + \beta_{104}(ITC * SVC) + \beta_{105}(ECF * SVC) + \beta_{106}FS + \beta_{107}OS + \varepsilon_{14}$

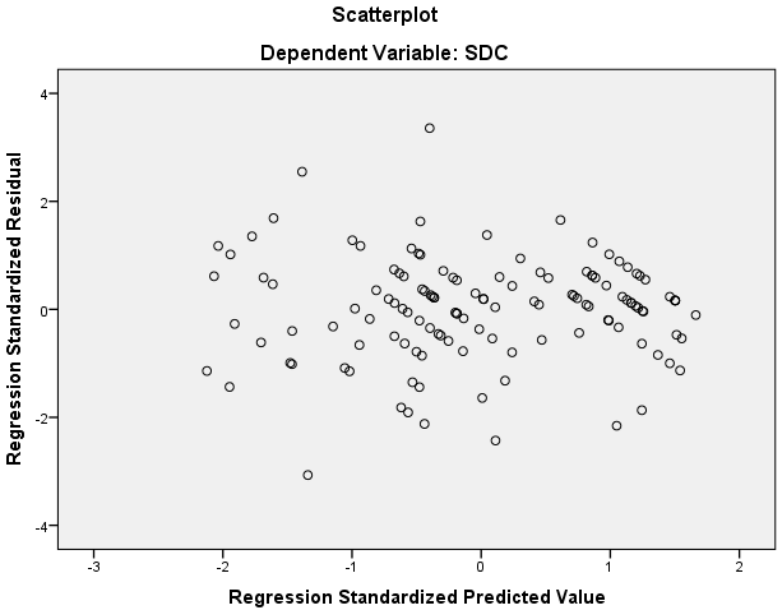


Heteroscedasticity (Continued)

Equation 15: SDC = $\alpha_{15} + \beta_{108}TLO + \beta_{109}HCP + \beta_{110}ORR + \beta_{111}ITC + \beta_{112}ECF + \beta_{113}FS + \beta_{114}OS + \varepsilon_{15}$

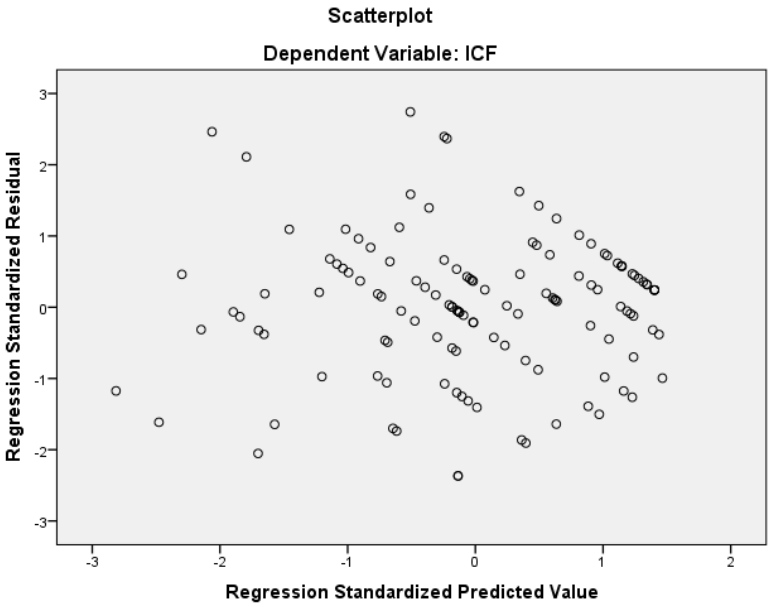


Equation 16: SDC = $\alpha_{16} + \beta_{115}TLO + \beta_{116}HCP + \beta_{117}ORR + \beta_{118}ITC + \beta_{119}ECF + \beta_{120}SVC + \beta_{121}(TLO * SVC) + \beta_{122}(HCP * SVC) + \beta_{123}(ORR * SVC) + \beta_{124}(ITC * SVC) + \beta_{125}(ECF * SVC) + \beta_{126}FS + \beta_{127}OS + \varepsilon_{16}$

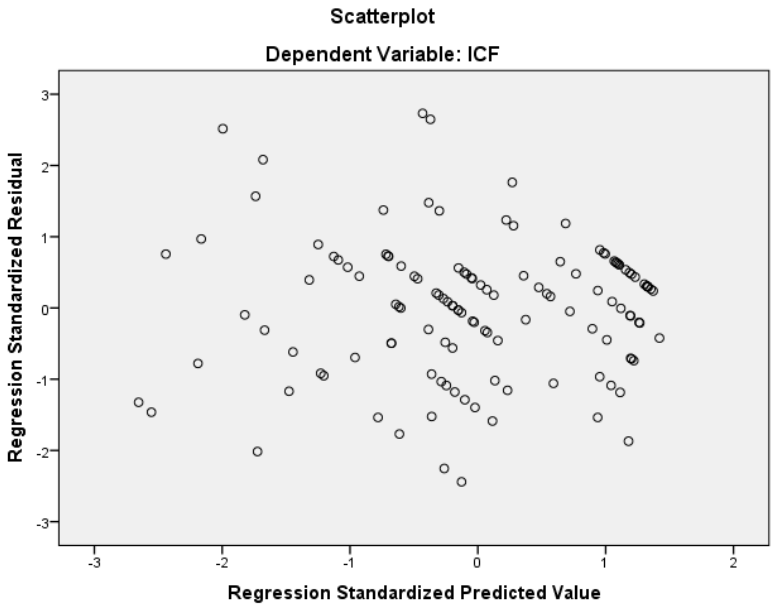


Heteroscedasticity (Continued)

Equation 17: ICF = $\alpha_{17} + \beta_{128}TLO + \beta_{129}HCP + \beta_{130}ORR + \beta_{131}ITC + \beta_{132}ECF + \beta_{133}FS + \beta_{134}OS + \varepsilon_{17}$



Equation 18: ICF = $\alpha_{18} + \beta_{135}TLO + \beta_{136}HCP + \beta_{137}ORR + \beta_{138}ITC + \beta_{139}ECF + \beta_{140}SVC + \beta_{141}(TLO * SVC) + \beta_{142}(HCP * SVC) + \beta_{143}(ORR * SVC) + \beta_{144}(ITC * SVC) + \beta_{145}(ECF * SVC) + \beta_{146}FS + \beta_{147}OS + \varepsilon_{18}$



Multicollinearity

The VIF should be less than 10, then multicollinearity is not a concerned (Hair et al., 2010). Table D3 illustrate the VIF values in each independent variables of construct as show below.

Table D3: Variance Inflation Factor

Construct	VIF
Employee Competency Analysis (ECA)	4.314
Individual Ability Support (IAS)	4.426
Continuous Learning Enhancement (CLE)	3.859
Strategy-Development Connectivity (SDC)	4.099
Innovation Creativity Focus (ICF)	3.454
Employee Commitment (ECM) (Equation 4)	2.814
Employee Commitment (ECM) (Equation 6)	3.244
Operational Development (OPD) (Equation 4)	2.823
Operational Development (OPD) (Equation 6)	3.290
Business Productivity (BNP)	2.775
Firm Competitiveness (FCP)	1.099
Transformational Leadership Orientation (TLO)	4.125
Human Capital Policy (HCP)	5.550
Organizational Resource Readiness (ORR)	4.894
Information Technology Capability (ITC)	3.838
Environmental Complexity Force (ECF)	2.031
Transformational Leadership Orientation (TLO) (Moderator testing)	4.846
Human Capital Policy (HCP) (Moderator testing)	5.920
Organizational Resource Readiness (ORR) (Moderator testing)	5.255
Information Technology Capability (ITC) (Moderator testing)	5.300
Environmental Complexity Force (ECF) (Moderator testing)	2.742
Survival Culture (SVC)	5.184
TLO x SVC	6.696
HCP x SVC	8.293
ORR x SVC	7.892
ITC x SVC	7.197
ECF x SVC	3.911

APPENDIX E

Cover Letter and Questionnaire (Thai Version)

แบบสอบถามเพื่อการวิจัย
เรื่อง ผลกระทบของศักยภาพการพัฒนาทรัพยากรมนุษย์ที่มีต่อความสำเร็จ
ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

คำชี้แจง

โครงการวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาวิจัยเรื่อง “ผลกระทบของศักยภาพการพัฒนาทรัพยากรมนุษย์ที่มีต่อความสำเร็จของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย” เพื่อใช้เป็นข้อมูลในการจัดทำวิทยานิพนธ์ระดับปริญญาเอกของผู้วิจัยในหลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม 44000 หมายเลขโทรศัพท์ 043-754333

ข้าพเจ้าใคร่ขอความอนุเคราะห์จากท่านในการตอบแบบสอบถามชุดนี้ โดยรายละเอียดของแบบสอบถามประกอบด้วยส่วนของคำถาม 7 ตอน ดังนี้

ตอนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้บริหารฝ่ายทรัพยากรมนุษย์ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 2 ข้อมูลทั่วไปของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 3 ความคิดเห็นเกี่ยวกับศักยภาพการพัฒนาทรัพยากรมนุษย์ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่ส่งผลต่อการดำเนินงานของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อการดำเนินงานของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ตอนที่ 7 ข้อคิดเห็น ปัญหา และข้อเสนอแนะเกี่ยวกับการบริหารธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

คำตอบของท่านจะถูกเก็บรักษาเป็นความลับ และจะไม่มีการใช้ข้อมูลใด ๆ ที่เปิดเผยเกี่ยวกับตัวท่านในการรายงานข้อมูล รวมทั้งจะไม่มีการร่วมใช้ข้อมูลดังกล่าวกับบุคคลภายนอกอื่นใดโดยไม่ได้รับอนุญาตจากท่าน

ท่านต้องการรายงานสรุปผลการวิจัยหรือไม่☐ ต้องการ E - mail _____ ☐ ไม่ต้องการ

หากท่านต้องการรายงานสรุปผลการวิจัย โปรดระบุ E-mail Address ของท่าน หรือแนบนามบัตรของท่านมากับแบบสอบถามชุดนี้

ผู้วิจัยขอขอบพระคุณที่ท่านได้กรุณาเสียสละเวลาในการตอบแบบสอบถามชุดนี้อย่างถูกต้องครบถ้วน และหวังเป็นอย่างยิ่งว่าข้อมูลที่ได้รับจากท่านจะเป็นประโยชน์อย่างยิ่งต่อการวิจัยในครั้งนี้ และขอขอบพระคุณอย่างสูงมา ณ โอกาสนี้ หากท่านมีข้อสงสัยประการใดเกี่ยวกับแบบสอบถาม โปรดติดต่อผู้วิจัย นายอภิ คำเพราะ โทรศัพท์เคลื่อนที่ 0-86-645-8939 หรือ E – mail : sandacross@gmail.com

(นายอภิ คำเพราะ)
นิสิตระดับปริญญาเอก สาขาการจัดการ
คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม

ตอนที่ 1 ข้อมูลทั่วไปของผู้บริหารฝ่ายทรัพยากรมนุษย์ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

1. เพศ

☐ ชาย ☐ หญิง

2. อายุ

☐ น้อยกว่า 30 ปี ☐ 30 – 40 ปี

☐ 41 – 50 ปี ☐ มากกว่า 50 ปี

3. สถานภาพ

☐ โสด ☐ สมรส

☐ หย่าร้าง/หม้าย

4. ระดับการศึกษา

☐ ปริญญาตรีหรือต่ำกว่า ☐ สูงกว่าปริญญาตรี

5. ประสบการณ์ในการทำงาน

☐ น้อยกว่า 5 ปี ☐ 5 – 10 ปี

☐ 11 – 15 ปี ☐ มากกว่า 15 ปี

6. รายได้เฉลี่ยต่อเดือนที่ได้รับ

☐ ต่ำกว่า 50,000 บาท ☐ 50,001 – 70,000 บาท

☐ 70,001 – 90,000 บาท ☐ มากกว่า 90,000 บาท

7. ตำแหน่งในปัจจุบัน

☐ ผู้อำนวยการฝ่ายพัฒนาทรัพยากรมนุษย์ ☐ ผู้จัดการฝ่ายทรัพยากรมนุษย์

☐ อื่นๆ (โปรดระบุ) .....

ตอนที่ 2 ข้อมูลทั่วไปเกี่ยวกับธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

1. ลักษณะของของธุรกิจ

☐ ลงทุนจากภายในประเทศไทย ☐ ร่วมลงทุนจากต่างประเทศ

2. รูปแบบของธุรกิจ

☐ บริษัทจำกัด ☐ ห้างหุ้นส่วน

3. ความเป็นเจ้าของของธุรกิจ

☐ ธุรกิจเดี่ยว ☐ ธุรกิจในเครือ

4. ที่ตั้งของกิจการ

☐ ภาคเหนือ ☐ ภาคกลาง

☐ ภาคตะวันออก ☐ ภาคใต้

☐ ภาคตะวันออกเฉียงเหนือ ☐ กรุงเทพมหานคร

5. ระยะเวลาในการดำเนินงานของกิจการ

☐ น้อยกว่า 5 ปี ☐ 5 – 10 ปี

☐ 11 – 15 ปี ☐ มากกว่า 15 ปี

6. จำนวนพนักงานประจำของกิจการในปัจจุบันจำนวน.....คน

7. ทุนในการดำเนินงาน

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

☐ 75,000,001 – 100,000,000 บาท ☐ มากกว่า 100,000,000 บาท

8. รายได้เฉลี่ยของกิจการต่อปี

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

☐ 75,000,001 – 100,000,000 บาท ☐ มากกว่า 100,000,000 บาท

9. บุคลากรของกิจการมีการเข้าร่วมกับสหภาพแรงงานแห่งประเทศไทย

☐ มี ☐ ไม่มี

ตอนที่ 3 ความคิดเห็นเกี่ยวกับศักยภาพการพัฒนาทรัพยากรมนุษย์ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ศักยภาพการพัฒนาทรัพยากรมนุษย์ (Human Resource Development Capability)	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
<u>การวิเคราะห์ความสามารถของพนักงาน (Employee Competency Analysis)</u> 1. กิจการเชื่อมั่นว่าการมีการวิเคราะห์ศักยภาพความสามารถของบุคลากรที่เป็นระบบ จะช่วยให้กิจการมีการดำเนินงานด้านบุคลากรได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
2. กิจการให้ความสำคัญกับการประเมิน ระบุ และจำแนกศักยภาพของบุคลากรอย่างต่อเนื่อง จะช่วยให้กิจการสามารถบริหารทรัพยากรบุคคลได้อย่างมีประสิทธิภาพสูงสุด					
3. กิจการผลักดันให้มีการจำแนกความสามารถที่จำเป็นในการดำเนินงานของบุคลากรอย่างเป็นรูปธรรม ซึ่งจะช่วยให้กิจการสามารถวางแผนการพัฒนาทรัพยากรบุคคลได้ดียิ่งขึ้น					
4. กิจการให้ความสำคัญกับการประเมินความต้องการของบุคลากรในการเข้าฝึกอบรมและพัฒนาความสามารถอย่างต่อเนื่อง ซึ่งจะช่วยให้กิจการสามารถพัฒนาศักยภาพและความสามารถของบุคลากรได้อย่างเหมาะสม					
การสนับสนุนความสามารถระดับบุคคล (Individual Ability Support) **5.** กิจการเชื่อมั่นว่าการพัฒนาขีดความสามารถของบุคลากรอย่างเต็มที่ จะทำให้การบริหารงานของกิจการประสบความสำเร็จมากยิ่งขึ้น					
6. กิจการให้ความสำคัญกับการจัดสรรงบประมาณด้านการพัฒนาบุคลากรอย่างเต็มที่ ซึ่งจะช่วยให้บุคลากรแต่ละคนสามารถแสดงศักยภาพและความสามารถในการปฏิบัติงานของตนเองได้อย่างโดดเด่นและเป็นรูปธรรม					
7. กิจการสนับสนุนให้บุคลากรแสดงความสามารถที่โดดเด่นในงานที่ได้รับมอบหมายอย่างเต็มที่ ซึ่งจะช่วยให้การปฏิบัติงานบรรลุผลสำเร็จได้เป็นอย่างดี					
8. กิจการส่งเสริมให้บุคลากรได้รับการพัฒนาและฝึกอบรมในประเด็นและหัวข้อที่สนใจอยู่เสมอ ซึ่งจะช่วยให้การปฏิบัติงานมีประสิทธิภาพสูงสุด					
การส่งเสริมการเรียนรู้อย่างต่อเนื่อง (Continuous Learning Enhancement) 9. กิจการเชื่อมั่นว่าการเรียนรู้ของบุคลากรอย่างต่อเนื่อง จะช่วยทำให้การปฏิบัติงานของบุคลากรมีประสิทธิภาพและบรรลุผลสำเร็จได้ดียิ่งขึ้น					
10. กิจการสนับสนุนให้บุคลากรศึกษาและทำความเข้าใจในประเด็นใหม่ๆในการบริหารจัดการอย่างต่อเนื่อง ซึ่งจะช่วยให้บุคลากรสามารถปรับตัวและปฏิบัติงานได้ดียิ่งขึ้นภายใต้สถานการณ์ต่างๆ					

ตอนที่ 3 (ต่อ)

ศักยภาพการพัฒนาทรัพยากรมนุษย์ (Human Resource Development Capability)	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
11. กิจการผลักดันให้บุคลากรมีการแลกเปลี่ยนความรู้ และประสบการณ์ในการทำงานที่ดีระหว่างกันอย่างต่อเนื่องและเป็นระบบ ซึ่งจะช่วยให้สามารถบูรณาการความรู้ในการดำเนินงานได้เป็นอย่างดี					
12. กิจการสนับสนุนให้มีการวิจัยและพัฒนาข้อดี ข้อผิดพลาด ความสำเร็จและความล้มเหลวในอดีต ซึ่งจะช่วยให้พัฒนาการปฏิบัติงานให้มีประสิทธิภาพมากยิ่งขึ้น					
การเชื่อมโยงกลยุทธ์และการพัฒนา (Strategy-Development Connectivity) 13. กิจการเชื่อมั่นว่าการพัฒนาทรัพยากรมนุษย์เชิงกลยุทธ์ จะช่วยให้การบริหารงานมีความได้เปรียบทางการแข่งขันมากยิ่งขึ้น					
14. กิจการตระหนักเสมอว่า บุคลากรเป็นทรัพยากรที่มีคุณค่าของกิจการ ซึ่งช่วยผลักดันให้การดำเนินงานมีประสิทธิภาพและประสิทธิผลมากยิ่งขึ้น					
15. กิจการให้ความสำคัญกับการกำหนดคุณลักษณะและอัตลักษณ์ที่ดีของบุคลากรที่กิจการต้องการอย่างชัดเจน ซึ่งจะช่วยให้เกิดการแรงจูงใจและทิศทางในการพัฒนาบุคลากรได้อย่างชัดเจนมากยิ่งขึ้น					
16. กิจการมุ่งเน้นให้มีการวางแผนการพัฒนาทรัพยากรมนุษย์อย่างเป็นระบบและเป็นรูปธรรมทั้งในปัจจุบันและอนาคต ซึ่งจะช่วยให้กิจการมีบุคลากรที่มีคุณภาพและมีความสามารถสอดคล้องกับสถานการณ์ทั้งในปัจจุบันและในอนาคตได้ดียิ่งขึ้น					
17. กิจการมุ่งมั่นให้มีการนำประเด็นและหัวข้อเกี่ยวกับทรัพยากรมนุษย์มาพูดคุยและถกเถียงในที่ประชุมอย่างต่อเนื่อง ซึ่งจะช่วยให้การบริหารงานด้านทรัพยากรมนุษย์ประสบความสำเร็จมากยิ่งขึ้น					
การมุ่งเน้นการสร้างสรรค์นวัตกรรม (Innovation Creativity Focus) 18. กิจการเชื่อมั่นว่าการมีบุคลากรที่มีความคิดสร้างสรรค์และคิดค้นสิ่งใหม่อย่างต่อเนื่อง จะช่วยให้การดำเนินงานประสบความสำเร็จมากยิ่งขึ้น					
19. กิจการส่งเสริมให้บุคลากรมีความคิดริเริ่มสร้างสรรค์สิ่งใหม่ๆในการดำเนินงานอย่างต่อเนื่อง ซึ่งจะช่วยให้การบริหารงานบรรลุเป้าหมายได้เป็นอย่างดี					
20. กิจการสนับสนุนให้มีการวัดผลการปฏิบัติงานของบุคลากร โดยมุ่งเน้นความคิดสร้างสรรค์ในการปฏิบัติงานอย่างเป็นรูปธรรม ซึ่งจะช่วยให้เกิดการพัฒนาศักยภาพการดำเนินงานของกิจการอย่างต่อเนื่อง					
21. กิจการมุ่งเน้นให้มีการจัดสรรงบประมาณเพื่อการสร้างสรรค์ วิจัยและพัฒนาสิ่งใหม่อย่างเต็มที่ ซึ่งจะช่วยให้การปฏิบัติงานในกิจการมีความเป็นเลิศมากยิ่งขึ้น					

ตอนที่ 4 ความคิดเห็นเกี่ยวกับผลการดำเนินงานของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ความมุ่งมั่นของพนักงาน (Employee Commitment) 1. บุคลากรของกิจการมีความพยายามและมุ่งมั่นที่จะปฏิบัติงานอย่างเต็มความรู้ความสามารถที่มีอยู่					
2. บุคลากรของกิจการมีความภาคภูมิใจในการเป็นสมาชิกภาพของกิจการ และต้องการที่จะอยู่กับกิจการในระยะยาว					
3. บุคลากรของกิจการมีความรู้สึกว่าตนเองเป็นส่วนหนึ่งของกิจการและต้องการให้กิจการประสบความสำเร็จ เติบโต และเจริญรุ่งเรืองตลอดไป					
4. บุคลากรของกิจการมีส่วนร่วมในการทำให้กิจการประสบความสำเร็จตามเป้าหมายที่ตั้งไว้					
การพัฒนาการดำเนินงาน (Operational Development) 5. กิจการมีการปรับปรุงพัฒนาการดำเนินงานอย่างต่อเนื่องตั้งแต่อดีตถึงปัจจุบัน					
5. กิจการมีกระบวนการปฏิบัติงานสอดคล้องเหมาะสมกับสถานการณ์ที่เกิดขึ้นได้เป็นอย่างดี					
6. กิจการมีการวิเคราะห์ปัญหาต่างๆที่เกิดขึ้นในการปฏิบัติงานและสามารถแก้ปัญหาได้อย่างเป็นระบบและต่อเนื่อง					
7. กิจการมีการดำเนินงานบริหารภายในที่สอดคล้องกันเป็นอย่างดี ในทุกสถานการณ์ที่เกิดขึ้น					
ผลิตภาพของธุรกิจ (Business Productivity) 8. กิจการมีการบริหารงานที่เป็นไปตามเป้าหมายอย่างครบถ้วนสมบูรณ์ โดยมีการใช้ทรัพยากรและสินทรัพย์อย่างเหมาะสม					
9. กิจการสามารถบูรณาการทรัพยากรที่มีอยู่อย่างจำกัดให้เกิดประโยชน์สูงสุดแก่องค์กรได้					
10. กิจการสามารถปรับเปลี่ยนการใช้ประโยชน์จากบุคลากรหรือเครื่องจักรให้สามารถสอดคล้องกับสถานการณ์ที่เกิดขึ้นได้					
11. กิจการมีการผลิตสินค้าที่มีประสิทธิภาพ โดยสามารถลดการใช้ทรัพยากรอย่างสูญเปล่า และเพิ่มคุณภาพของสินค้าของกิจการได้					
ความสามารถทางการแข่งขันขององค์กร (Firm Competitiveness) 12. กิจการสามารถนำเสนอสินค้าหรือบริการใหม่ออกสู่ตลาดได้อย่างต่อเนื่อง					
13. กิจการมีการบริหารงานที่ประสบความสำเร็จและแตกต่างจากคู่แข่งขันอย่างเห็นได้ชัด					
14. กิจการสามารถตอบสนองความต้องการของลูกค้าได้เป็นอย่างดี					
15. กิจการมีบุคลากรที่มีศักยภาพและความสามารถที่โดดเด่นต่อการดำเนินงานในปัจจุบันและในอนาคต					

ตอนที่ 4 (ต่อ)

ผลการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
ความสำเร็จขององค์กร (Firm Success) 16. กิจการมีผลการดำเนินงานที่ดี เป็นไปตามเป้าหมายของกิจการ					
17. กิจการมีอัตราส่วนแบ่งตลาดที่เพิ่มขึ้นอย่างต่อเนื่อง ตั้งแต่อดีตจนถึงปัจจุบัน					
18. กิจการมียอดขายที่เพิ่มขึ้นอย่างต่อเนื่อง เมื่อเทียบกับปีที่ผ่านมา					
19. กิจการมีกำไรเพิ่มขึ้นอย่างต่อเนื่องจากการดำเนินงาน เป็นไปตามเป้าหมายหรือวัตถุประสงค์ที่กำหนดไว้					
20. กิจการมีลูกค้าใหม่เกิดขึ้นอย่างต่อเนื่อง ตลอดจนสามารถรักษาปริมาณลูกค้าเดิมไว้ได้					
21. กิจการได้รับการยอมรับจากลูกค้าและผู้มีส่วนเกี่ยวข้องว่า กิจการมีการบริหารงานอย่างมืออาชีพ					

ตอนที่ 5 ความคิดเห็นเกี่ยวกับปัจจัยภายในที่มีผลต่อการดำเนินงานของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
การมุ่งเน้นภาวะผู้นำการปรับเปลี่ยน (Transformational Leadership Orientation) 1. กิจการเชื่อมั่นว่าการมีเป้าหมายในการบริหารงานที่มุ่งเน้นเพื่อตอบสนองการเปลี่ยนแปลงตามสถานการณ์ในธุรกิจ จะทำให้การบริหารงานมีประสิทธิภาพมากยิ่งขึ้น					
2. กิจการมุ่งเน้นในการสร้างแรงบันดาลใจในการปฏิบัติให้กับบุคลากรอย่างต่อเนื่อง ซึ่งจะทำให้บุคลากรสามารถปฏิบัติงานตามภาระหน้าที่ที่ได้รับมอบหมายได้เป็นอย่างดี					
3. กิจการให้ความสำคัญกับการกระตุ้นให้บุคลากรเกิดการเรียนรู้ และทำความเข้าใจในการเปลี่ยนแปลงที่เกิดขึ้นอยู่เสมอ ซึ่งจะช่วยให้การดำเนินงานของกิจการบรรลุเป้าหมายได้เป็นอย่างดี					
4. กิจการตระหนักถึงการให้การดูแลเอาใจใส่ เป็นที่ปรึกษาในการปฏิบัติงานของบุคลากรอยู่เสมอ ซึ่งจะช่วยให้บุคลากรปฏิบัติงานประสบผลสำเร็จตามเป้าหมายที่กำหนดไว้					

ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
นโยบายด้านทุนมนุษย์ (Human Capital Policy) 5. กิจการเชื่อมั่นว่าบุคลากรในกิจการเป็นทุนทรัพย์ที่มีคุณค่า และมีความสำคัญกับกิจการ ซึ่งจะช่วยทำให้การบริหารงานบรรลุเป้าหมายได้เป็นอย่างดี					
6. กิจการมุ่งมั่นให้มีการลงทุนด้านกิจกรรมด้านทรัพยากรมนุษย์อย่างต่อเนื่อง ซึ่งจะช่วยให้กิจการสามารถดำเนินงานได้อย่างมีประสิทธิภาพมากยิ่งขึ้น					
7. กิจการตระหนักถึงการใช้ประโยชน์จากความรู้ความสามารถของบุคลากรอย่างเต็มที่ ซึ่งจะช่วยทำให้การปฏิบัติงานบรรลุความสำเร็จได้ดียิ่งขึ้น					
8. กิจการสนับสนุนให้บุคลากรมีการพัฒนาความรู้ความสามารถอยู่เสมอ ซึ่งจะช่วยเพิ่มประสิทธิภาพในการดำเนินงานได้ดียิ่งขึ้น					
ความพร้อมด้านทรัพยากรขององค์กร (Organizational Resource Readiness) 9. กิจการเชื่อมั่นว่าการมีทรัพยากรอย่างเพียบพร้อมและสมบูรณ์ จะช่วยให้การดำเนินงานของกิจการมีประสิทธิภาพมากยิ่งขึ้น					
10. กิจการมุ่งมั่นในการจัดสรรงบประมาณลงไปในการดำเนินงานด้านต่างๆ อย่างเต็มที่ ซึ่งจะช่วยให้การดำเนินงานบรรลุเป้าหมายได้เป็นอย่างดี					
11. กิจการให้ความสำคัญกับพัฒนาศักยภาพและความรู้ความสามารถของบุคลากรให้มากยิ่งขึ้น ซึ่งจะช่วยให้การดำเนินงานเป็นเลิศและบรรลุเป้าหมายได้มากยิ่งขึ้น					
12. กิจการมุ่งมั่นในการพัฒนาเทคโนโลยี เทคนิคและวิธีการในการดำเนินงานอย่างต่อเนื่อง ซึ่งจะช่วยให้สามารถบรรลุเป้าหมายในการดำเนินงานได้ดียิ่งขึ้น					
ความสามารถด้านเทคโนโลยีสารสนเทศ (Information Technology Capability) 13. กิจการเชื่อมั่นว่าการมีเทคโนโลยีสารสนเทศที่ดี จะทำให้การดำเนินงานมีความทันสมัยและมีประสิทธิภาพมากยิ่งขึ้น					
14. กิจการให้ความสำคัญกับการลงทุนด้านเทคโนโลยีสารสนเทศอย่างต่อเนื่อง ซึ่งจะทำให้กิจการมีระบบฐานข้อมูลในการดำเนินงานของกิจการที่มีประสิทธิภาพมากยิ่งขึ้น					
15. กิจการส่งเสริมให้บุคลากรมีการเรียนรู้ ทำความเข้าใจ ระบบเทคโนโลยีสารสนเทศอย่างต่อเนื่อง จะช่วยให้สามารถประยุกต์ใช้เทคโนโลยีสารสนเทศในการปฏิบัติงานได้ดียิ่งขึ้น					

ตอนที่ 5 (ต่อ)

ปัจจัยภายในที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
16. กิจการสนับสนุนให้มีการติดตามความก้าวหน้าและการเจริญเติบโตด้านเทคโนโลยีสารสนเทศอย่างต่อเนื่อง ซึ่งจะช่วยให้กิจการนำมาใช้เป็นข้อมูลในการวางแผนการพัฒนาปรับปรุงเทคโนโลยีสารสนเทศในการดำเนินงานให้มีประสิทธิภาพมากยิ่งขึ้น					
วัฒนธรรมการอยู่รอด (Survival Culture) 17. กิจการเชื่อมั่นว่าการมีวัฒนธรรมของกิจการที่มุ่งเน้นการมีเป้าหมายในการดำเนินงานในระยะยาว จะทำให้การดำเนินงานมีความชัดเจนและสอดคล้องกับการแข่งขันที่รุนแรงได้เป็นอย่างดี					
18. กิจการตระหนักเสมอว่าการมีนวัตกรรมในการดำเนินงานของกิจการอย่างต่อเนื่อง จะเป็นแรงผลักดันในการปรับปรุงกิจการให้สอดคล้องกับสถานการณ์ได้ดียิ่งขึ้น					
19. กิจการส่งเสริมให้บุคลากรมีการคาดการสถานการณ์ที่จะเกิดขึ้นในอนาคตอย่างเป็นรูปธรรม ที่จะช่วยให้มีข้อมูลในการวางแผนในการปฏิบัติงานได้อย่างมีประสิทธิภาพ					
20. กิจการมุ่งมั่นในการพัฒนากิจการอย่างเป็นรูปธรรม ซึ่งจะช่วยให้กิจการสามารถดำเนินงานได้อย่างประสบความสำเร็จทั้งในปัจจุบันและในอนาคต					

ตอนที่ 6 ความคิดเห็นเกี่ยวกับปัจจัยภายนอกที่ส่งผลต่อการดำเนินงานของธุรกิจขึ้นส่วนยานยนต์ในประเทศไทย

ปัจจัยภายนอกที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
แรงกดดันจากความซับซ้อนของสภาพแวดล้อม (Environmental Complexity Force) 1. ในปัจจุบันธุรกิจมีการแข่งขันอย่างรุนแรงเพิ่มขึ้น ทำให้กิจการต่างๆมุ่งเน้นในการปรับปรุงพัฒนาตัวเองอย่างต่อเนื่อง เพื่อให้สามารถทำการแข่งขันในธุรกิจได้เป็นอย่างดี					
2. ในปัจจุบันธุรกิจมีคู่แข่งเกิดขึ้นจำนวนมาก ทำให้กิจการต่างๆ มีการมุ่งเน้นการพัฒนาและและปรับปรุงตัวเองอย่างต่อเนื่อง จะทำให้กิจการสามารถมีศักยภาพและความสามารถทางการแข่งขันทั้งในปัจจุบันและอนาคตได้เป็นอย่างดี					

ตอนที่ 6 (ต่อ)

ปัจจัยภายนอกที่ส่งผลต่อการดำเนินงาน	ระดับความคิดเห็น				
	มากที่สุด 5	มาก 4	ปานกลาง 3	น้อย 2	น้อยที่สุด 1
3. ลูกค้ามีความต้องการที่หลากหลายมากขึ้น ทำให้กิจการต่างๆ มีการปรับเปลี่ยนค้นหาวิธีการดำเนินงานใหม่ๆอย่างต่อเนื่อง เพื่อให้สามารถตอบสนองความต้องการได้อย่างทันท่วงที					
4. ปัจจุบันเทคโนโลยีมีความก้าวหน้ามากยิ่งขึ้น ทำให้กิจการต่างๆ ต้องทำการศึกษา เรียนรู้ และประยุกต์ใช้เทคโนโลยีดังกล่าว มาใช้ในการดำเนินงานได้อย่างมีประสิทธิภาพสูงสุด					

ตอนที่ 7 ข้อเสนอแนะและข้อคิดเห็นเกี่ยวกับการบริหารทรัพยากรมนุษย์ของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย

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ขอขอบพระคุณเป็นอย่างสูงที่ท่านกรุณาสละเวลาตอบแบบสอบถามทุกข้อ

และได้โปรดพับแบบสอบถามและใส่ซองที่แนบมาพร้อมกันนี้ ส่งคืนผู้วิจัยตามที่อยู่ที่ได้ระบุ

หากท่านต้องการรายงานสรุปผลการสำรวจครั้งนี้โปรดแนบนามบัตรของท่านมาพร้อมกับแบบสอบถาม

ข้าพเจ้ายินดีจัดส่งรายงานสรุปให้แก่ท่านในภายหลัง

APPENDIX F

Original Item, Cover Letter and Questionnaire (English Version)

Table F1: Original Item in Scales

Construct	Items
Employee Competency Analysis (ECA)	
ECA1	Firm believes that the implementation of systematic employee competency analysis will efficiency enhancement in human resource performance.
ECA2	Firm place important on evaluation, identification and classify the employee ability continuously and it will help firm can maximum efficiency human resource management.
ECA3	Firm push on concrete necessary ability identification in the employee operation which will help firm to can upgrade the planning in human resource development
ECA4	Firm place important on need evaluation of employee in taken training and developing an ability continuously which will help firm can develop ability and competency of employee properly.
Individual Ability Support (IAS)	
IAS1	Firm believes that extremely developing in ability limit of employee will more achieve in firm management.
IAS2	Firm place important on extremely budget allocation in human development which will help individual employee can great and concrete ability and competency utilization.
IAS3	Firm supports employee to great and extremely illustrate the ability in entrust work which will help to good achieve the operation goal.
IAS4	Firm enhance employee in taken development and training in title that employee interest continuously which will help to maximum efficiency operation.
Continuous Learning Enhancement (CLE)	
CLE1	Firm believes that the learning of employee continuously will help employee operation have more efficiency achievement.

Table F1: Original Item in Scales (continued)

Construct	Items
CLE2	Firm supports employee in new topic study and understanding in management continuously which help employee to adapt and greater operation under separate situation.
CLE3	Firm push on employee in share the knowledge and experience in working continuously and systemically which will help to can well integrated the knowledge in operation.
CLE4	Firm supports in research and development in merit, mistake, success and failure in the past which will help operation is more efficiency developed.
Strategic-Development Connectivity (SDC)	
SDC1	Firm believes that strategic human resource development will help firm management can more achieve the competitive advantage over competitor.
SDC2	Firm always aware that human is a valuable resource of the firm which help firm to more efficiency and effectively operation.
SDC3	Firm place important on clearly specify on good characteristic and nature of employee that firm need which will help to more clearly motivation and guideline in human development.
SDC4	Firm emphasize in systematic and concrete planning of human resource development in both present and future which will help firm take employee with quality and better consistency ability on present and future situation.
SDC5	Firm concentrate to use human resource topic and issue to discuss in meeting continuously which will help human resource management to greater achievement.
Innovation Creativity Focus (ICF)	
ICF1	Firm believes that continuously creative thinking employee will help firm to more success operation.

Table F1: Original Item in Scales (continued)

Construct	Items
ICF2	Firm enhance employee have continuously creative thinking in new something of operation which will help work management better achieve the goal.
ICF3	Firm supports the continuously operation evaluation of employee that emphasize on creative thinking in operation which will help occur development in operational development of the firm continuously.
ICF4	Firm emphasize the extremely budget allocation for create, research and developing a new something which will help firm operation to more excellent.
Employee Commitment (ECM)	
ECM1	Employee of firm has extremely attempt and attention in work operation.
ECM2	Employee of firm has worthiness in firm citizenship and want to stay with firm in long-term.
ECM3	Employee of firm has feel that themselves is a one part of firm and want to see firm successful, grow up and progress forward.
ECM4	Employee of firm has participation in firm successful from exist target.
Operational Development (OPD)	
OPD1	Firm has continuous improve and developing operation continuously from the past to the future.
OPD2	Firm has well appropriately and consistency operation in exist situation.
OPD3	Firm has analyze in several problem that occur in operation and can solve systemically and continuously.
OPD4	Firm has well consistency internal operational management in any exist situation?

Table F1: Original Item in Scales (continued)

Construct	Items
Business Productivity (BNP)	
BNP1	Firm has work management that consistency with target perfectly which has appropriately use resource and asset.
BNP2	Firm can integrate limit exist resource to maximum benefit to the firm.
BNP3	Firm can utilize transformation from employee or machine for consistency to exist situation.
BNP4	Firm has efficiency production which can reduce wasteful resource using and increase product quality of the firm.
Firm Competitiveness (FCP)	
FCP1	Firm can launch the new product to market continuously.
FCP2	Firm has successfully management and great different from competitor.
FCP3	Firm can good response the customer need?
FCP4	Firm has great latency and competency employee in present and future operation.
Firm Success (FSC)	
FSC1	Firm has a good performance and consistency with target.
FSC2	Firm has increase market share continuously from the past to present.
FSC3	Firm has increase sale revenue continuously when compare from last year?
FSC4	Firm has increase profit continuously from operation which consistency with exist target and objective.
FSC5	Firm has new customer continuously and can keep an old customer.
FSC6	Firm take recognition from customer and stake holder that firm has professional management.
Transformational Leadership Orientation (TLO)	
TLO1	Firm believes that engrosses management target for response the business situation change will cause to more efficiency management.

Table F1: Original Item in Scales (continued)

Construct	Items
TLO2	Firm emphasis in make operation inspiration to employee continuously which will help employee to best assign work operation.
TLO3	Firm place important on moderate the employee learning and understanding in continuously change which will help to firm operation and achieve the firm target.
TLO4	Firm aware in take care and mentoring in employee operation continuously which will help employee in successful operation to existing target.
Human Capital Policy (HCP)	
HCP1	Firm believes that employee in the firm is valuable asset and has important with the firm which will help firm management achieve the exist target.
HCP2	Firm engrosses to activities investment in human resource continuously which will help firm can more efficiency operation.
HCP3	Firm aware to extreme utilization from knowledge and ability of employee which will help firm operation more successes achievement.
HCP4	Firm supports employee in knowledge and ability development continuously which will help increase efficiency operation.
Organizational Resource Readiness (ORR)	
ORR1	Firm believes that richness and fully of resource will help firm to more efficiency operation.
ORR2	Firm engrosses in budget allocation in fully separate department which help firm to good target efficiency achievement.
ORR3	Firm place important in more competency, knowledge and ability development of employee which will help firm to greatest operation and more target achievement.

Table F1: Original Item in Scales (continued)

Construct	Items
ORR4	Firm engrosses in technology, technique and process development in operation continuously which will help firm can more operation target achievement.
Information Technology Capability (ITC)	
ITC1	Firm believes that the good information technology will take a modern and efficiency operation.
ITC2	Firm place important in information technology investment continuously which will help firm has best efficiency database system.
ITC3	Firm enhance employee to more learning and understanding the information technology system continuously which will help firm can better applied information technology in operation.
ITC4	Firm supports the follow up in advancement and growth up of information technology continuously which will help firm can use data in planning and developing in information technology of better efficiency operation.
Survival Culture (SVC)	
SVC2	Firm believes that the firm culture that engrosses long term operational target will make clearly operation and good consistency with rapid competition.
SVC2	Firm always aware in continuous firm operational innovation will push on firm adaptation to better situation consistency.
SVC3	Firm enhance employee to predication in concrete future situation which will help firm in planning data on better operation.
SVC4	Firm engrosses in firm concrete development which will help firm can successful operation in both present and future.

Table F1: Original Item in Scales (continued)

Construct	Items
Environmental Complexity Force (ECF)	
ECF1	In present day, the business competition is more rapidly course any firm engrosses to adapt and develop themselves continuously for them can better competition.
ECF2	In present day, business competition has more competitor course any firm has engrosses adaptation and development continuously which will help firm has better capability and ability in competition both present and future.
ECF3	The customer has more various need course any firm has adapt and search the new operation continuously for they can response customer need immediately.
ECF4	In present day, it has more modern technology course any firm must study, learning and applied to use that technology in maximum efficiency operation.

Questionnaire to the Ph. D. Dissertation Research
"Effects of Human Resource Development Capability and Firm Success of Auto Parts Businesses in Thailand"

Explanations:

The objective of this research is to investigate "the human resource development capability of auto parts businesses in Thailand". The data will used in analysis of Ph. D. dissertation of branch of management, Accounting and management faculty, Mahasarakham University, Mahasarakham, Thailand.

The researcher may assistance you to answer the questionnaire with consist of 7 sections as below.

Section 1: Personal information about executive of auto parts businesses in Thailand.

Section 2: General information about auto parts businesses in Thailand.

Section 3: Opinion on human resource development of auto parts businesses in Thailand.

Section 4: Opinion on business outcomes of auto parts businesses in Thailand.

Section 5: Opinion on the internal factor that impact on human resource development of auto parts businesses in Thailand.

Section 6: Opinion on the external factor that impact on human resource development of auto parts businesses in Thailand.

Section 7: Recommendations and suggestions regarding human resource development of auto parts businesses in Thailand.

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

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

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

Sincerely yours,

(Aphi Khamphroh)
Ph.D. Candidate
Mahasarakham Business School
Mahasarakham University, Thailand

Contact Info:
Cell phone: 086-645-8939
E-mail: sandacross@gmail.com

Section 1: Personal information about executives of auto parts businesses in Thailand

1. Gender

   □ Male □ Female

2. Age

   □ Less than 30 years old □ 30 – 40 years old
   □ 41 – 50 years old □ More than 50 years old

3. Marital Status

   □ Single □ Married
   □ Divorced

4. Level of education

   □ Bachelor's degree or lower □ Higher than Bachelor's degree

5. Working experiences

   □ Less than 5 years □ 5 – 10 years
   □ 11 – 15 years □ More than 15 years

6. Average revenues per month

   □ Less than 50,000 Baht □ 50,001 – 70,000 Baht
   □ 70,001 – 90,000 Baht □ More than 90,000 Baht

7. Current position

   □ Human resource director □ Human resource manager
   □ Other (Please Specify) .....

Section 2: General information about auto parts businesses in Thailand

1. Business Investment

   □ Domestic Investment □ International Investment

2. Business Type

   □ Company limited □ Partnership

3. Business Ownership

   □ Single unit □ Franchised unit

4. Business Location

   □ Northern Region □ Central Region
   □ Eastern Region □ Southern Region
   □ North-Eastern Region □ Bangkok

5. The period of time in business

   □ Less than 5 years □ 5 – 10 years
   □ 11 – 15 years □ More than 15 years

6. Number of full time employee (Please Specify) .....Employee

7. Operational Capital

   □ Less than 50,000,000 Baht □ 50,000,001 – 75,000,000 Baht
   □ 75,000,001 – 100,000,000 Baht □ More than 100,000,000 Baht

8. Average annual income per year

   □ Less than 50,000,000 Baht □ 50,000,001 – 75,000,000 Baht
   □ 75,000,001 – 100,000,000 Baht □ More than 100,000,000 Baht

9. The employee in the firm have join in labor union of Thailand

   □ Yes □ No

Section 3: Opinion on human resource development of auto parts businesses in Thailand

Human Resource Development Capability	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Employee Competency Analysis					
1. Firm believes that the implementation of systematic employee competency analysis will efficiency enhancement in human resource performance					
2. Firm place important on evaluation, identification and classify the employee ability continuously and it will help firm can maximum efficiency human resource management					
3. Firm push on concrete necessary ability identification in the employee operation which will help firm to can upgrade the planning in human resource development					
4. Firm place important on need evaluation of employee in taken training and developing an ability continuously which will help firm can develop ability and competency of employee properly					
Individual Ability Support					
5. Firm believes that extremely developing in ability limit of employee will more achieve in firm management					
6. Firm place important on extremely budget allocation in human development which will help individual employee can great and concrete ability and competency utilization					
7. Firm supports employee to great and extremely illustrate the ability in entrust work which will help to good achieve the operation goal					
8. Firm enhance employee in taken development and training in title that employee interest continuously which will help to maximum efficiency operation					
Continuous Learning Enhancement					
9. Firm believes that the learning of employee continuously will help employee operation have more efficiency achievement					
10.Firm supports employee in new topic study and understanding in management continuously which help employee to adapt and greater operation under separate situation					
11.Firm push on employee in share the knowledge and experience in working continuously and systemically which will help to can well integrated the knowledge in operation					
12.Firm supports in research and development in merit, mistake, success and failure in the past which will help operation is more efficiency developed					
Strategy-Development Connectivity					
13.Firm believes that strategic human resource development will help firm management can more achieve the competitive advantage over competitor					
14.Firm always aware that human is a valuable resource of the firm which help firm to more efficiency and effectively operation					
15.Firm place important on clearly specify on good characteristic and nature of employee that firm need which will help to more clearly motivation and guideline in human development					

Section 3 (Continued)

Human Resource Development Capability	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
16. Firm emphasize in systematic and concrete planning of human resource development in both present and future which will help firm take employee with quality and better consistency ability on present and future situation					
17. Firm concentrate to use human resource topic and issue to discuss in meeting continuously which will help human resource management to greater achievement					
Innovation Creativity Focus 18. Firm believes that continuously creative thinking employee will help firm to more success operation					
19. Firm enhance employee have continuously creative thinking in new something of operation which will help work management better achieve the goal					
20. Firm supports the continuously operation evaluation of employee that emphasize on creative thinking in operation which will help occur development in operational development of the firm continuously					
21. Firm emphasize the extremely budget allocation for create, research and developing a new something which will help firm operation to more excellent					

Section 4: Opinion on business outcomes of auto parts businesses in Thailand

Business Outcome	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
Employee Commitment 1. Employee of firm has extremely attempt and attention in work operation					
2. Employee of firm has worthiness in firm citizenship and want to stay with firm in long-term					
3. Employee of firm has feel that themselves is a one part of firm and want to see firm successful, grow up and progress forward					
4. Employee of firm has participation in firm successful from exist target					
Operational Development 5. Firm has continuous improve and developing operation continuously from the past to the future					
6. Firm has well appropriately and consistency operation in exist situation					
7. Firm has analyze in several problem that occur in operation and can solve systemically and continuously					
8. Firm has well consistency internal operational management in any exist situation					
Business Productivity 9. Firm has work management that consistency with target perfectly which has appropriately use resource and asset					

Section 4 (Continued)

Business Outcome	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Disagree 1
10. Firm can integrate limit exist resource to maximum benefit to the firm					
11. Firm can utilize transformation from employee or machine for consistency to exist situation					
12. Firm has efficiency production which can reduce wasteful resource using and increase product quality of the firm					
Firm Competitiveness 13. Firm can launch the new product to market continuously					
14. Firm has successfully management and great different from competitor					
15. Firm can good response the customer need					
16. Firm has great latency and competency employee in present and future operation					
Firm Success 17. Firm has a good performance and consistency with target					
18. Firm has increase market share continuously from the past to present					
19. Firm has increase sale revenue continuously when compare from last year					
20. Firm has increase profit continuously from operation which consistency with exist target and objective					
21. Firm has new customer continuously and can keep an old customer					
22. Firm take recognition from customer and stake holder that firm has professional management					

Section 5: Opinion on the internal factor that impact on human resource development of auto parts businesses in Thailand

Internal factor	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Agree 5
Transformational Leadership Orientation 1. Firm believes that engrosses management target for response the business situation change will cause to more efficiency management					
2. Firm emphasis in make operation inspiration to employee continuously which will help employee to best assign work operation					
3. Firm place important on moderate the employee learning and understanding in continuously change which will help to firm operation and achieve the firm target					
4. Firm aware in take care and mentoring in employee operation continuously which will help employee in successful operation to existing target					
Human Capital Policy 5. Firm believes that employee in the firm is valuable asset and has important with the firm which will help firm management achieve the exist target					

Section 5 (Continued)

Internal factor	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Agree 5
6. Firm engrosses to activities investment in human resource continuously which will help firm can more efficiency operation					
7. Firm aware to extreme utilization from knowledge and ability of employee which will help firm operation more successes achievement					
8. Firm supports employee in knowledge and ability development continuously which will help increase efficiency operation					
Organizational Resource Readiness 9. Firm believes that richness and fully of resource will help firm to more efficiency operation					
10. Firm engrosses in budget allocation in fully separate department which help firm to good target efficiency achievement					
11. Firm place important in more competency, knowledge and ability development of employee which will help firm to greatest operation and more target achievement					
12. Firm engrosses in technology, technique and process development in operation continuously which will help firm can more operation target achievement					
Information Technology Capability 13. Firm believes that the good information technology will take a modern and efficiency operation					
14. Firm place important in information technology investment continuously which will help firm has more best efficiency database system					
15. Firm enhance employee to more learning and understanding the information technology system continuously which will help firm can better applied information technology in operation					
16. Firm supports the follow up in advancement and growth up of information technology continuously which will help firm can use data in planning and developing in information technology of better efficiency operation					
Survival Culture 17. Firm believes that the firm culture that engrosses long term operational target will make clearly operation and good consistency with rapid competition					
18. Firm always aware in continuous firm operational innovation will push on firm adaptation to better situation consistency					
19. Firm enhance employee to predication in concrete future situation which will help firm in planning data on better operation					
20. Firm engrosses in firm concrete development which will help firm can successful operation in both present and future					

Section 6: Opinion on the external factor that impact on human resource development of auto parts businesses in Thailand

External factor	Level of Agreement				
	Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly Agree 5
Environmental Complexity Force					
1. In present day, the business competition is more rapidly course any firm engrosses to adapt and develop themselves continuously for them can better competition					
2. In present day, business competition has more competitor course any firm has engrosses adaptation and development continuously which will help firm has better capability and ability in competition both present and future					
3. The customer has more various need course any firm has adapt and search the new operation continuously for they can response customer need immediately					
4. In present day, it has more modern technology course any firm must study, learning and applied to use that technology in maximum efficiency operation					

Section 7: Recommendations and suggestions regarding human resource development of auto parts businesses in Thailand

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

APPENDIX G

Letters to Experts

บันทึกข้อความ

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

ที่ ศธ.0530.10/ **วันที่** 13 มิถุนายน 2560

เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน อาจารย์ ดร.ประทานพร จันทร์อินทร์

ด้วย นายอภิ คำเพราะ นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "ผลกระทบของศักยภาพการพัฒนาทรัพยากรมนุษย์ที่มีต่อความสำเร็จของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์ท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(รองศาสตราจารย์ ดร.สุวรรณ หวังเจริญเดช)
รองคณบดีฝ่ายกิจการนิสิต รักษาการแทน
คณบดีคณะการบัญชีและการจัดการ

บันทึกข้อความ

หน่วยงาน คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม โทรศัพท์ 043-754333-3431 Fax 043- 754422
ที่ ศธ.0530.10/ **วันที่** 23 พฤษภาคม 2560
เรื่อง ขอเรียนเชิญเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัย

เรียน รองศาสตราจารย์ ดร.ปพฤกษ์บารมี อุตสาหะวาณิชกิจ

ด้วย นายอภิ คำเพราะ นิสิตระดับปริญญาเอก หลักสูตรปรัชญาดุษฎีบัณฑิต (ปร.ด.) สาขาวิชาการจัดการ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม กำลังศึกษาวิทยานิพนธ์ เรื่อง "ผลกระทบของศักยภาพการพัฒนาทรัพยากรมนุษย์ที่มีต่อความสำเร็จของธุรกิจชิ้นส่วนยานยนต์ในประเทศไทย" ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปรัชญาดุษฎีบัณฑิต ดังนั้น เพื่อให้การดำเนินการเป็นไปด้วยความเรียบร้อยและบรรลุตามวัตถุประสงค์ คณะการบัญชีและการจัดการ มหาวิทยาลัยมหาสารคาม จึงใคร่ขอความอนุเคราะห์ท่านเป็นผู้เชี่ยวชาญตรวจสอบเครื่องมือวิจัยและข้อเสนอแนะเพื่อนำข้อมูลที่ได้ไปดำเนินการทำวิทยานิพนธ์ต่อไป ตามเอกสารแนบท้าย

จึงเรียนมาเพื่อโปรดพิจารณา

(ผู้ช่วยศาสตราจารย์ ดร.นิติพงษ์ ส่งศรีโรจน์)
คณบดีคณะการบัญชีและการจัดการ

VITA

VITA

NAME	Mr. Aphi Khamphroh
DATE OF BIRTH	October 10, 1981
PLACE OF BIRTH	Khonkaen, Thailand
ADDRESS	214 Kasikorntungsang Road, Sila Sub-District, Muang, District, Khonkaen, Thailand 40000
POSITION	-
PLACE OF WORK	-

EDUCATION

2007	Bachelor of Science Valaya Alongkorn Rajabath University, Platum Tani, Thailand
2012	Master of Business Administration Khonkaen University, Khonkaen, Thailand
2018	Doctor of Philosophy (Management) Mahasarakham University, Mahasarakham, Thailand

RESEARCH

2016	Job Characteristic or Personality More Effect on Job Satisfaction and Behavioral Performance, Moderated by Leader-Member Exchange
2016	Leader-Member Exchange and Service Quality: Evidence from Hotel Businesses in Thailand