

A Study of Factors Affecting to Long-Term Relationship of Outsourcing



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Department of Industrial Engineering

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การศึกษาปัจจัยที่มีผลต่อความสัมพันธ์ในระยะยาวของการว่าจ้างภายนอก



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิศวกรรมศาสตรมหาบัณฑิต

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"การว่าจ้างภายนอก" เป็นสิ่งสำคัญมากสำหรับกลยุทธ์ขององค์กรในการลดต้นทุนและทำให้องค์กรสามารถเพิ่มความเชี่ยวชาญในพื้นที่หลักที่มีอยู่อย่างจำกัด ประเทศไทยเป็นที่รู้จักทั่วโลกในฐานะผู้ให้บริการ การว่าจ้างภายนอกที่สำคัญ การทราบปัจจัยที่มีผลต่อความสัมพันธ์ในระยะยาวของการว่าจ้างภายนอกนั้นเป็นสิ่งจำเป็นสำหรับการดำเนินธุรกิจอย่างต่อเนื่องของผู้ให้บริการ กระบวนการทางธุรกิจในประเทศไทย จากการพัฒนาวัฒนธรรม งานวิจัยนี้เสนอรูปแบบที่ความร่วมมือการควบคุมและการปรับปรุงที่จะส่งผลต่อประสิทธิภาพการทำงานและจากนั้นจะส่งผลต่อความสัมพันธ์ระยะยาวในการว่าจ้างภายนอก การใช้ข้อมูลที่รวบรวมจากแบบสอบถาม 322 ชุดได้ถูกส่งทางอีเมล และ 200 ชุดถูกส่งไปยังเจ้าหน้าที่ส่วนบุคคลเพื่อทดสอบสมมติฐาน ตั้งแต่วันที่ 1 มิถุนายน 2562 ถึงวันที่ 31 สิงหาคม 2562 ผลการสำรวจ พบว่ามีผู้ตอบแบบสอบถามจำนวน 219 คน (คิดเป็นร้อยละ 41.95) เพื่อทดสอบสมมติฐาน งานวิจัยนี้ใช้วิธีกำลังสองน้อยที่สุดบางส่วน (Partial Least squares: PLS) - วิธีการสร้างแบบจำลองโครงสร้างสมการความแปรปรวน (Structural Equation Modeling: SEM) ผลการศึกษาพบว่า ความร่วมมือมีผลในเชิงบวกต่อการควบคุม นอกจากนี้ความร่วมมือและการปรับปรุงมีผลในเชิงบวกต่อประสิทธิภาพ และประสิทธิภาพยังมีผลเชิงบวกต่อความสัมพันธ์ระยะยาวในการว่าจ้างภายนอก การศึกษาครั้งนี้สามารถให้คำแนะนำบางอย่างกับผู้ให้บริการการว่าจ้างในประเทศไทยเพื่อรักษาหรือขยายความสัมพันธ์กับผู้ให้บริการหรือลูกค้าปัจจุบันของพวกเขา

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"Outsourcing" is very important for the organization's strategy to seek to reduce costs and specialize in a limited number of core areas. Thailand is known worldwide as a key outsourcing service provider. To know the factors affecting long-term relationship outsourcing are essential for the business continuities of Business Process Outsourcing (BPO) providers in Thailand. Based on the literature review, this research proposes a model that cooperation, control, and improvement will affect performance and then further affects outsourcing long-term relationship. Using a data set collected from 322 questionnaire surveys through e-mails, and 200 sent to personal to test proposed hypotheses from June 1, 2019, to August 31, 2019. As a result, 219 respondents were used for data analysis (41.95 percent). To confirm hypotheses, this study uses Partial Least Squares (PLS) – a variance-based Structural Equation Modeling (SEM) approach. The results showed that, cooperation has a positive effect on the control. Moreover, cooperation and improvement have positive effects on the performance and performance has a positive effect on outsourcing long-term relationships. This study provides some suggestions to outsourcing suppliers in Thailand to maintain and to extend their outsourcing relationships with their current customers.

Field of Study: Industrial Engineering

Student's Signature

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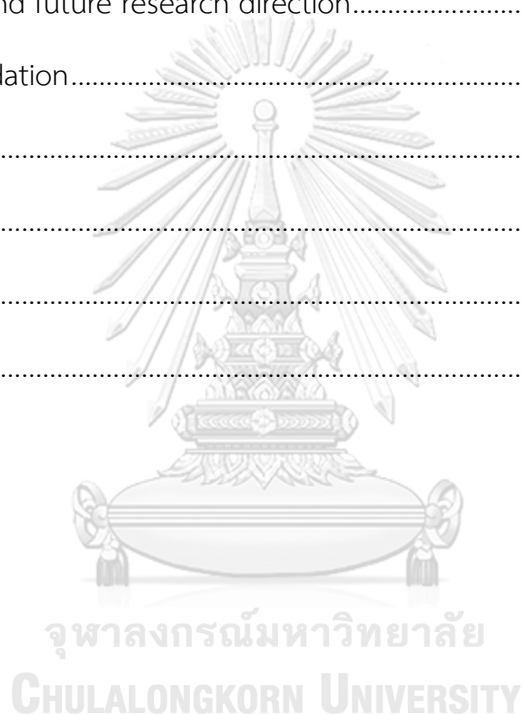
Thitiporn Katato

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Glossary

No.	Words	Definition	Sources
1.	Business Process Outsourcing (BPO)	A process within your organization to outside companies perform instead	(Bharadwaj, Saxena, & Halemane, 2010)
2.	Commitment	The extent to which a firm has a desire to continue a relationship	(Chou, Techatassanasoontorn, & Hung, 2015)
3.	Contractual governance	Contract supervision	(Rai, Keil, Hornyak, & Wüllenweber, 2014)
4.	Endogenous variables	Internal variables	(Cooke & Sellbom, 2019)
5.	Exogenous variables	External variables	(Cooke & Sellbom, 2019)
6.	Information Technology Outsourcing (ITO)	The external agencies manage and treat the part of information technology.	(Lacity & Hirschheim, 1995)
7.	Inner model	The relationships between the independent and dependent latent variables	(Wong, 2013)
8.	Innovation	Ability to apply knowledge, creativity, skills and experience in management	(Lacity, Khan, Yan, & Willcocks, 2010; Lacity, Stan, Yan, & Willcocks, 2011)
9.	Latent variables	Factors in model	(Hair et al. 2013; Nunnally and Bernstein, 1994)

No.	Words	Definition	Sources
10.	Measurement Model	The model that specifies the relationship between latent variables and observed variables.	(Cooke & Sellbom, 2019)
11.	Observed variables	Questions (items) to measure factors correlation	(Hair et al. 2013; Nunnally and Bernstein, 1994)
12.	Outer model	The relationships between the latent variables and their observed indicators.	(Wong, 2013)
13.	Performance	The results from the process	(Deepen, Goldsby, & Knemeyer, 2008)
14.	Relational governance	Cooperate supervision.	(Rai et al., 2014)
15.	Structural Model	The relationship between latent variables	(Cooke & Sellbom, 2019)

Chapter 1 Introduction

This chapter discusses about statement of the problems also detail of objectives, expected outcome, scope, research schedule and research timeline.

1.1 Statement of the problems

It is generally accepted that in the current environment, business competition is quite high. There are four main perspectives that most businesses are interested in: innovation, speed, quality, and cost. From A.T.Kearney 2016 Global Property Index, almost every business is familiar with the cost. Because most of the businesses are still markets that focus on mass production. As a result, the high cost of the business is also high (Sethi & Gott, 2016). Therefore, outsourcing has become a strategic essential of organization in order to reduce costs and focus on a limited number of core areas (Gerbl, McIvor, Loane, & Humphreys, 2015).

Outsourcing has become one of the most popular and important operating strategies in recent years, which makes The company can focus on strengths and reduce capital costs. (Kakabadse & Kakabadse, 2005). At the same time, outsourcing can respond to changes in the market or the needs of customers in an uncertain global market and increase the efficiency of the organization (Bustinza, Arias-Aranda, & Gutierrez-Gutierrez, 2010). As shown in Table I, there is difference in percent of each factor that motivates IT outsourcing in the U.S and the U.K (Suzuki, 2005).

Table 1 Factors motivated outsourcing in UK AND US.

Benefit	US (%)	UK (%)
Cost reduction	40	64
Improved flexibility	46	36
Better quality service	40	39
Access to main skills	43	36
Improved business flexibility	26	36
Focus on core business	29	34
Access to new knowledge	26	16

Note. Adopted from “Globalization and IT Outsourcing: The Case of Japanese Banks”, by S. Toshio (2005), *USJP Occasional*, pp. 5-12.

On the other hand, it is said about the impact of outsourcing on innovation-related topics. Outsourcing can be an opportunity to increase external expertise and support the learning process between companies. Some researchers consider business processes that have long-term contracts that may reduce innovation rates or a loss of innovation and ability of clients. The key of outsourcing is to maintain long-term relationships with current service providers.

Basic innovation is recognized as one source of competitive advantage in the rapidly changing industry. To be ready for market forces and changing consumer tastes all the time, companies need innovation by developing both internal and external knowledge. Although innovations have been explored and popular in business for decades, it is still a relatively new topic in the context of outsourcing. (Oshri & Kotlarsky, 2011).

Figure 1 from A.T. Kearney Global Services Location Index 2017 shows that the problem for the Thailand down from Rank 6 to Rank 8 for Offshoring Business Process Outsourcing (BPO) and IT Outsourcing (ITO). For 2017 year's index, Thailand fallen to second place which has been specified in previous years index that failure in industrial development and IT services are the main reason and most of these problems cannot be solved such as, early contract termination, ineffective operation (Sethi & Gott, 2017). However, the lack of clear evidence about the differences of the previous study. From the above reasons, there should be a study of the company that was committed by the important point to focus on the factors that affect the outsourcing long-term relationship. The major reason for the outsourcing challenges is issues related to managing the outsourcing relationship (Ishizaka & Blakiston 2012).

From the above reasons, the organization should be a study of the company that was hired by the important point to focus on the factors that affect the BPO contract duration.

While outsourcing has increased, organizations need to have management relationships for outsourcing in the long-term. It's also said that organizations require a strategy for managing relationships. Therefore, we have identified several important factors from an important theoretical perspective that may affect the long-term relationship of outsourcing (G. Lee, Shin, Hwang, Kuper, & Kang, 2018).

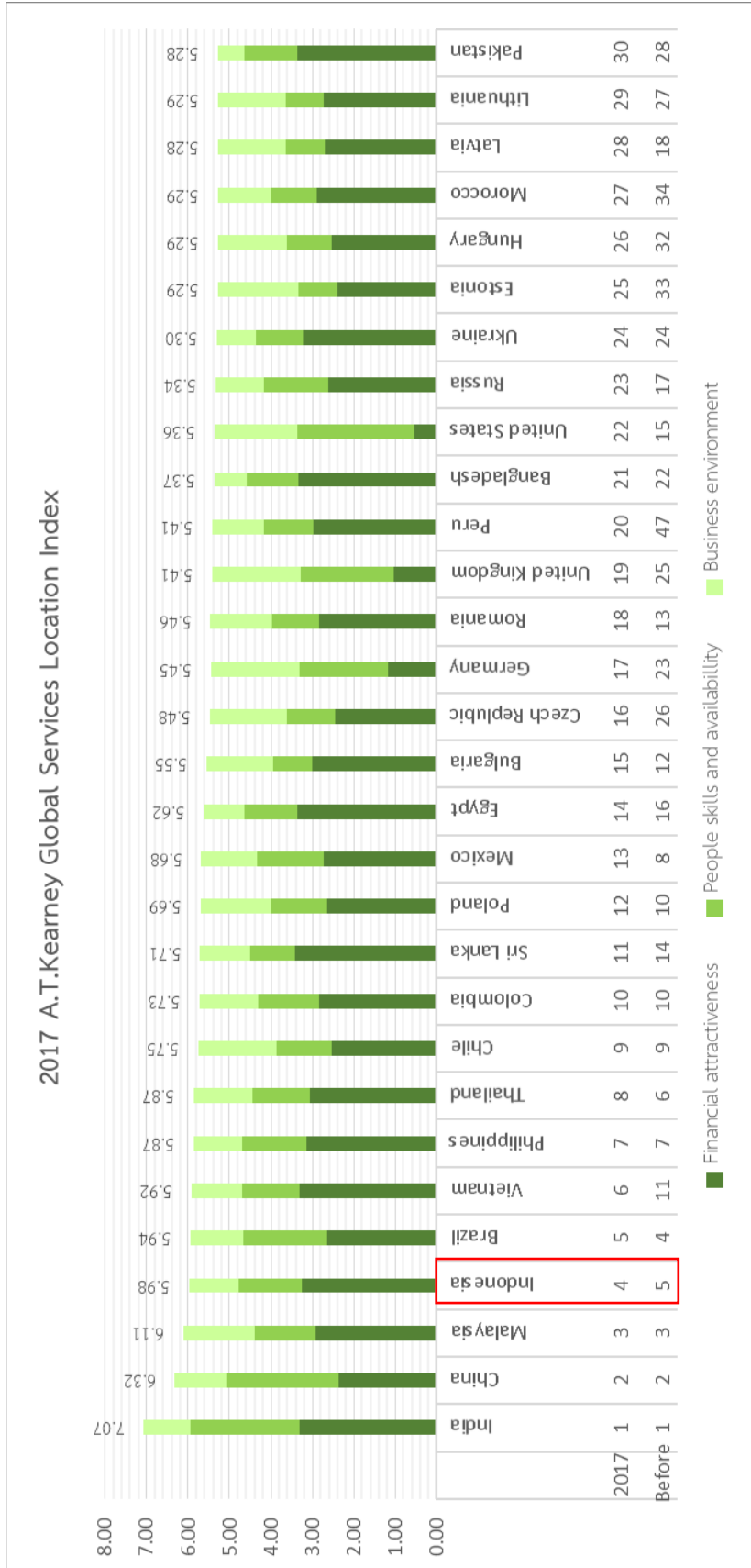


Figure 1 2017 year's index

Adapted from Global offshoring BPO and ITO. (Sethi & Gott, 2017)

1.2 Objectives

1. To identify factors, leading to positive effects to outsourcing long-term relationship from the supplier-customer relationship perspective.
2. To determine the relationship between the identified factors.

1.3 Expected outcome

1. Received factors that hypothesis tested, showed there have a positive effect on outsourcing long-term relationship.

1.4 Expected benefit

1. To provide important suggestions for outsourcing suppliers in Thailand to maintain or to extend their outsourcing relationships with their current customers.
2. To provide important suggestions for organization in Thailand or oversea to maintain or to extend their outsourcing relationships with their current outsourcing suppliers.
3. To provide some suggestions for other researchers to study factors, additional factors that are suitable for any outsourcing situation.

1.5 Scope

This study takes a public and private organizations, companies, factories in Thailand, that have a business registration which are using outsourced, ignoring the principle of selection and the criteria selection of outsourcing.

1.6 Research Schedule

Step of research 8 steps are

1. Review theories and related literature
2. Sdevelopment research proposes and research hypotheses
3. Review related statistics
4. Questionnaire development

5. Pilot test
6. Questionnaire survey
7. Data collection
8. Data analysis and data interpretation
9. Data summary
10. Reporting the findings

1.7 Research timeline

In this research, we start with review theories and related literature. The second step is set a research proposes and research hypotheses, at the same time, we study research methodology. And after we set a research proposed and research hypotheses, we explore factors and define each factor, finally for factors we create research model and hypotheses. In the next step is develop the questionnaire. After that the step of language comparison by language expert and Pilot test by the participants were 30 company's employees. Then, we improved questionnaire before send to respondents. And the last step for proposal timeline is collect data answering questions since 1 June, 2019. For the future plan, after getting the data we will analyze the data and summary. And the last step about data are discussion and conclusion (see Figure 2).

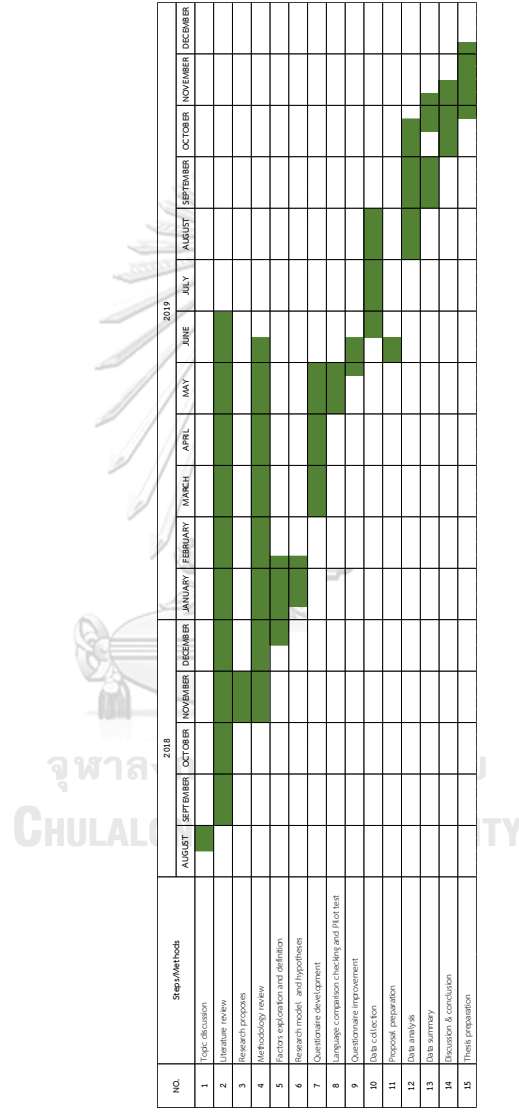


Figure 2 Research timeline.

Chapter 2 Literature Review

Research journal articles published and indexed by ScienceDirect database is the target. The related domain and keywords, such as BPO, contract duration, innovation, will be used to gather the literature. Based on systematic review procedure, this study is expected to summarize the factor, leading to positive effects to BPO contract duration from the supplier-customer relationship perspective.

In this chapter, we discuss about the theories and related researches. The theories consist of 1.) Outsourcing outcome and Business Process Outsourcing (BPO) long-term relationship 2.) Key perspective in Information Technology Outsourcing (ITO) 3.) Internal Control Systems in Outsourced Project and 4.) Innovation in BPO Relationships.

2.1 Theories

2.1.1 Outsourcing outcome and Business Process Outsourcing (BPO) long-term relationship

BPO means assigning at least one non-core process to a third party to manage the process to achieve the objectives of the client company, as well as to spread responsibility and risk (Bharadwaj et al., 2010; Lacity et al., 2010; Mani et al., 2010).

ITO is the “assigning third-party vendors to supply IT products and services, which previously was carried out within the organization” (Lacity & Hirschheim, 1995, p.363). ITO provides many services, including IT development (hardware and operating systems), application development, etc.

First of all, the organization has to manage whether to do activities themselves within the company or commit an outsourcing. We have a sample framework that helps organizations make decisions. So, organization need to weight

these factors to find best option for ITO decision making (Morgan, 2006). As shown in **Figure 3**.

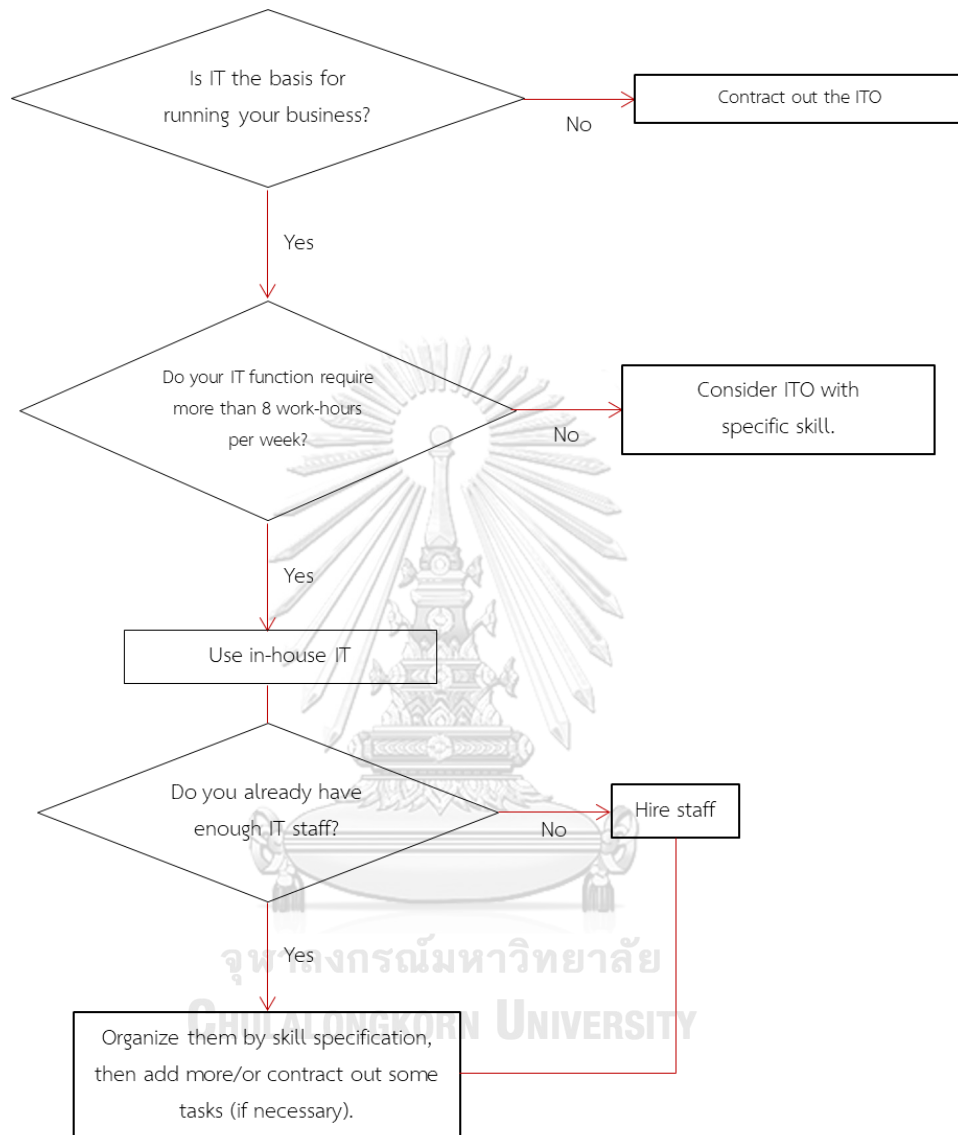


Figure 3 Framework to ITO decision making.

The next step, after organization decided to outsource, they need to evaluate the results of the work of outsourcing. We will describe in topic a.) outsourcing outcome and b.) Business Process Outsourcing (BPO) long-term relationship

a.) Outsourcing outcome

Outsourcing decision and outsourcing outcome are the main point in outsourcing research (Anandasivam, Mukhopadhyay, & Krishnan, 2002; Lacity et al., 2010; J.-N. Lee & Kim, 1999). There are a number of ways to measure outsourcing outcome; the client's general perceptions of the success, relationship quality, project or business performance.

Table 2 Outsourcing outcomes classification.

No.	Details	Source
1	Classify outsourcing outcome into three categories; performance, relationship quality and capability	(Lacity et al., 2010)
2	The benefits of measurement outsourcing are more varied and include the performance improvements of the client, reliability of the partnership and interpersonal governance, active sharing of knowledge, trust, engagement, flexibility and cooperation between client and provider.	(Lacity et al., 2011)

From **Table 1**, (Lacity et al., 2010; Lacity et al., 2011) showed that in the past the outsourcing project focused primarily on cost savings before outsourcing be complex and innovation-oriented. Including changes in business processes that are increasingly affect outsourcing outcome is more various. Some researcher (Bharadwaj et al., 2010; Goo, Kishore, Raghav Rao, & Nam, 2009; Lacity et al., 2011; Oshri, Van Fenema, & Kotlarsky, 2008) do not interesting about transaction features but considering the importance of relationships and partnerships in outsourcing. According with other research (Goo et al., 2009), the success of the BPO depends on the level of cooperation between partner and the not stable relationship can lead to high financial costs. Including disruption in operations and the loss of business opportunities as well.

b.) Business Process Outsourcing (BPO) long-term relationship

This study uses long-term relationship to measure the performance of BPO projects. There are three aspects to measure success of outsourcing: outsourced processes/operations performance, objective realizations, and long-term relationship (Dibbern, Goles, Hirschheim, & Jayatilaka, 2004). By comparing with the other two aspects, absolutely, long-term relationship is a well-defined, simple, and significant measure of success (Leiblein, Reuer, & Dalsace, 2002; Rai et al., 2014). Some articles (Mani , Barua , & Whinston 2010) denote an important determinant of long-term actions.

This study adopts the BPO's proposed long-term relationship evaluation (Rai et al., 2014), which includes overall outsourcing efficiency, realized outsourcing goals situation (including service quality and cost), and continued commitment outsourcing to understand satisfaction.

2.1.2 Key perspective in Information Technology Outsourcing (ITO)

Key insights in ITO have 3 perspective; strategic perspective, economic perspective, and social perspective

a.) Strategic Perspective of ITO

A strategic perspective of ITO used to describe how and why the company has been determined and implemented strategies for competitive advantages (Weick & Quinn, 1999). In the research of (Barney, 1996), a resource-based theory showed the company's competitive advantage is IT capability that cannot be imitated. For this reason, the IT capabilities of a company must be precious, and hard to imitate or substitute. With the characteristics of strategic capabilities, the researcher has shown that possible to imitate or substitute IT products/services because there are still vendors who want to produce products at a low cost due to the economy of scale.

That is why they need to pay more attention to standards rather than differences or uniqueness. Moreover, based on study (Huber, 1991), the Organizational Learning Theory suggested that IT capability is necessary to continuous learning about the differences in IT products/services. Other researchers (Cohen & Levinthal, 1990) believed that the learning of clients from the ITO contract would not be effective, unless that specific method were being managed to support learning and maintain knowledge. Therefore, with or without client learning, there may be a certain direction of satisfaction with the relationship for the benefit of competition and dependence on a developed vendor in the future. The vendor development will affect the duration of the relationship (Pfeffer & Salancik, 2003). If an organization cannot be self-reliant, it must have a dependence on external resources, and it needs better management. In conclusion, organization outsourcing strategy depends on the level of activity that focuses on, including implementation of control activities process between organization to value-added.

b.) Economic Perspective of ITO

The ability to follow strategies and the control of economic transactions between companies is based on the Theory of Transaction Cost Economics (TCE) and Agent Theory.

The research (Williamson, 1989) defined “transaction” as the transmission or negotiate of goods or services between organizations. A transaction refers to the administration, negotiation, monitoring, and enforcement costs. Transaction costs are divided into two steps: the first one is before-contract costs which include the third-party exploration costs and contract costs (i.e., negotiation and contract drafting) and the last one is after-contract costs, which includes monitoring/application costs, adjustment costs, bond (i.e., costs for vendor to work comply with contractual obligations) and dissolution costs (i.e., costs of contract termination). The frequency of the transactions, the uncertainty included in those transactions, and the specificity of the assets of the

transaction. These three aspects are developed into TCE establishes appropriate regulatory guidelines for outsourcing (Williamson, 1979).

The Agency Theory developed by Jensen and Meckling (Jensen & Meckling, 1976) describes the corporate governance mechanisms supported by human behavior and organizations that predict management motivation for misconduct, such as creative accounting for transfer economic benefits. This theory assumes that business owners are not able to manage a business alone and have to assign someone else to manage the business. This theory demonstrates the relationship between departments that occur between two parties. The principle is the delegated person and the representative is the delegated individual. As long as the representative decides to invest in order to get the most return, the company will receive the maximum benefit for the shareholders. The relationship between shareholders and executives is considered effective. However, when the interests and objectives of shareholders and executives are inconsistent, agency problems arise.

This theory shows the relationship that occurs between two parties between agents. In other words, the person delegating authority is a principal and the agent is the person assigned authority to. So long as the agent takes an investment decision to reap the highest return, it is completely consistent with the way that investors receive the highest value.

c.) Social Perspective of ITO

The nature of social relationships is based on the concept of supported organizational relationships with social organizations or blocked the flow of knowledge and organizational learning. Examination in the context of social interactions that help companies cope with resource shortages while meeting their goals of reducing vulnerabilities and uncertainty and independence (Adler & Kwon, 2002; Kale, Singh, & Perlmutter, 2000; Nahapiet & Ghoshal, 1998).

The necessity to acquire valuable knowledge and effective means to increase the understanding and have to understand deeply the learning of organization learning from a social perspective and combining existing knowledge with the ever-changing business environment (i.e., dynamic business environment). Previous research on the factors of outsourcing outcome in ITO and BPO as shown in **Table 3**.

2.1.3 Internal Control Systems in Outsourced Project

Controlling the relationship in outsourcing means that the client company is used to control the actions of the vendor company in order to achieve the desired goal (Choudhury & Sabherwal, 2003; Tiwana & Keil, 2010). In some situations, formal control system constructs working to control and shows more transparency which may affect relationships and control strengthening between organizations. A useful initiative concept for studying internal control in outsourcing relationship is to consider what a single internal control company has been conceptualized.

Control systems are categorized in various ways: formal control compared to process control and outcome control. Mechanisms working with organic controls, etc. Control systems consist of formal controls, clearly designed, including informal or societal control. Within the formal controls, (Ouchi, 1979) and (Eisenhardt, 1985) distinguished between controlling results and controlling behavior. Controlling results will be the measurement and monitoring of the results of operations or behavior. Behavior control such as regulation and standard operating procedures, identify and check the behavior of people. As mentioned by Ouchi (1979), controlling results are said to be appropriate in situations that can be measured at high levels and the ability to program low workloads. While behavior control is suitable for situations of low ability to measure values in cases. As the potentiality to measure results and programmability is high, either behavior control or outcome control may be used.

Process control and behavior control are the two perspectives of formal controls; process control and behavioral control are used by customers to assess the

effectiveness of the vendor following the methods and procedures specified by the vendor (Henderson & Lee 1992; Tiwana & Keil, 2007). Outcome control by the client to evaluate the effectiveness of the vendor to the extent that the final goal and achieve the desired goal, regardless of process control (Kirsch, Sambamurthy, Ko, & Purvis 2002). Process control describes how to achieve the desired results, while the outcome control will explain about what to do in an external project.

There is research that shows a decisive relationship between formal controls and performance (Tiwana, 2008). There are still researches discovered the conflicts about the capability of process control and outcome control in external outsourcing projects (Henderson & Lee 1992; Tiwana & Keil, 2007). Therefore, more evidence is needed in order to be aware of process controls and outcome controls that affect the performance of third parties. For example, it was argued by Tiwana (2008) that the outcome control has a positively effect on performance of the outsourcing project. Due to the hardness of using process control. Respectively, results of outcome control may be better and more reliable than process control in external outsourcing projects.

The positive relationship between structured control and quality is well established and recognized (Keil, Rai, & Liu, 2017; Rustagi, 2004). Contrary results on the efficacy of process and outcome controls in outsourced projects have been obtained, however (Gopal & Gosain, 2010; Tiwana, 2008; Tiwana & Keil, 2010).

The positive relationship between structured command and performance has been well established and recognized. Contrary results on the efficacy of process and outcome controls in outsourced projects have been obtained, however (Gopal & Gosain, 2010; Tiwana, 2008; Tiwana & Keil, 2010)

Therefore, to understand how outsourcing performance is affected by process and outcome controls, more empirical evidence is required. While both system and

outcome controls are used in outsourced project management, previous studies suggest the varying efficacy of these two control types.

For example, (Tiwana & Keil, 2010) argued that outsourced project output was positively influenced by outcome control but was insignificantly influenced by process control due to the difficulty of outsourced process control implementation project. As a consequence, the effect of outcome management success may be greater than that of outsourced process control of the task.

2.1.4 Innovation in BPO Relationships

a.) Type of Innovation

(Trott, 2008) summarized 7 types of innovation

1.) **Product Innovation** develops new products and improving products to be more efficient, such as mobile phones, cars, with new innovations that makes the product better and can achieve the needs of customers more

2.) **Process Innovation** develops a new operational process for maximum efficiency, such as a new process that can better meet the needs of customers and can still manage inventory more efficiently.

3.) **Organizational Innovation** is a reorganization of processes such as new department operations, changing the internal communication system for efficiency and adjusting the process of accounting operations organization-related innovations enable the organization to operate efficiently. Resulting in all those involved (Stakeholders) are more satisfied.

4.) **Management Innovation** refers to the creation of a new management approach for the organization to increase the efficiency of work performance, such as the introduction of Total Quality Management in the quality control of operations.

5.) **Production Innovation** is a creation of production systems for maximum efficiency and low cost such as Quality circles, Just in Time (JIT)

6.) **Marketing/Commercial Innovation** is a method that makes new financial terms, new selling method such as sold without going through the middleman and electronic commerce.

7.) **Service Innovation** creates new services such as financial services using internet communication technology which the bank has used, called e-Banking.

b.) **In the context of ITO and BPO**, innovation as an independent or dependent variable has been studied. Studies have analyzed creativity as a catalyst or engine for outsourcing decisions to a limited extent as an independent variable. Studies have explored the effects of innovation as a dependent variable, i.e. the influence of outsourcing on innovation. (Lacity et al., 2010; Lacity et al., 2011).

2.2 Related Studies

2.2.1 Prior research on determinants of outsourcing outcomes in ITO and BPO literature

This part has a summary from (Chou et al., 2015) about the key determinants of outsourcing outcomes in the ITO and BPO literatures. As shown in **Table 3**.

2.2.2 The effects of process and outcome controls on business process outsourcing performance

As shown in **figure 4** (Liu, Wang, & Huang, 2017) on the impact of control on performance, vendor and company resource risks have rarely been integrated into the relationship between control and efficiency. Using combined quantitative data from 234 ventures outsourcing business processes that were empirically used to test hypotheses.

From **Figure 4**, studied about the effect of control on performance, vendor and client capability risks have rarely been merged into the control–performance relationship. Using paired quantitative data collected from 234 business process outsourcing projects, which were used empirically to test hypotheses. The hypotheses were tested by conducting hierarchical regression analysis with ordinary least squares. The result shows that process management is less efficient than outcome control, although both have a positive impact on outsourced project efficiency. And in the case of risk of vendor capacity; high risk of vendor capacity, the impact on quality of process control is strong. By comparison, the impact on quality of outcome control is small.

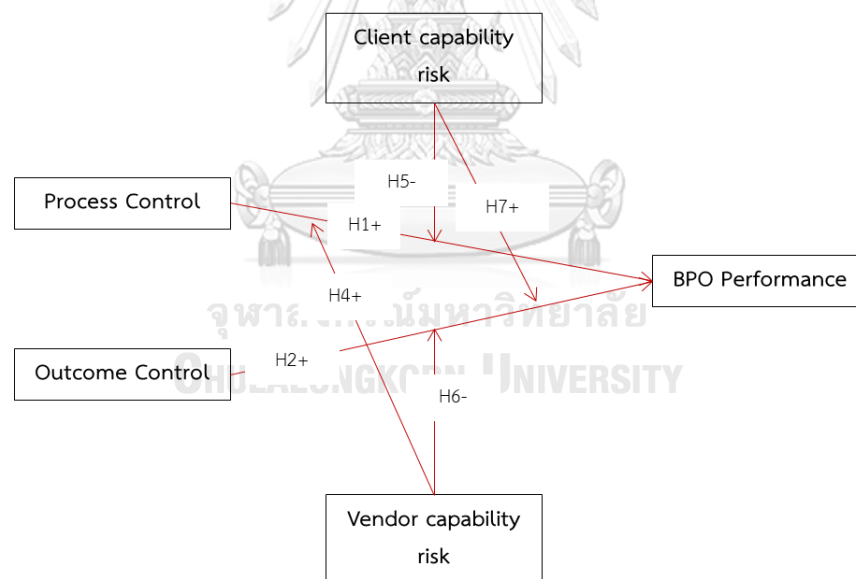


Figure 4 Previous research model about the effect of control on BPO performance.

Note. Adopted from “Effects of process and outcome controls on business process outsourcing performance: Moderating roles of vendor and client capability risks”, by S. Liu, L. Wang, W. Huang, (2017). *European Journal of Operational Research*, pp. 1115–1128.

Table 3 Literature review about the key characteristic of outsourcing outcomes in the ITO and BPO.

	Outcome orientation	Variables from	Variables from BPO research	Key findings	Sources
1	Performance: Contractual governance	Contract size; control mechanism; contract type.	Control mechanisms.	Both BPO and ITO outcomes are influenced by an elaboration in contract.	(Gefen, Wyss, & Lichtenstein, 2008; Gewald & Gellrich, 2007; Poppo & Zenger, 2002)
2	Performance: Transaction and organizational characteristics	Transaction attributes (uncertainty, measurement difficulty); Decision characteristics (top management commitment, evaluation process of outsourcing decisions); Client firm characteristics (Client experience)	Similar variables.	BPO literature reports no significant influence of transaction attributes, decision characteristics, or client characteristics on outsourcing outcomes.	(Baldwin, Irani, & Love, 2001; Goo et al., 2009; Mani et al., 2010)
3	Relationship quality: Relational governance	Trust; prior client/supplier working relationship; relationship quality	Relationship specific investments;	Both the BPO and ITO literature identify three key factors related to relational governance: communication, effective knowledge sharing, and a partnership view.	(Jay B Barney, 1999; Hart & Saunders, 1997; Oshri, Kotlarsky, & P. Willcocks, 2002)
4	Capability: Client firm	Client's technical and methodological maturity; capability; client's ability to understand and adapt to cultural differences; client's ability to mitigate risks.	Client's ability to manage the business process in-house	Both BPO and ITO literature show that the client's ability to manage suppliers affects business process in-house	(Anandavaram et al., 2002; Ranganathan & Balaji, 2007; Smith & McKeen, 2000)
5	Capability: Service provider firm	Service provider's technical and methodological capability; supplier's domain understanding.	Similar variables.	A service provider's human resource management capability has been found to be a key determinant of outsourcing outcomes in both BPO and ITO. BPO research has not examined the influence of a service provider's domain understanding on BPO outcomes.	(Clark Jr, Zmud, & McCray, 1995; Kline, 2010; Levina & Ross, 2003)

2.2.3 Business Process Outsourcing and Dynamic Innovation

Research conducted in 2011 and 2012 (Lacity & Willcocks, 2014) comprises 202 survey responses and 48 in-depth interviews with 24 client organizations. The question is answered: how do consumers and BPO service providers work together to foster competitive innovation? Consequently, the most effective opportunities for innovation are mandatory performance goals and project-level value sharing. Competition challenges and unique market governance systems can have a positive effect on innovation. Innovation funds, gain-sharing at the partnership stage, known as "pain-sharing" and benchmarking, are considered to be the least successful active opportunities for innovation.

(Lacity et al., 2010) reviewed 164 empirical ITO articles published in 50 newspapers between 1992 and 2010, and reviewed 87 empirical BPO articles published in 67 articles between 1996 and 2011. Academic research investigating outsourcing drivers found that clients mainly outsource IT and business process services for operational reasons – to reduce costs, improve process performance, access skills, increase scalability and/or speed delivery. In addition, economic manipulation has been analyzed twice in relation to the outsourcing decision (Anthony, DiRomualdo, & Gurbaxani, 1998), exposure to global markets has been explored five times (e.g. (Georgia, Geoffrey, & Dubravka, 2009; Rao, Poole, Raven, & Lockwood, 2006; Sobol & Apte, 1995) and creativity has been investigated three times as an outsourcing motive.

Chapter 3 Research Design and Methodology

This chapter consists of study process, proposed research model, questionnaire survey, and hypotheses testing: Partial Least Squares Based Structural Equation Modeling (PLS-SEM)

3.1 Study Process

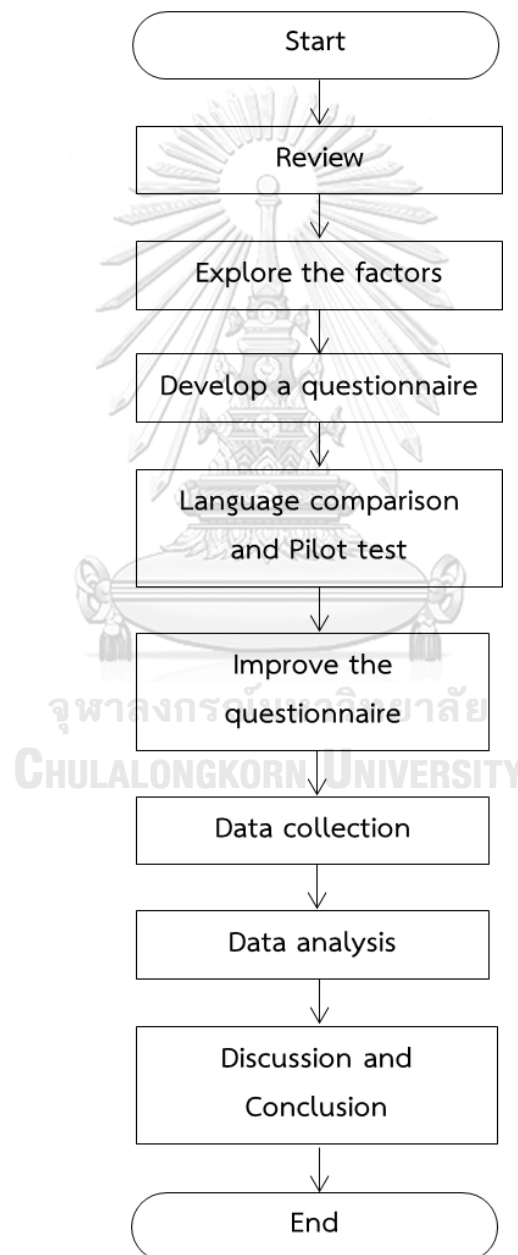


Figure 5 Study process flow diagram.

3.2 Proposed Research model

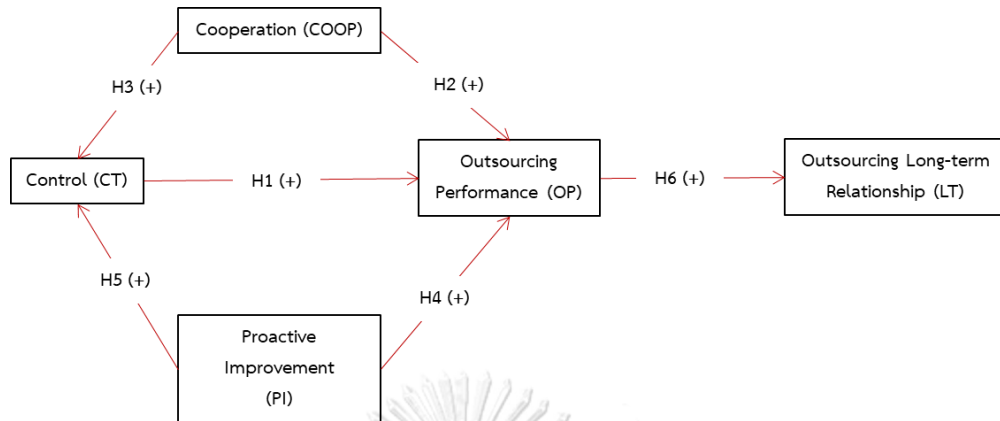


Figure 6 Proposed research model.

3.2.1 Explanatory factors and hypotheses

Despite have many researchers study these five factors in outsourcing research before, lack of testing some of hypothesis of each factors. In addition, in this study focus on contract duration, so we think these factors are interesting.

In this part, this study explain each factor, differences and gap from previous research.

1.) **Control** refers to the mechanisms controlling the service provider's behavior in a manner which fosters the customer's interests (Tiwana, 2008); two forms of mechanisms: (a) outcome control, explain what should be achieved in outsourced projects (Kirsch et al., 2002). In the same way, by analyzing the results obtained, consumers can provide input for corrections effectively (Love & Josephson, 2004).

However, this study expect both types of formal control mechanisms to enhance outsourcing performance.

H1: Control exerts a positive effect on the performance of outsourcing projects.

2.) Cooperation. The concept of cooperation has been widely discussed in the literature on customer-supplier relationships (Anderson & Narus, 1990; Frazier & Summers, 1984; Lisa M. Ellram & Hendrick, 1995). Following (Anderson & Narus, 1990), cooperation can be defined “as the formal as well as informal sharing of meaningful and timely information between firms. Cooperation involves action such as goal setting, teamwork, and establishing unity of purpose. Working together. Help each other willingness to work as accomplished as well (Larson & Kulchitsky, 1999). Also (Goldsby, Knemeyer, Miller, & Wallenburg, 2013) demonstrated that communication influences logistics outsourcing performance.

H2: Cooperation positively affects the outsourcing performance *directly*.

Previous studies (Deepen et al., 2008; Goldsby et al., 2013) are lack of evidence that cooperation will enhance the positive impact of control on the performance of BPO projects. However, this study think cooperation will support control so in this research this research decided to set **H3** to fill the gap.

H3: Cooperation will enhance the positive impact of control on the outsourcing performance.

3.) Proactive Improvement is defined by (Rogers, 1995, p.55) as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption. Consistent with (Engelbrecht, 2004), who shows its strong effect on logistics

goal achievement, proactive improvement will focus on the extent and intensity of the activities employed by Logistics Service Provider's aimed at achieving innovative improvements to their customers' logistics activities. These innovations will in turn, influence the perceived performance of the logistics outsourcing relationship. Including to developing a new operational process for maximum efficiency (Trott, 2008)

H4: Proactive Improvement positively affects the outsourcing performance *directly*.

Previous study (Deepen et al., 2008; Goldsby et al., 2013) lack of evidence that cooperation will enhance the positive impact of control on the performance of BPO projects. However, this study think proactive improvement will support control so in this research decided to set **H5** to fill the gap.

H5: Proactive Improvement will enhance the positive impact of control on the outsourcing performance.

4.) Outsourcing Performance is referring to clients' perception of outsourcing performance, such as reliability, relevancy, timeliness, accuracy, currency, completeness of information including to overall satisfaction (J.-N. Lee & Kim, 1999). About logistics research (Theodore Stank et al., 2003) propose a three-dimensional conceptualization that incorporates the areas of operational performance, relational performance, and cost performance.

In this research, this study think that effective outsourcing leads to long-term outsourcing long-term relationship.

H6: There is a positive relationship between the outsourcing performance and outsourcing long-term relationship.

5.) Long-term Relationship is the extent to which a firm has a desire to continue a relationship and confidence on the stability of a relationship due to positive affect toward the partner.

3.2.2 Control variables

Certain situational factors may also impact the duration of relationships with outsourcing. Among the most important are the scale and form of outsourced activities. Larger organizations are more likely to engage in long-term contracts and have enough resources and power to promote structures to control higher levels of outsourced operations and properties.

According to the reasons mentioned above, this study set a size of company and size of outsourcing are control variables as same as (Goo et al., 2007; Leiblein et al., 2002) studies (**Figure 7 and Figure 8**).

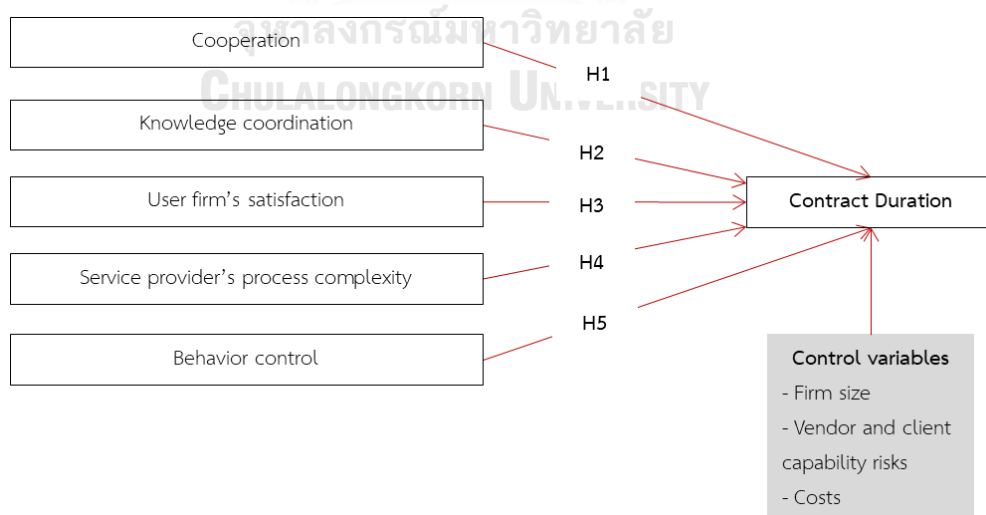


Figure 7 The previous research model with a control variable (1).

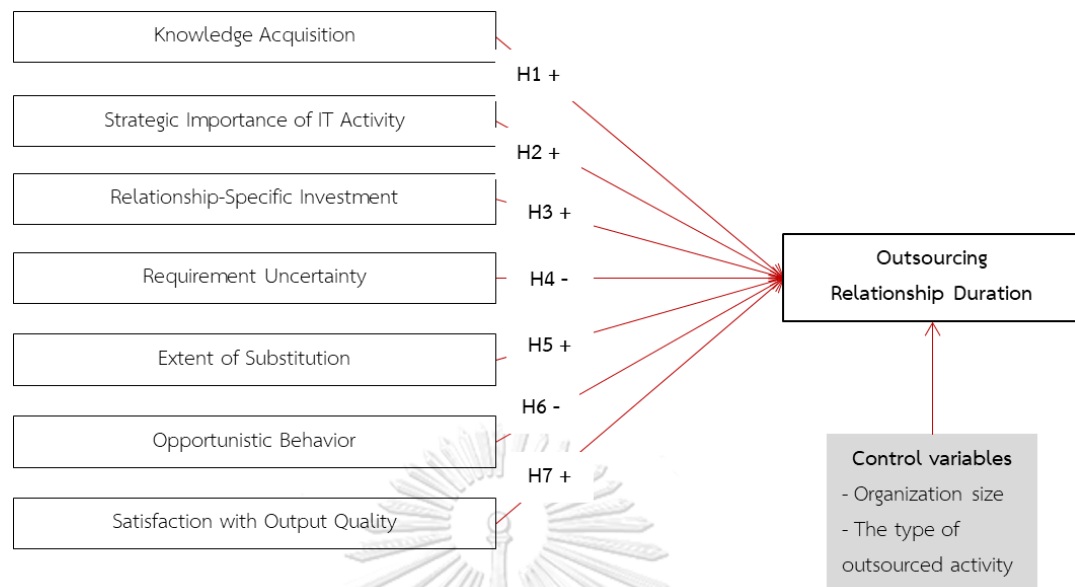


Figure 8 The previous research model with a control variable (2).

3.3 Questionnaire survey

The questionnaire has six sections, starting with demographics profile, about outsourcing, an outsourced activity, question related 5 factors that adapted from literature (Deepen et al., 2008; Liu et al., 2017). In addition, due to the necessity of understanding the additional items were added. They are 4.1.4 The company placed significant weight upon project completion within budget., 4.2.7 The outsourcing shows a high level of innovation.,

4.2.8 The cooperation with outsource makes easier work control.,

4.2.9 Proactive Improvement supports outsourcing work control.,

4.3.9 The outsourcing never got a legal problem during working together.,

4.3.10 The outsourcing helps your company/organization reducing overall costs.,

4.3.11 Effective outsourcing makes you choose to continue hire outsource.

And Section 5.

The response format will be standardized using a five-point Likert scale by ranging from 5= “Strongly Agree”, 4= “Agree”, 3= “Neutral”, 2= “Disagree” and 1= “Strongly Disagree” (see Appendix A for English version and Appendix B for Thai version)

3.3.1 Language comparison checking

Language comparison is a method for translating vocabulary units to verify the correctness of the literal translations (Wangratanasopon, 2016). In the same way (Newmark, 1995) said “the validity of literal translation can sometimes be established by the backing translation test.”

For this research, the original questionnaire is in English. After that have translated into Thai. Then it was examined by four Thai native speaking who have never seen this questionnaire before and there is no outsourcing background to reduce data bias is to check the content of each topic as the original (validity checking). It has been revealed that there were some incorrect translation and words.

3.3.2 Pilot test

Pilot test was conducted during May 17-22, 2019. The participants were 30 company employees. After that some items were appropriately revised such as, ambiguous and elusive sentence and the question are too many parts. Takes about 10 minutes to completed the questionnaire.

3.3.3 Data Collection

This study focuses on the companies in Thailand which are using BPO. The questionnaires will be distributed to executive or managerial positions in the department(s) which is an outsourcing user. The desired sample included small to

large organizations across diverse industries that had outsourced one or more business process. The normative response rates based on pre committed samples are as high as 40 percent (Anderson & Narus, 1990). Total of 322 questionnaire surveys were mailed, and about 200 sent to personal. The targets sample size is expected to be 300. The questionnaires have been distributed using Google form. The due date of online questionnaire is on August 31, 2019.

Before answer the respondents need to read the description of the questionnaire thoroughly, to reach the right to answer. The target respondent must be the person involved in an outsourcing project or has the right to decide to hire or terminate an outsourcing contract. All information collected from this questionnaire will be used for research purposes only. This study do not collect identifying information such as respondents' name, e-mail, address. And the most important is the respondent has the right to withdraw at any time because this cooperation is voluntary.

3.4 Hypotheses testing:

3.4.1 Factor Analysis

Factor analysis or component analysis is a statistical method that lets researchers create components from multiple variables by grouping related variables into one element. Variables that are in the same element are very closely related. In which the relationship can be either positive or negative variables that are in different components that do not have any relationship or little relationship. An element will represent latent variables which are a characteristic that the researchers want to study (Angsuchoti, Wijitwanna, & Phinyophanuwat, 2018). To study the relationship between variables, considering how much should each weight or relationship rate relate to that variable. And to reduce the number of factors to a

minimum by creating more elements to be many items (questions) in the same group by studying the relationship structure between items (Kaiwan, 2557).

Types of methods for factor analysis (Kaiwan, 2557).

1.) Exploratory Factor Analysis: EFA

It is called “Survey component analysis”. EFA uses component analysis to create model of the characteristics of interest to be studied according to the hypothesis structure by using many variables or indicators that can be measured directly as a representative of the characteristics of interest In order to know how many features there are. The results of this analysis will help reduce the number of variables. And obtaining elements that make it easy to understand the nature of the data and easy to interpret Including knowing the pattern And the data relationship structure (Kaiwan, 2557)..

2.) Confirmatory Factor Analysis: CFA

CFA used when the researcher expects the relationship structure of the what variable should be in form or know the relationship structure of variables or which variables are highly related and should be in the same composition. So, use the confirmatory element analysis technique to check or confirm the relationship as expected or not (Kaiwan, 2557)..

3.4.2 Partial Least Squares Based Structural Equation Modeling (PLS-SEM)

Structural Equation Model (SEM) is available for confirmation or for the exploration means that modeling may the objective is to theory testing or to theory building (Bollen & Long, 1993). In this research are considered as theory testing. For reflective models, indicators are a representative group of items that all reflect the measured latent factor. Reflective models assume the "truth" element, and calculated variables are a collection of all possible measures of this value. It means that it may not matter much to reduce one indicator as the other indicators are also

representative. Reflective measuring model is a type of measuring model setup in which the direction of the arrow is from the construct to the indicator (manifest variable), indicating the assumption that the construct causes the measuring model (more precisely, the covariation) of the indicator variables (Joseph F. Hair, Ringle, & Sarstedt, 2013) (Joseph F. Hair, Ringle, & Sarstedt, 2013). When the statement is related to the effect of the variable, reflective model is performed. Consequently, the arrow points out the latent structure based on the manifest parameter (Afthanorhan, 2014). Upon dropping an indicator, the latent variable (factor) will still have the same value (Garson 2016). The aim of reflective measurement model evaluation is to ensure the quality (the degree to which an assessment system produces stable and consistent results) and validity (the extent to which the calculation of the construct measures is to be measured) of the construct measures and therefore, provide support for the suitability of their inclusion in the path model (Joseph F. Hair et al., 2013; Olya, 2017).

The types of variables used in the Structural Equation Model (SEM) (Jöreskog & Sörbom., 1996.) (see **figure 9**).

1.) Classification of variables according to variable sources

1.1) Observed variables or Indicator variables is a variable that the researcher can collect or measure directly such as questions in the questionnaire by creating it as a variable. Observable variables use square symbols (□)

1.2) Unobserved variables or Latent variables ss a variable that the researcher cannot measure or store directly by using variables that are observable variables as indicators which can be said that the underlying variable is variables that represent many variable variables therefore it can be called a variable. Notice that the variable indicates Because many observable variables the value will be the variable indicating the latent variable. Represented by use the circle symbol (○)

2.) Classification of variables by status of variables.

2.1) Exogenous variables or Independent variables because there are no underlying variables that influence external variables in the model.

2.2) Endogenous variables; can be a Dependent variables or Mediating variables

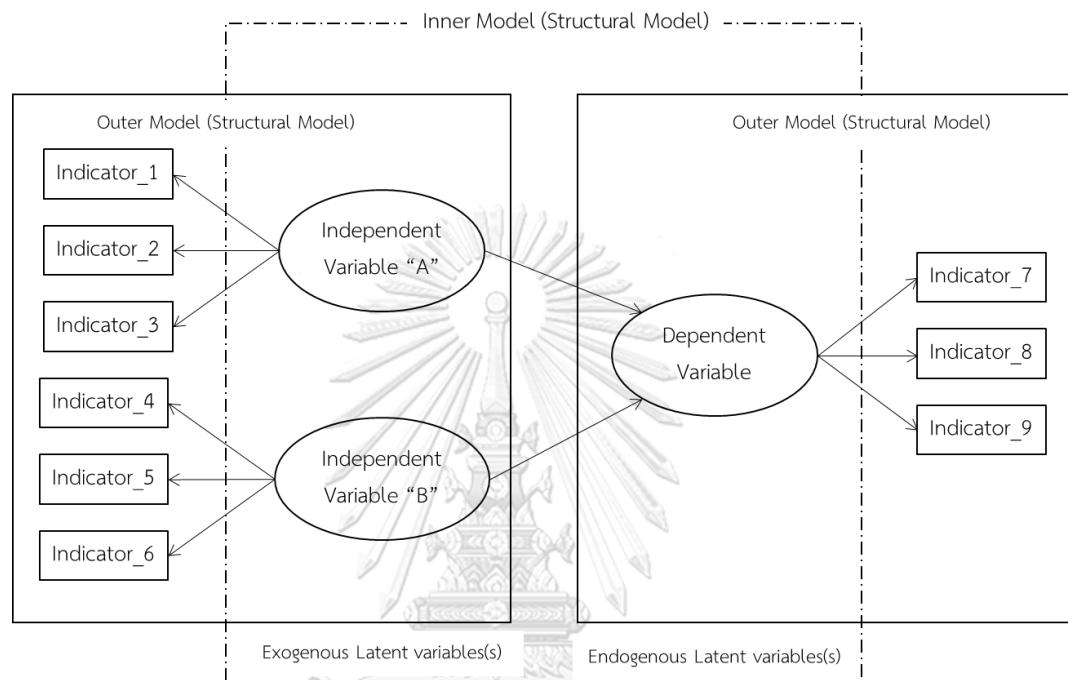


Figure 9 Inner vs. Outer Model in a SEM Diagram

Note. Adopted from K. Kwong and K. Wong (2013), "Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS", Marketing Bulletin.

Reliability measurement, the first step, the outer model loadings require for testing the correlations between factors and items. The value should more than 0.7 (Afthanorhan, 2014; Joseph F. Hair et al., 2013; Nunnally & Bernstein, 1994). The high loading refers to strong determinant of that factor.

Loading is the coefficient of factors that are related to the items (group of question in that factor) (see **equation 1**) (Piriyakul 2010).

$$X_j = a_{j1}F_1 + a_{j2}F_2 + a_{j3}F_3 + \dots + v_j \quad \dots\dots\dots (1)$$

a_{ij} = loadings that F_1 related to X_j in case of a_{jk} is the most valuable demonstrates that X_j must be grouped into F_k .

Second, indicator reliability (square of each outer loading). This reliability will be accepted even it reflects construct more than 50%. However, in exploratory research, if it is higher than 0.4 it will be acceptable (Chin & Marcoulides, 1998; Joseph F. Hair et al., 2013; Urbach & Ahlemann 2010). Third, internal consistency (composite) reliability to measure indicators (questions) aligning or Cronbach's alpha. Should be greater than 0.70 to achieve the reliable of measurement model (Nunnally & Bernstein, 1994; Urbach & Ahlemann 2010).

- Cronbach's alpha should be more than 0.70, describes by **equation 2**.

$$\alpha = 1 - \frac{K}{K-1} \left[\frac{\sum S_i^2}{S^2} \right] \quad \text{..... (2)}$$

K = Number of items

S_i^2 = The variation among the question in the factor

S^2 = The variation of the total score

In practice, this means that for all items, Alpha assumes the same factor loading. Composite reliability does not assume this but takes into consideration the varying factor loadings of the items. If the items are in these conditions:

- 1.) Measure the same single structure
- 2.) Have absolutely the same factor loadings
- 3.) There are no error covariances

The value of composite reliability coefficient, and Cronbach's alpha would be the same or very close. The more factor loadings vary among items, the higher the difference between the values of composite reliability and Cronbach's Alpha. And Cronbach's alpha has possibility to bias in case of the number of items are quite low (Tavakol & Dennick, 2011).

"Cronbach's alpha" is traditionally used in social science research to measure internal consistency reliability, but it tends to provide a moderate measurement in

PLS-SEM. Prior literature proposed that "Composite Reliability" be used as a substitute ((Bagozzi, Yi, & Phillips, 1991; Hair et al., 2013),

For validity measurement, convergent validity is representing the common variance between items and their factors. The questions or items that measure a factor should have high covariance to explain the same. It is checked from evaluating of Average Variance Extracted (AVE). The value that greater than 0.5 is confirmed (see **equation 3**) (Fornell & Larcker 1981; Piriyaikul 2010).

$$AVE_h = \frac{1}{p} \sum_i^p (\text{loading}_{hi})^2; h = 1, 2, \dots, (H + K) \dots\dots (3)$$

p = the number of item(s)

loading_{hi} = loading of factor h , at number i

Then, research hypotheses are tested by path coefficients and significant base on two-tail t-statistic. The values are accepted to be path even if it is higher than 1.96 (Adhikari et al., 2018). In addition, the high value indicates the good predictive power of model (Adhikari et al., 2018). Bootstrapping testing will show all significant path coefficients confirmed the predictive validity of the model (Adhikari et al., 2018). The significant level will be represented into three level which is 90%, 95% and 99%. These analysis results will show the relationship between factors.

And the last value in marketing research, R^2 of 0.67 is substantial, 0.33 is moderate, and 0.19 is weak (Piriyaikul 2010).

All about reflective model measurement both reliability and validity, this study will summarize in **Table 4**.

3.4.3 Mediation in PLS-SEM

Mediation occurs when a third mediator variable interferes between two other related constructs as same as this research. More precisely, a change in the

exogenous construct causes a change in the mediator variable, which, in turn, results in a change in the endogenous construct in the PLS path model.

The following figure shows the example of a simple mediator model, whereby ρ_3 is the direct effect, $\rho_1 \cdot \rho_2$ is the indirect effect, and the direct effect (ρ_3) + the indirect effect ($\rho_1 \cdot \rho_2$) = the total effect (Nitzl, Roldán, & Cepeda, 2016):

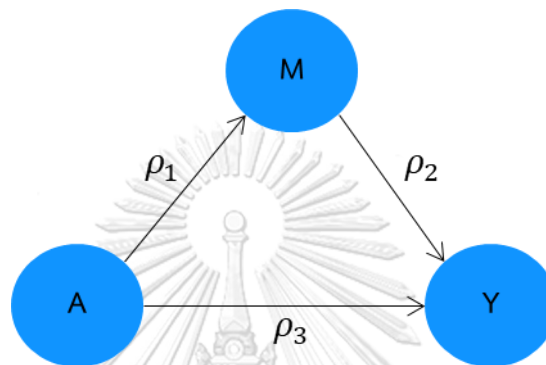


Figure 10 The example of a simple mediator model.

Note. Adapted from “Mediation Analysis in Partial Least Squares Path Modeling: Helping Researchers Discuss More Sophisticated Models”, by C. Nitzl, J. Roldán, & L. Cepeda (2016), *Industrial Management and Data Systems*, pp. 1849-1864.

To analyze a mediator model, (Zhao, Lynch, & Chen, 2010) suggest a framework model, as shown in the following **figure 11**, which (Hair, Hult, Ringle, Sarstedt, 2017) also proposed to use for PLS-SEM:

If in the model have many mediation. Researchers also can apply the model to situations with multiple mediators as shown in the **figure 11**.

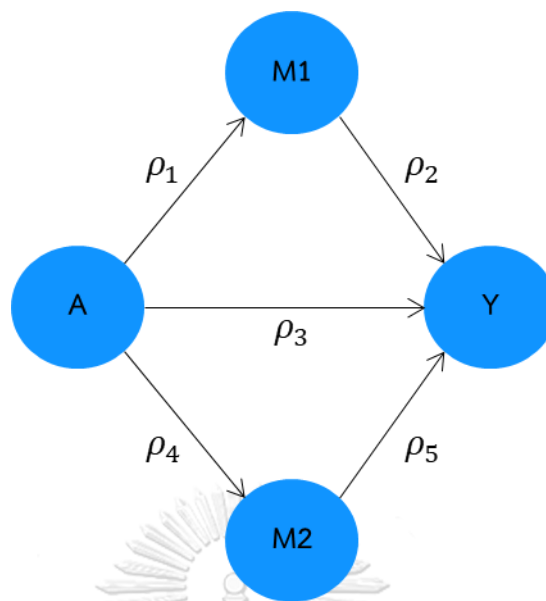


Figure 11 Multiple Mediator Model

Figure 11 shows that, in addition to the amount of the indirect effect of M1 and M2, the total effect is equivalent to the direct effect of A on Y. The indirect effect of a given mediator is referred to as a specific indirect effect (e.g. through M1). The total indirect effect is the sum of the two different indirect effects. The total indirect effect is the sum of the two different indirect effects. So, the overall effect is the sum of the direct effect and the total indirect effects (i.e., the sum of the unique indirect effects includes the M1-M2 relationship).

From **figure 12**, mediation can be divided in two different types; full mediation and partial mediation. Partial mediation can be divided into complementary and competitive.

a.) Full mediation (Indirect-only) means that the effect of A to Y is completely transmitted with help of another variable (M). Technically, the variable X extracts its influence only under a certain condition of M on Y.

b.) Partial mediation represents all other situations under the condition that both the direct effect (ρ_3) and the indirect effect ($\rho_1 \cdot \rho_2$) are significant.

- **Complementary partial mediation;** the direct effect (ρ_3) and the indirect effect ($\rho_1 \cdot \rho_2$) point in the same direction (Baron & Kenny, 1986). Complementary partial mediation is often called a ‘positive confounding’ or a ‘consistent’ model (Zhao et al., 2010).

- **Competitive partial mediation;** the direct effect (ρ_3) and the indirect effect ($\rho_1 \cdot \rho_2$) point in the difference direction (Baron & Kenny, 1986). Competitive partial mediation has often been called a ‘negative confounding’ or an ‘inconsistent’ model (Zhao et al., 2010).

c.) **Only direct effect;** direct effect (ρ_3) exists, but no indirect effect ($\rho_1 \cdot \rho_2$).

d.) **No effect;** neither direct effect nor indirect effect exists.

Sufficiently suggest 10 times as many cases as parameters (or preferably 20 times) for sense evaluation of template effects (Kline, 2010). In general, a model should include 10 to 20 times as many observations as variables to have faith in the reliability of the fit test (Mitchell, 1992). As with factor analysis, when strong relationships between components of the system are high, 200 cases may be adequate for a simple model Wuensch, 2013). Our proposed research model contains 24 things and 6 paths for 5 variables in this analysis. Therefore, 300 would be the correct sample size.

Lastly, Smart PLS 3 will test the proposed research model to measure the model and to evaluate the structural model. The structural model results will be confirmed and shown in the next chapter.

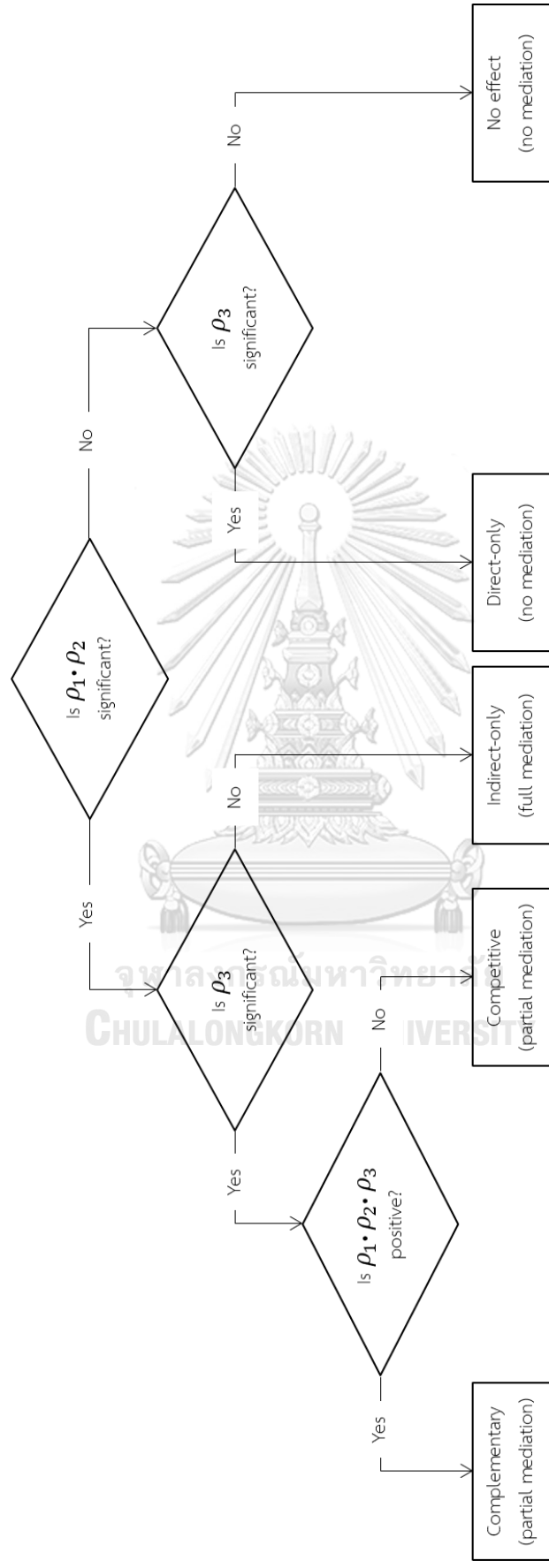


Figure 12 Framework for mediator analysis.

Adapted from “Mediation Analysis in Partial Least Squares Path Modeling: Helping Researchers Discuss More Sophisticated Models”, by C. Nitzl, J. Roldán, & L. Cepeda (2016), *Industrial Management and Data Systems*, pp. 1849-1864.

Table 4 Reflective model measurement.

Measurement	Criterion	Description	References
Reliability			
1. Reliability	Outer Loadings	Correlation between factors and indicators (questions). Should be greater than 0.7 is acceptable.	(Afthanorhan, 2014; Joseph F. Hair et al., 2013; Nunnally & Bernstein, 1994)
2. Indicator Reliability	Indicator Loadings (Square of each outer loadings)	The proportion of indicators (questions) variance that is explained by the factors. Should be greater than 50%	(Chin & Marcoulides, 1998; Joseph F. Hair et al., 2013; Urbach & Ahlemann 2010)
3. Internal Consistency Reliability	Composite Reliability Or Cronbach's alpha	To measure indicators (questions) aligning. Should be greater than 0.70 to achieve the reliable of measurement model.	(Nunnally & Bernstein, 1994; Urbach & Ahlemann 2010)
Validity			
4. Convergent Validity	AVE (Average Variance Extracted)	The accuracy of the measurement used to show that indicators (questions) can measure the same factor.	(Fornell & Larcker 1981; Piriyaikul 2010)
5. Discriminant Validity	$\sqrt{\text{AVE}}$	The AVE of each factor should be greater than the factor highest squared correlation with any other factor.	(Fornell & Larcker 1981; Piriyaikul 2010)

Chapter 4 Results

4.1 Descriptive results

From the questionnaire survey, the response rate is 41.95%. The total sample is 219. 52% is female ($n=113$), 48% is male ($n=106$), which has quite similar values. The most respondents around 30.59% are between 40–50 years-old. Company type is categorized into 11 types. 18.72% is working about financial (e.g. banking and insurance). Work position is categorized into 4 levels, which up to section head position. 34.25% is middle-level manager. And the last one, outsourcing type is categorized into 9 groups, which 26.48% outsourced Information Technology /Information System following top three by maintenance, manufacturing, finance/accounting and the least outsourcing is others types such as, laborer, sale, and construction worker equal to 1.83%. As shown profiles of respondents in **Table 5**.

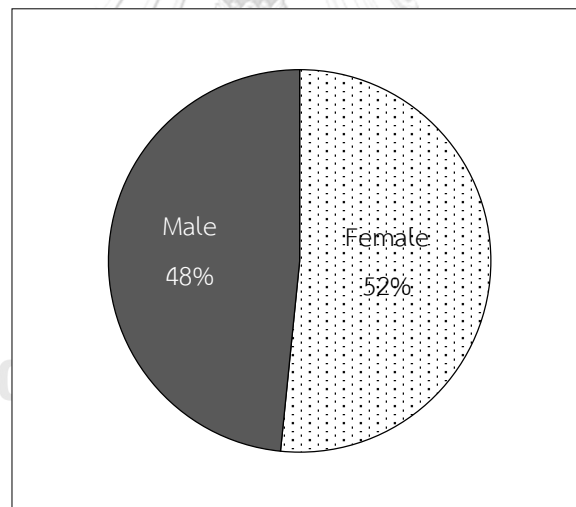


Figure 13 Respondents gender proportion.

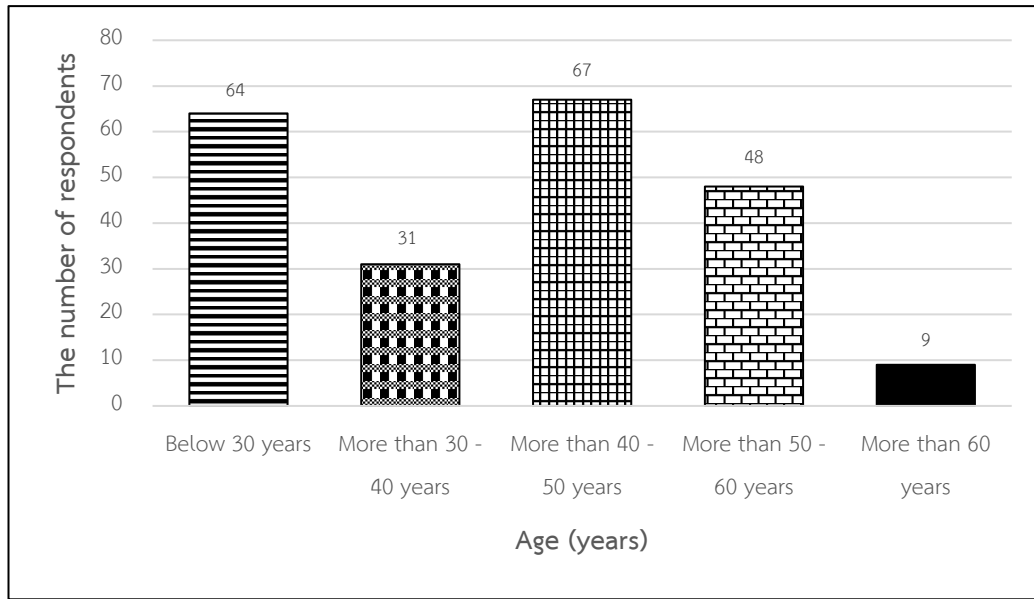


Figure 14 Respondents age distribution.

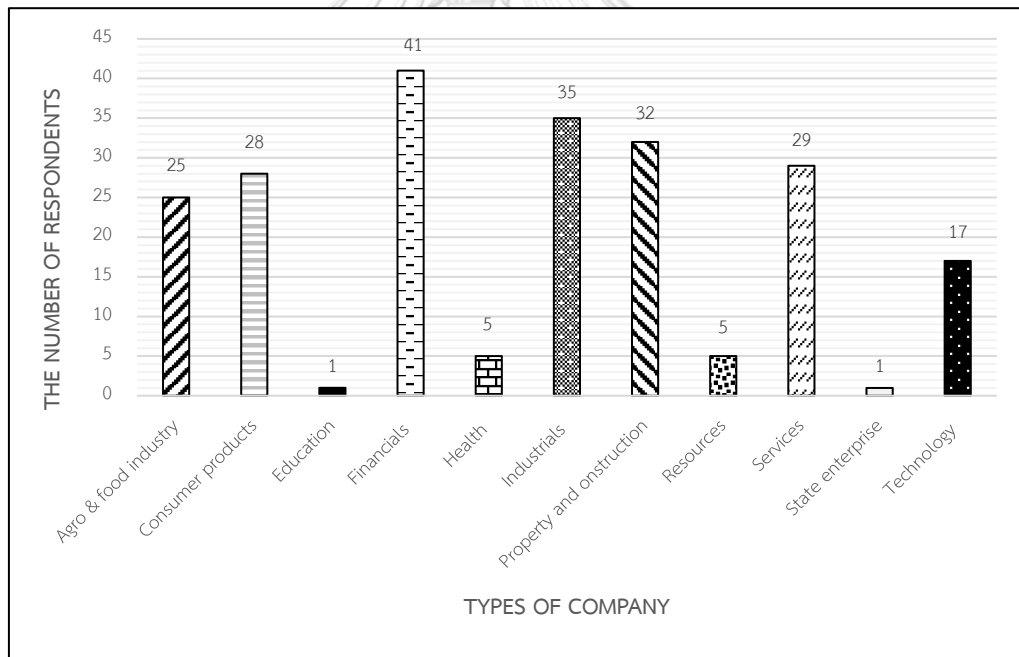


Figure 15 Company types.

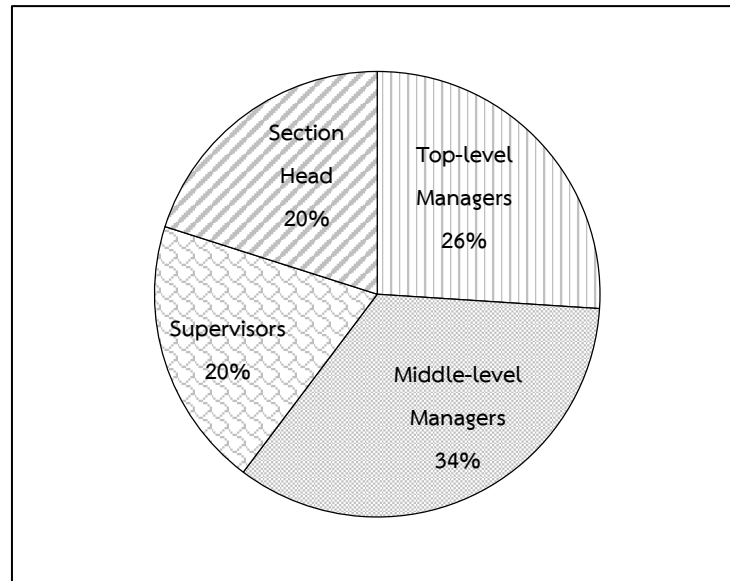


Figure 16 Work position proportion.

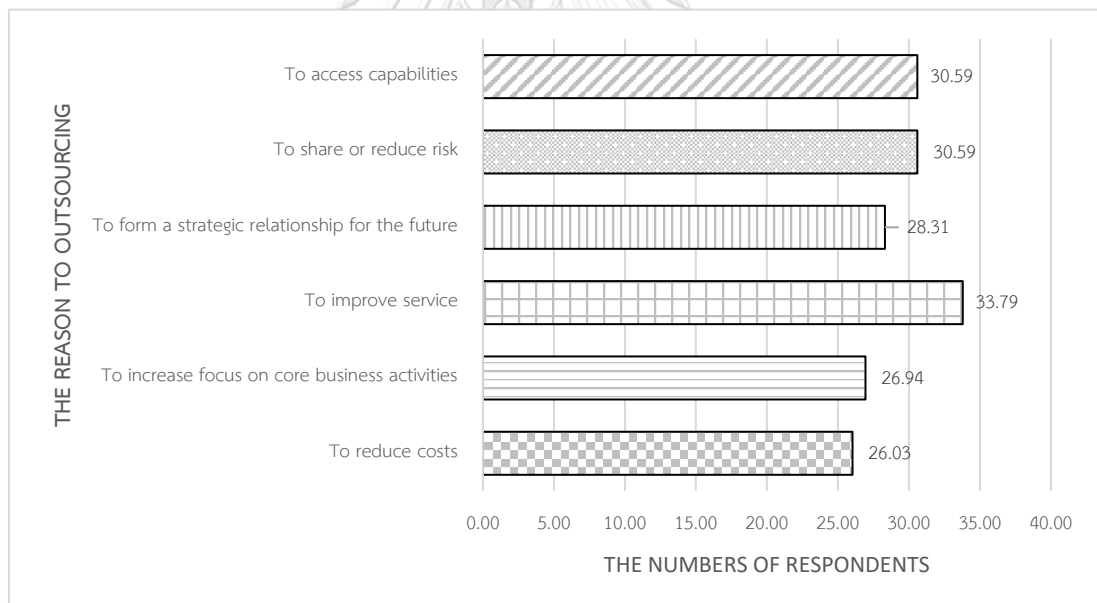


Figure 17 Important reasons for outsourcing outsourcing decisions.

Although previous research shows that the most common reason for outsourcing is to reduce costs and make the organization focus on core business (Kakabadse & Kakabadse, 2005). This research found that from **Figure 17**, the main reason for outsourcing decision is in order to improve service around 33.79% ($n=74$

from 219). The second most important reason are to access capabilities and to share or reduce risk equal 30.59% ($n=67$ from 219). It also shows that those reasons are not the top three main reasons for outsourcing decisions.

Table 5 Summary of respondent's profile.

Category	Frequency	Percent	Category	Frequency	Percent
Gender			Company types (continue)		
Female	113	52.00	State enterprise	1	0.46
Male	106	48.00	Technology	17	7.76
Age			Work Position		
< 30 years	64	29.22	Top-level Managers	57	26.03
30 - 40 years	31	14.16	Middle-level Managers	75	34.25
40 - 50 years	67	30.59	Supervisors	43	19.63
50 - 60 years	48	21.92	Section Head	44	20.09
> 60 years	9	4.11	Outsourcing types		
Company types			Finance/Accounting	28	12.79
Agro & food industry	25	11.42	Human Resources	8	3.65
Consumer products	28	12.79	IT/IS	58	26.48
Education	1	0.46	Logistics	18	8.22
Financials	41	18.72	Maintenance	46	21.00
Health	5	2.28	Manufacturing/Operations	38	17.35
Industrials	35	15.98	Marketing	12	5.48
Property and construction	32	14.61	Services	7	3.20
Resources	5	2.28	Others	4	1.83
Services	29	13.24			

Table 4 shows the profiles of respondents, it is interesting that have a respondents more than 60 years old which 4 of them are middle-level manager position and 5 of them are high-level manager position.

4.2 Measurement Model

To adjust the model, put all items for assessing qualities. It presents loading between items and their factors. Then, the outer loadings which are expected higher than 0.7 is presented in **Table 5**.

Table 6 Outer loadings for initial model.

Constructs	Items	Loadings
Control	CT1. The company expected the outsourcing to follow an understandable written sequence of steps specified by the client toward the accomplishment of project goals.	0.612
	CT2. The company expected the outsourcing to follow articulated rules and procedures specified by the client toward the accomplishment of project goals.	0.690
	CT3. The company placed significant weight upon the timely.	0.697
	CT4. The company placed significant weight upon project completion within budget.	0.542
	CT5. The client evaluated the performance of the vendor by the extent to which project goals were accomplished.	0.645
Cooperation	COOP1. The relationship with outsourcing is very satisfy.	0.527
	COOP2. Outsourcing delivers its service always with the required quality.	0.417
	COOP3. Your approach to doing business or organizing projects is very similar to your outsourcing.	0.636
	COOP4. In the relationship with your outsource, you always pull together in the same direction.	0.586
	COOP5. When problems or questions arise during this outsourcing project, you make decisions together with your outsourcing to get to adequate solutions.	0.689
Proactive Improvement	PI1. The exchange of information between the employees of our outsourcing and our company is working very well.	0.629
	PI2. The outsourcing shows a high level of innovation.	0.645
	PI3. The cooperation with outsource makes easier work control.	0.585
	PI4. Proactive Improvement supports outsourcing work control.	0.794
Outsourcing Performance	OP1. The outsourcing performed contracted services dependably and accurately.	0.548
	OP2. The outsourcing provided prompt service.	0.456

Table 7 Outer loadings for initial model (continue).

Constructs	Items	Loadings	
Outsourcing Performance	OP3. The processes, procedures, systems, and technology provided by the outsourcing made the service a seamless one.	0.391	
	OP4. The outsourcing leveraged process knowledge to deliver a range of process enhancements that go beyond performance expectations of the company.	0.596	
	OP5. The outsourcing has an overall satisfaction during working together.	0.581	
	OP6. The outsourcing helps your company/organization increasing quality of service.	0.422	
	OP7. The outsourcing has a new innovation to make your job easier.	0.507	
	OP8. The outsourcing helps your company/organization increasing management focus.	0.683	
	OP9. The outsourcing never got a legal problem during working together.	0.686	
	OP10. The outsourcing helps your company/organization reducing overall costs.	0.611	
	OP11. Effective outsourcing makes you choose to continue hire your outsource.	0.356	
	Outsourcing Long-Term Relationship	LT1. You will continue to commit the contract with this outsourcing	0.647
		LT2. You want to extend the field to cooperation with this outsourcing	0.817
LT3. You will recommend other project in your company to hire this outsourcing?		0.892	
LT4. You will recommend other companies to commit this outsourcing?		0.854	

Loadings is less than 0.7 will be thoroughly eliminated one by one. Then, other values are also checked whether it is better. **Table 7** present cut off some items. It shows all items in are higher than 0.7.

Table 8 Outer loadings for based model.

Constructs	Items	Loadings
Control	CT1. The company expected the outsourcing to follow an understandable written sequence of steps specified by the client toward the accomplishment of project goals.	0.681
	CT2. The company expected the outsourcing to follow articulated rules and procedures specified by the client toward the accomplishment of project goals.	0.746
	CT3. The company placed significant weight upon the timely.	0.759
Cooperation	COOP1. In the relationship with your outsourcing, you always pull together in the same direction	0.788
	COOP2. When problems or questions arise during this outsourcing project, we make decisions together with our outsourcing to get to adequate solutions.	0.795
Proactive Improvement	PI1. The exchange of information between the employees of our outsourcing and our company is working very well.	0.672
	PI2. The outsourcing shows a high level of innovation.	0.752
	PI3. Proactive Improvement supports outsourcing work control.	0.836
Outsourcing Performance	OP1. The outsourcing helps your company/organization increasing quality of service.	0.775
	OP2. The outsourcing has a new innovation to make your job easier.	0.860
	OP3. The outsourcing helps your company/organization increasing management focus.	0.724
Outsourcing Long-Term Relationship	LT1. You will continue to commit the contract with this outsourcing	0.677
	LT2. You want to extend the field to cooperation with this outsourcing?	0.868
	LT3. You will recommend other project in your company to hire this outsourcing?	0.870
	LT4. You will recommend other companies to hire this outsourcing?	0.828

Next step, internal consistency reliability which is represented by Cronbach's alpha, composite reliability and Average Variance Extracted (AVE) are shown in **Table 7**. In addition, Convergent validity is also presented as well. Discriminant validity is shown in **Table 8**. It is expected that there is no high relationship between itself and others.

Table 9 Internal consistency reliability and convergent validity.

Constructs	Cronbach's Alpha	Composite Reliability	AVE
Control (CT)	0.573	0.773	0.532
Cooperation (COOP)	0.404	0.771	0.627
Proactive Improvement (PI)	0.691	0.831	0.622
Outsourcing Performance (OP)	0.574	0.778	0.542
Outsourcing Long-Term Relationship (LT)	0.821	0.875	0.641

Table 10 Discriminant validity.

	CT	COOP	PI	OP	LT
CT	0.730*	-	-	-	-
COOP	0.435	0.792*	-	-	-
PI	0.223	0.279	0.737*	-	-
OP	0.239	0.389	0.472	0.788*	-
LT	0.132	0.162	0.111	0.160	0.801*

Test path significant of hypothesis by PLS-SEM based on bootstrapping of 1,000 samples. The results t-statistic value with p-value at 95% significant level as shown in **Table 10** indicates not only cooperation but also proactive improvement is directly significant on outsourcing performance (H2 and H4 are accepted). On the other hand, control is not affected on outsourcing performance (H1 is rejected). About control, cooperation is directly significant on control but not for proactive improvement, that not affected on control (H3 is accepted but H5 is rejected). And

the last one is outsourcing performance is positive effect on outsourcing long-term relationship. (H6 is accepted).

Table 11 Hypothesis testing.

Hypotheses	t-value	p-value	Hypothesis testing
H1: Control exerts a positive effect on the performance of outsourcing projects.	0.512	0.609	H1: Rejected
H2: Cooperation positively affects the outsourcing performance directly.	4.458**	0.001**	H2: Accepted
H3: Cooperation will enhance the positive impact of control on the outsourcing performance.	6.519**	0.000**	H3: Accepted
H4: Proactive Improvement positively affects the outsourcing performance directly.	6.983**	0.000**	H4: Accepted
H5: Proactive Improvement will enhance the positive impact of control on the outsourcing performance.	1.512	0.131	H5: Rejected
H6: There is a positive relationship between the outsourcing performance and outsourcing long-term relationship	2.554*	0.011*	H6: Accepted

* path is significant at $\alpha = 95\%$,

** path is significant at $\alpha = 99\%$

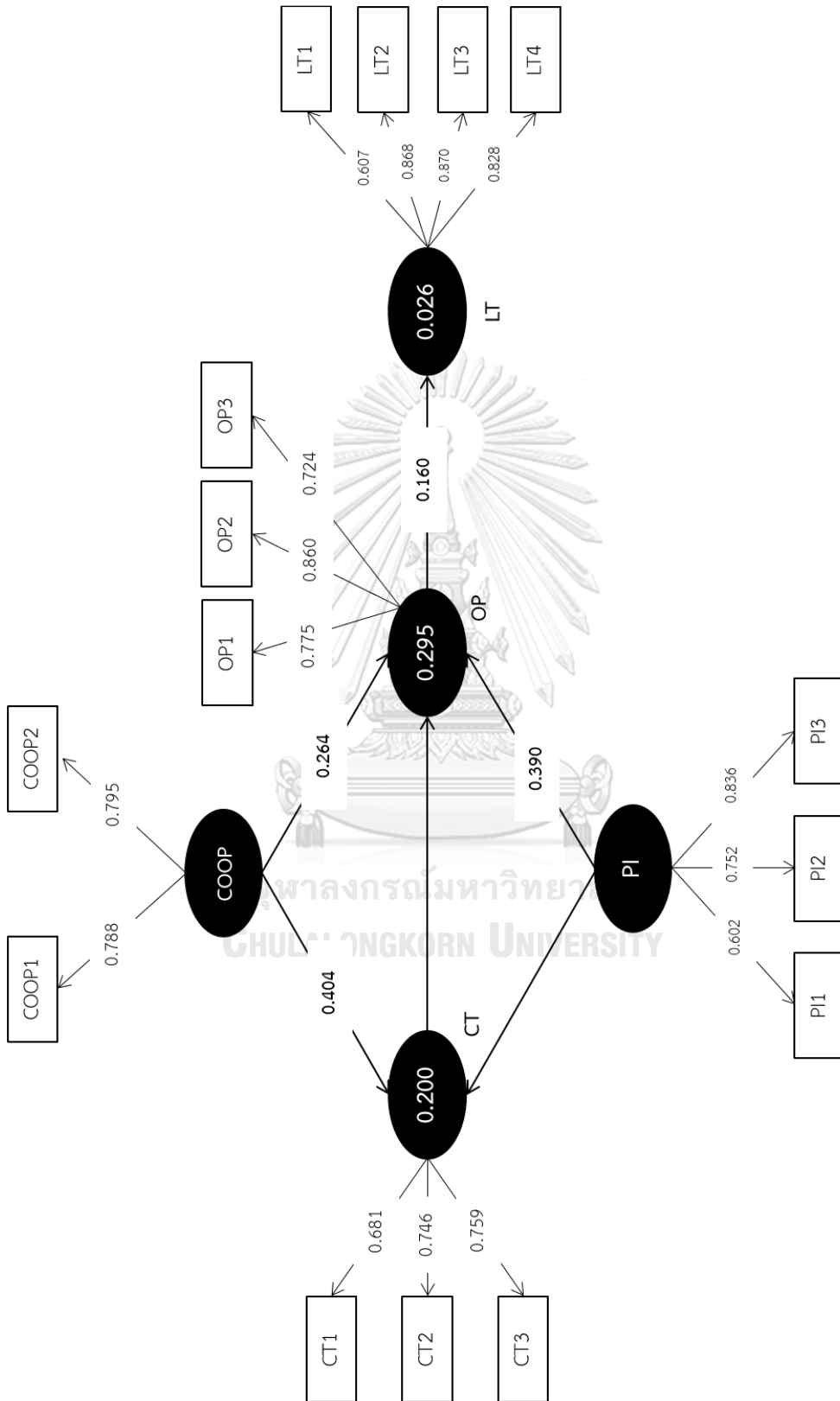


Figure 18 Summary factor analysis of the proposed

Figure 18 shows results can be taken by looking at the diagram:

1.) Explanation of target endogenous (dependent) variable variance

1.1) The coefficient of determination, R^2 , is 0.026 for the LT endogenous latent variable. This means that the latent variable (OP) weakly explain 2.60% of the variance in LT.

1.2) CT, COOP, and PI together explain 29.5% of the variance of OP (In this example, OP acts as an independent and dependent variable and is positioned in the middle of the model. As it has arrows pointing to it from other latent variables, it is regarded as an endogenous variable).

2.) Inner model path coefficient and significance

2.1) The inner model suggests that PI has the stronger effect on OP (0.390), COOP (0.264) were observed.

2.2) The hypothesized path relationship between COOP and CT is statistically significant at $\alpha = 99\%$.

2.3) However, do not have statistically significant is not the hypothesized path relationship between CT and OP. This is because there is less than 0.1 in its standardized path coefficient. This study assume that both COOP and PI are moderately strong OP predictors, but CT does not directly predict OP.

2.4) The hypothesized path relationship between PI and CT is not statistically significant.

Figure 17 shows the Path Coefficients (β) of direct effect. However, in this the research proposed model also considered factor affecting to outsourcing long-term relationship so, this study show that there have some indirect effect. Therefore, have discussed in the next part.

4.2.1 Indirect Effect

In Smart PLS, the results of the PLS-SEM algorithm and the bootstrap procedure include the direct, the total indirect effect, the specific indirect effects, and the total effect. From Figure 6, this proposed research model; OP is a Mediation.

Table 12 Total Indirect Effects

Relationship	t-value	p-value	Results
CT \rightarrow LT	0.432	0.666	NO
PI \rightarrow LT	2.398*	0.017*	YES
COOP \rightarrow LT	1.954*	0.050*	YES

* path is significant at $\alpha = 95\%$

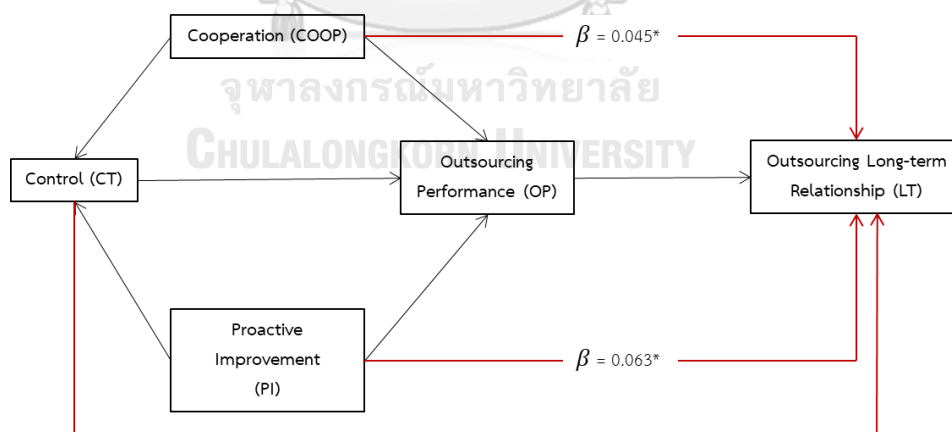


Figure 19 Path Coefficients (β) of indirect effect.

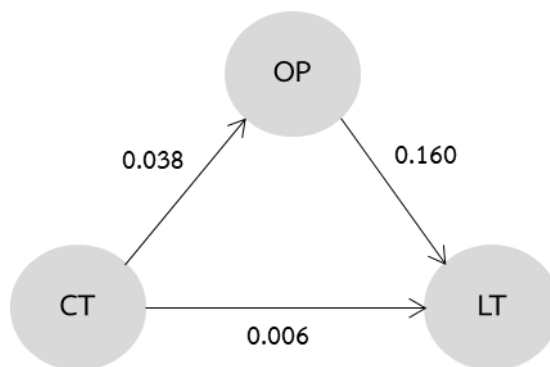


Figure 20 The total effect of CT-OP-LT relationship.

From **figure 19**, $\rho_1 = 0.038$, $\rho_2 = 0.160$, $\rho_3 = 0.006$. Indirect effect $\rho_1 \cdot \rho_2$ is not significant and direct effect (ρ_3) is not significant. So, this relationship is no effect (no mediation).

CT-OP-LT relationship should be viewed as a failure. Although, OP has a positive effect on LT, CT has no positive effect on OP. Therefore, CT has no indirect effect on LT. In the same way, CT has no direct effect on LT as well.

That mean regardless of how good the organization is controlling the outsourced, in determining the duration of work, it also does not have a positive effect on the outsourcing long-term relationship.

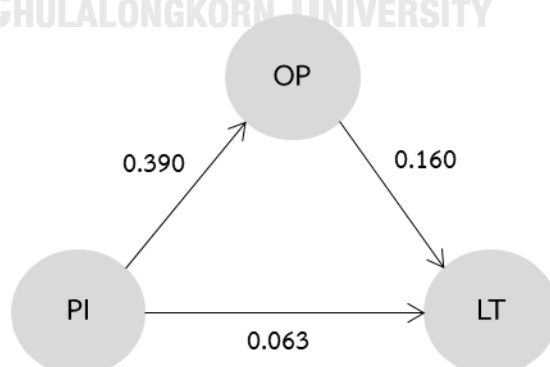


Figure 21 The total effect of PI-OP-LT relationship.

From **figure 20**, $\rho_1 = 0.390$, $\rho_2 = 0.160$, $\rho_3 = 0.063$. Indirect effect $\rho_1 \cdot \rho_2$ is significant, ρ_3 is significant, and $\rho_1 \cdot \rho_2 \cdot \rho_3$ is positive. So, this relationship is complementary (partial mediation).

PI-OP-LT relationship should be viewed as a consistency relationship. PI not only directly affects the LT but also indirectly affecting LT which the PI support to increase performance. And because of OP already has a positive effect on LT, so PI has an effect on LT indirectly.

That's shows that if the service provider has implemented innovation in their work, organizations agreed that it can help increase the performance of outsourcing. And the organization is also interested in maintaining long-term relationships.

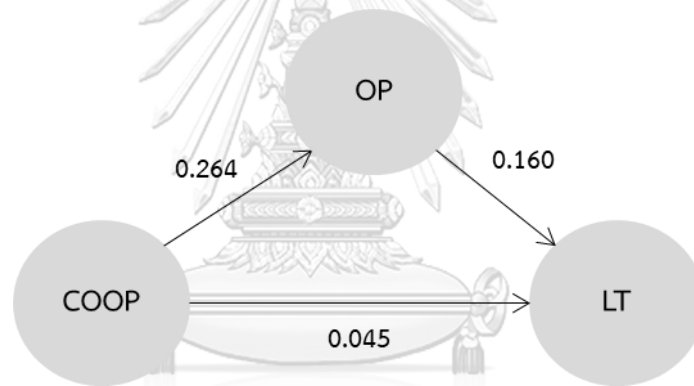


Figure 22 The total effect of COOP-OP-LT relationship.

From **figure 21**, $\rho_1 = 0.264$, $\rho_2 = 0.160$, $\rho_3 = 0.045$. Indirect effect $\rho_1 \cdot \rho_2$ is significant, ρ_3 is significant, and $\rho_1 \cdot \rho_2 \cdot \rho_3$ is positive. So, this relationship is complementary (partial mediation).

COOP-OP-LT relationship should be viewed as a consistency relationship as same as PI-OP-LT relationship. COOP not only directly affects the LT but also indirectly affecting LT which the COOP support to increase performance. And because of OP already has a positive effect on LT, so PI has an effect on LT indirectly.

Chapter 5 Discussion

5.1 Theoretical Implications

1.) From **Table 8**, some Cronbach's alpha values are unacceptable. In general, the acceptable alpha value is greater than 0.7 but not more than 0.9 (Streiner, 2003). However, it has been tested that a high Cronbach's alpha value does not always mean a high level of internal consistency. That is because the Cronbach's alpha affected by the number of items which if the number of items is too small may cause poor correlation between items. The value of Cronbach's alpha will be decreased (Nunnally & Bernstein, 1994; Streiner, 2003). Therefore, if wanting to increase the Cronbach's alpha value will have to add items which has to have acceptable factor loadings value. In this research, present a cross-loadings measurement to show Latent Correlation Coefficients as shown in **Table 12**.

As a method of assessing discriminating validity for reflective models, cross-loading is an alternative to AVE. Each predictor variable should at least have a higher correlation with another latent variable than with its own latent variable. If it does, the model will be specified inappropriately (Garson, 2016).

Table 13 Cross Loadings.

	CT	COOP	PI	OP	LT
CT1	0.681	0.251	0.209	0.065	0.144
CT2	0.746	0.295	0.141	0.174	0.052
CT3	0.759	0.382	0.151	0.250	0.101
COOP1	0.379	0.788	0.120	0.263	0.127
COOP2	0.310	0.795	0.319	0.352	0.129
PI1	0.145	0.111	0.602	0.259	0.056
PI2	0.081	0.221	0.752	0.384	0.050
PI3	0.251	0.260	0.836	0.385	0.127
OP1	0.159	0.326	0.363	0.775	0.164
OP2	0.200	0.336	0.355	0.860	0.085
OP3	0.207	0.255	0.395	0.724	0.129
LT1	0.145	0.120	0.111	0.055	0.607
LT2	0.081	0.136	0.157	0.182	0.868
LT3	0.251	0.159	0.017	0.088	0.870
LT4	0.157	0.120	0.039	0.125	0.828

This research shows the proposed research model that emphasizes factors that affect the long-term relationship. The results of the research show that the more effective of outsourcing is resulting in the organization deciding to make a long-term contract.

2.) From **Table 10**, it is surprising for H1 that reveals that control does not have a positive effect on outsourcing performance. Although, in **Table 8** and **Table 9** show the acceptable value, H1 is rejected. This result which give the opposite results from previous research (Tiwana & Keil, 2010), formal control (both process control and outcome control) have a positive effect on the outsourcing performance notwithstanding, the relationship between outcome control and performance is stronger than the relationship between process control and performance in outsourcing projects. Because of the cultural differences of respondents, the descriptive results show that the respondents below 30 year-old is the most respondents (64 respondents) which section-head work position mostly. The average of answer of item CT1, CT2, and CT3 is 4.00 that lower than average of all answer

(4.42). This research think these people maybe not primarily responsible for outsourcing, or not frequently controlled, or not very strict. In addition, the work position is section-head may cause not thoroughly control. As a consequence, these people perceived that the control does not affect the outsourcing performance.

3.) Lastly, for H2, H3, H4 and H5. These hypotheses have never appeared in previous literature related to outsourcing before. Therefore, this research interested in these hypotheses because this study think there are important factors in outsourcing working. This research wants to investigate the hypotheses have not been tested before. However, result of this research shows that proactive improvement does not support control on outsourcing performance. This research think it is because of those innovations will affect working control or limit capacity development and finally affect outsourcing performance. By the way, Cooperation and Proactive Improvement factors (H2 and H4) have a literature reveals which is similar to this research but they (Deepen et al., 2008) assumed that Goal Achievement and Goal Exceedance as an Outsourcing Performance. However, they have no evidence to prove (see **figure 23**).

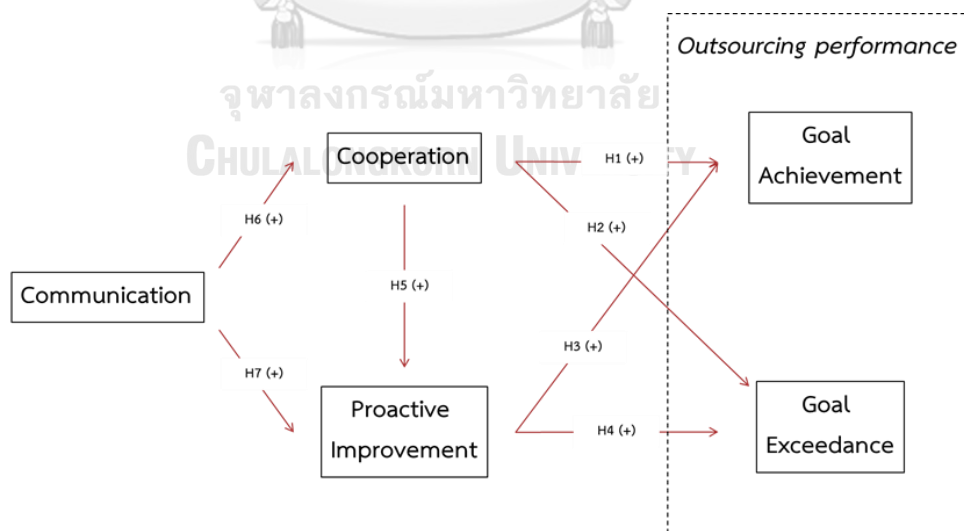


Figure 23 Previous study to show relationship between Factors and Outsourcing Performance.

Note. Adapted from Deepen et al., 2008

Chapter 6 Conclusion

This research studies factors that may have a positive effect on the outsourcing long-term relationship. It is a study focusing on the companies in Thailand that have contracted service providers in Thailand and are interested in the situation of outsourcing in Thailand as a service provider, the objective is to test the hypothesis and find out the relationship of those factors. There are operating procedures as follows; the 1st step is review related literature, in this part lead us to know the gap of each literature. The 2nd step is exploring the factor and develop questionnaire after that language comparison checking and pilot test then improved the questionnaire in order to correct and easy to understand. The 3rd step is collecting the data as mentioned in topics **3.3.3 Data collection**. And the last step is analyzing the data and conclusion. After testing the hypothesis it can be confirmed which factors really affect LT, including indirect effects outsourcing long-term relationship (see the next topic).

6.1 Research conclusion

This research investigates factors relevance to a long-term relationship and outsourcing performance. For the developing of outsourcing relationship management, the affecting factors are tested to support hypotheses. The results of this research also provide valuable and advantage insights on how service providers in Thailand can be used for the long term and with better performance. Therefore, this study will be an incentive for better outsourcing management. This research hope that this research as a guideline for companies to managing their outsource. Finally, as a guideline for other researchers to study the factors in this model including other factors.

Table 14 Summary of hypothesis testing

Hypotheses	Hypothesis testing
H1: Control exerts a positive effect on the performance of outsourcing projects.	H1: Rejected
H2: Cooperation positively affects the outsourcing performance directly.	H2: Accepted
H3: Cooperation will enhance the positive impact of control on the outsourcing performance.	H3: Accepted
H4: Proactive Improvement positively affects the outsourcing performance directly.	H4: Accepted
H5: Proactive Improvement will enhance the positive impact of control on the outsourcing performance.	H5: Rejected
H6: There is a positive relationship between the outsourcing performance and outsourcing long-term relationship	H6: Accepted

6.2 Limitation and future research direction

First, this research is not interested in the selection criteria for outsourcing. Because it is a pre-outsourcing step. Importantly an organization need to decision making to outsourced, but this research is a during-outsourcing step. By the way, in the future research considering selection criteria is a challenge topic.

Second, the literature related to outsourcing provides a diverse perspective on strategies or activities. In this research, This study focus on outsourcing long-term relationship management but in terms of the client's long-term orientation toward service provider in the outsourcing relationship, which in comparison to other perspectives there is quite outstanding. However, due to the management of outsourcing relationships, there is a close relationship between clients-service providers. Therefore, it is necessary to investigate the impact of the service provider's long-term orientation toward the clients. In addition, there is also a need for future studies to study the relationship between others which may provide interesting and useful insights for better understanding.

Third, the respondents of this research are a person who upper section head position. Therefore, decisions taking or answers to questions may be just personal opinions did not see the in-depth work of outsourcing but just looking at the overall and outcomes of the work. However, for future research, this study suggest that it should be inquired to staff or employee that are close and working with those outsourcing as well to get more information to make decisions.

Forth, although this study will adapt the literature model to suit the Thailand outsourcing situation. There is still more study in the future to study more details regarding other factors that may affect outsourcing long-term relationship. For example, the development of more complex service provider, human resource investments, management costs including other costs such as wages. Therefore, in the future, the aforementioned factors should be considered. Including model adjustment. And other factors to meet the situation at that time.

Fifth, because of this research does not have enough sample size to separate into various groups to analyze data such as segmentation by company types or outsourcing types. This study suggested that in the future research should be an increase in data collection. In order to be able to analyze the list separately may be able to see the trend of results which is different from this research.

Finally, the complexity of inter-firm relationship management. This research is a survey for outsourcing only in Thailand which the cultural differences of clients and service providers will not be different or may vary by region. Since these factors may have an effect on the relationship, considering these cultural differences in Thailand will make it more interesting for organizations to better understand the outsourcing relationship management. Lastly, if there are opportunities for future research there should be a survey from oversea companies that have outsourcing in Thailand whether to give different results or not.

6.3 Recommendation

From **Table 12**, the results of this study offer clear information by using practices to achieve efficient outsourcing and managing long-term relationships.

The first step, when the organizations in Thailand tends towards long-term outsourcing relationships, they need to know the factors that have been tested correctly and appropriately and can be applied for real use both to maintain long-term relationships and achieving desired outsourcing work. The important thing, when considering the business environment that is constantly changing maintaining relationships is especially important and useful for the organizations.

The second step, when deciding to make a long-term contract with a vendor, organizations need to focus on the development of their outsourcing or can be called “a specific outsourcing management strategy”. In general, outsourcing management not only is development but also outsource selection and outsource evaluation. The development should focus on improving the ability of vendor to meet the needs of the organization in the long-term (Li, Kang, & Haney, 2017).

This research shows direct effect; 1.) Cooperation positively affects the outsourcing performance *directly* (**H2**). And cooperation will enhance the positive impact of control on the outsourcing performance (**H3**). So, the service provider should make customers satisfied with the work besides, the problem solution and operations, should go in the same direction. 2.) Proactive Improvement positively affects the outsourcing performance *directly* (**H4**). These innovations will in turn, influence the perceived performance of the outsourcing relationship. Including to developing a new operational process for maximum efficiency. And the last direct effect 3.) There is a positive relationship between the outsourcing performance and outsourcing long-term relationship (**H6**). The service provider should make clients' perception of outsourcing performance, including to overall satisfaction for long-term relationship of outsourcing.

Furthermore, this research shows indirect effect between proactive improvement and outsourcing long-term relationship, cooperation and outsourcing long-term relationship. Although, proactive improvement has no positive impact of control on the outsourcing performance, proactive improvement has an indirect effect on outsourcing long-term relationship. Consequently, the service provider should have knowledge of innovation. In addition, organization should increase investment in the development of innovation and can use innovation to support work. It may not result in outsourcing control but for the benefit of maintaining long-term relationships. The final result, it is interesting that cooperation has a direct effect on outsourcing performance and has a positive impact of control on outsourcing performance also has indirect effects as well. In conclusion, cooperation is an important factor in outsourcing therefore, information exchanging or knowledge sharing, teamwork including helping to solve problems in the right way are an important method of maintaining long-term relationships.

Last but not least, about not significant hypothesis. This research results shows the organization agrees that the control does not affect the outsourcing performance (**H1**) will cause the organization to ignore the importance of control. However, if there is no work control at all will result in non-systematic outsourcing, the work was not completed on time. And in the end, will have a negative effect to the organization. Therefore, this research recommends the organization that control is good and organizations should not ignore but if having to waste time in the main work of the organization or with additional investment whether equipment procurement, including human resources the organization will consider the benefit as well. In other words, the organization should not emphasize the importance of control.

And finally, proactive Improvement does not have a positive impact of control on the outsourcing performance (**H5**). Clearly, PI doesn't support outsourcing controls. Anyway, there is already a COOP that has a positive effect on OP.

Therefore, this research does not see that it is not very necessary to implement the innovations. As well as the improvement of existing innovations for outsourcing control but will make the increasing outsourcing performance and also indirectly affects to outsourcing long-term relationship as well.



Appendix A

Questionnaire for opinions about outsourcing in the company

Description about questionnaire

1. The questionnaire has 6 sections. Please answer all questions following according to the instruction. Respondent will take about 10-15 minutes to answer this questionnaire.
2. The respondent must be the person involved in an outsourcing project or has the right to decide to hire or terminate an outsourcing contract.
3. Confidentiality: All information collected by this questionnaire will be used for research purposes only. The respondent has the right to withdraw at any time because this cooperation is voluntary.
4. Please answer and return completed this questionnaire by **31th AUGUST 2019**.

Purpose of questionnaire and benefit

This research attempts to understand which factors have positive effects on Business Process Outsourcing (BPO) contract duration from the supplier-customer relationship perspective. The outcome will provide a guideline to your organization/company for a more effective BPO management.

Description

While outsourcing has become more extensive, the need to handle outsourcing relationships on a long-term basis has become the most important so we identify several important factors from key theoretical perspectives that may have an impact on the duration of IT outsourcing relationships (Lee et al.,2003).

Section 1: About you (General Information: Please check ✓)

1.1 Gender

Male

Female

1.2 Age

Below 30 years

31-40 years

41-50 years

51-60 years

More than 60 years

1.3 Work position

Top-level Managers

Middle-level Manager

Supervisors

Section leads

Others (_____)

1.4 Category of business that you work

Agro & food industry (e.g. food and beverage)

Consumer products (e.g. fashion, home and office products, pharmaceuticals and personal products)

Financials (e.g. banking and insurance)

Industrials (e.g. automotive, materials & machine, packaging, printing materials)

Property and construction (e.g. construction materials)

Resources (e.g. energy and utilities)

Services (e.g. commerce, media, tourism, transportation and logistics)

Technology (e.g. electronic components, communication technology, website design)

Others (_____)

1.5 Work experience in current organization/company

0-5 years

6-10 years

More than 10 years

3.3 About criteria to selected your outsourcing partners? : (Please check ✓)

Lists	5	4	3	2	1
	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
3.3.1 Cost					
3.3.2 Service quality					
3.3.3 Technical capability					
3.3.4 Management strength					
3.3.5 Certification					
3.3.6 Past experience					
3.3.7 Reputation					
3.3.8 Innovation					
3.3.9 Responsiveness					

Section 4: About your relationship (Please check ✓)

4.1 Control

Lists	5	4	3	2	1
	<i>Strongly agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
4.1.1 The company expected the outsourcing to follow an understandable written sequence of steps specified by the client toward the accomplishment of project goals.					
4.1.2 The company expected the outsourcing to follow articulated rules and procedures specified by the client toward the accomplishment of project goals.					

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.1.3 The company placed significant weight upon the timely.					
4.1.4 The company placed significant weight upon project completion within budget.					
4.1.5 The client evaluated the performance of the vendor by the extent to which project goals were accomplished					

4.2 Cooperation and Proactive Improvement

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.2.1 The relationship with this outsourcing is very satisfy.					
4.2.2 Outsourcing delivers its service always with the required quality.					
4.2.3 Our approach to doing business or organizing projects is very similar to our outsourcing					
4.2.4 In the relationship with our outsourcing, we always pull together in the same direction					

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.2.5 When problems or questions arise during this outsourcing project, we make decisions together with our outsourcing to get to adequate solutions.					
4.2.6 The exchange of information between the employees of our outsourcing and our company is working very well.					
4.2.7 The outsourcing shows a high level of innovation.					
4.2.8 The cooperation with outsource makes easier work control.					
4.2.9 Proactive Improvement supports outsourcing work control.					

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4.3 Performance

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.3.1 The outsourcing performed contracted services dependably and accurately.					
4.3.2 The outsourcing provided prompt service.					

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.3.3 The processes, procedures, systems, and technology provided by the outsourcing made the service a seamless one.					
4.3.4 The outsourcing leveraged process knowledge to deliver a range of process enhancements that go beyond performance expectations of the company.					
4.3.5 The outsourcing has an overall satisfaction during working together.					
4.3.6 The outsourcing helps your company/organization increasing quality of service.					
4.3.7 The outsourcing has a new innovation to make your job easier.					
4.3.8 The outsourcing helps your company/organization increasing management focus.					
4.3.9 The outsourcing never got a legal problem during working together.					
4.3.10 The outsourcing helps your company/organization reducing overall costs.					

Lists	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.3.11 Effective outsourcing makes you choose to continue hire your outsource.					

Section 5: About your contract commitment (Please check ✓)

5.1 You will continue to commit the contract with this outsourcing partner?

Yes No

5.2 You want to extend the field to cooperation with this outsourcing partner?

Yes No

5.3 You will recommend other project in your company to hire this outsourcing partner?

Yes No

5.4 You will recommend other companies to hire this outsourcing partner?

Yes No

Section 6: Suggestion

Appendix B

แบบสอบถาม (สำหรับองค์กร/บริษัท)

คำชี้แจงเกี่ยวกับแบบสอบถาม

1. แบบสอบถามมีทั้งหมด 6 ส่วน กรุณาตอบคำถามทุกข้อตามคำแนะนำ ผู้ตอบแบบสอบถามจะใช้เวลาทำแบบสอบถามประมาณ 10-15 นาที
2. ผู้ตอบแบบสอบถามจะต้องเป็นบุคคลที่เกี่ยวข้องกับการจ้าง outsource หรือ มีสิทธิ์ในการตัดสินใจจ้างหรือเลิกจ้าง outsource
3. **การรักษาความลับ:** ข้อมูลทั้งหมดในแบบสอบถามนี้ใช้เพื่อประกอบการวิจัยเพื่อการศึกษาเท่านั้น ผู้ตอบแบบสอบถามมีสิทธิ์ที่จะเพิกถอนการตอบแบบสอบถามได้ทุกเมื่อ
4. กรุณาตอบแบบสอบถามและส่งกลับภายใน วันที่ **31 สิงหาคม 2562**

จุดประสงค์ของแบบสอบถามและประโยชน์ที่จะได้รับ

งานวิจัยนี้พยายามที่จะทำความเข้าใจเกี่ยวกับปัจจัยที่นำไปสู่ผลกระทบในเชิงบวกต่อการทำสัญญา outsource จากมุมมองความสัมพันธ์ระหว่างลูกค้ากับซัพพลายเออร์ ผลลัพธ์จะเป็นแนวทางสำหรับองค์กร/บริษัทของคุณสำหรับการจัดการ BPO ที่มีประสิทธิภาพมากขึ้น

คำบรรยาย

ในขณะที่การ outsource ได้กลายเป็นที่นิยมมากขึ้น จึงจำเป็นที่จะต้องจัดการกับความสัมพันธ์ outsource บนพื้นฐานความสัมพันธ์ในระยะยาวได้กลายเป็นสิ่งสำคัญที่สุด ดังนั้นเราได้ระบุปัจจัยสำคัญหลายประการจากมุมมองทางทฤษฎีที่สำคัญที่อาจมีผลกระทบต่อระยะเวลาความสัมพันธ์ของ outsource (Lee et al., 2003)

ส่วนที่ 1 : ข้อมูลเกี่ยวกับผู้ตอบแบบสอบถาม (กรุณาทำเครื่องหมาย ✓)

1.1 เพศ

___ ชาย

___ หญิง

1.2 อายุ

___ ต่ำกว่า 30 ปี

___ 30-40 ปี

___ 41-50 ปี

___ 51-60 ปี

___ มากกว่า 60 ปี

1.3 ตำแหน่งงาน

___ ผู้บริหารระดับสูง

___ ผู้บริหารระดับกลาง

___ Supervisors

___ หัวหน้าส่วน

___ อื่นๆ (โปรดระบุ _____)

1.4 ประเภทของธุรกิจที่คุณทำงานอยู่

___ เกษตรและอุตสาหกรรมอาหาร (เช่น อาหารและเครื่องดื่ม)

___ สินค้าอุปโภคบริโภค (เช่น แพชั่น, ของใช้ในครัวเรือนและสำนักงาน, ของใช้ส่วนตัว, เวชภัณฑ์)

___ การเงิน (เช่น ธนาคาร, ประกันภัย)

___ สินค้าอุตสาหกรรม (เช่น ยานยนต์, เครื่องจักร, บรรจุกภัณฑ์, ปิโตรเคมีและเคมีภัณฑ์)

___ อสังหาริมทรัพย์และก่อสร้าง (เช่น วัสดุก่อสร้าง, พัฒนาอสังหาริมทรัพย์)

___ ทรัพยากร (เช่น พลังงานและสาธารณูปโภค)

___ บริการ (เช่น สื่อ, การท่องเที่ยว, การขนส่ง, Logistics)

___ เทคโนโลยี (เช่น ชิ้นส่วนอิเล็กทรอนิกส์)

___ อื่นๆ (โปรดระบุ _____)

1.5 จำนวนปีที่ทำงานอยู่ในองค์กรปัจจุบัน

___ 0-5 ปี

___ 6-10 ปี

___ มากกว่า 10 ปี

ส่วนที่ 2 : เกี่ยวกับ outsource ของคุณ (กรุณาทำเครื่องหมาย ✓)

2.1 อะไรคืองานหลักที่คุณจ้าง outsource

- | | |
|--|---|
| <input type="checkbox"/> การผลิต | <input type="checkbox"/> การบำรุงรักษา |
| <input type="checkbox"/> การพัฒนาเทคโนโลยี | <input type="checkbox"/> การเงิน/การบัญชี |
| <input type="checkbox"/> ระบบสารสนเทศ | <input type="checkbox"/> การตลาด |
| <input type="checkbox"/> ทรัพยากรมนุษย์ | <input type="checkbox"/> Logistics |
| <input type="checkbox"/> อื่นๆ (โปรดระบุ _____) | |

ส่วนที่ 3 : เกี่ยวกับกิจกรรม outsource

3.1 ขอบเขตที่คุณเห็นพ้องว่าสิ่งต่อไปนี้เป็นแรงจูงใจที่สำคัญในการตัดสินใจที่จะจ้าง outsource: (กรุณาทำเครื่องหมาย ✓)

รายการ	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
3.1.1 เพื่อลดต้นทุน					
3.1.2 เพื่อเพิ่มการมุ่งเน้นไปยังกิจกรรมหลักขององค์กร					
3.1.3 เพื่อพัฒนาการให้บริการ					
3.1.4 เพื่อสร้างความสัมพันธ์เชิงกลยุทธ์สำหรับอนาคต					
3.1.5 เพื่อแบ่ง/ลด ความเสี่ยงที่อาจเกิดขึ้น					
3.1.6 เพื่อเข้าถึงความสามารถขององค์กรได้เต็มที่					

3.2 คุณหา outsource ของคุณได้อย่างไร : (กรุณาทำเครื่องหมาย ✓)

- เคยทำงานกับพวกเขามาก่อน
- การโฆษณาตามสื่อต่างๆ
- ได้รับคำแนะนำ
- เว็บไซต์
- เอาท์ซอร์สติดต่อเข้ามาโดยตรง
- ผ่านบริษัทในท้องถิ่น อื่นๆ (โปรดระบุ _____)

3.3 เกณฑ์ในการเลือก outsource ของคุณ: (กรุณาทำเครื่องหมาย ✓)

รายการ	5 <i>Strongly Agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
3.3.1 ต้นทุน					
3.3.2 คุณภาพการให้บริการ					
3.3.3 ความสามารถทางเทคนิค					
3.3.4 จุดแข็งในการจัดการ					
3.3.5 ได้รับการรับรอง					
3.3.6 มีประสบการณ์การถูกจ้างงานมาก่อน					
3.3.7 มีชื่อเสียง					
3.3.8 มีนวัตกรรมใหม่ๆ					
3.3.9 การตอบสนองในการทำงาน					

ส่วนที่ 4 : เกี่ยวกับความสัมพันธ์ของคุณกับผู้ให้บริการ (กรุณาทำเครื่องหมาย ✓)

โปรดระบุประโยชน์ของความสัมพันธ์ของคุณกับผู้ให้บริการ :

4.1 การควบคุม

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.1.1 บริษัทคาดว่า outsource จะปฏิบัติตามลำดับและเข้าใจขั้นตอนที่ระบุไว้ เพื่อให้บรรลุเป้าหมายของโครงการ					
4.1.2 บริษัทคาดว่า outsource จะปฏิบัติตามกฎกติกาที่ระบุไว้ เพื่อให้บรรลุเป้าหมายของโครงการ					

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.1.3 บริษัทได้กำหนดระยะเวลาการทำงานไว้ อย่างมีนัยสำคัญ					
4.1.4 บริษัทได้กำหนดระยะเวลาการทำงานไว้ อย่างมีนัยสำคัญ ภายในงบประมาณที่มี					
4.1.5 ลูกค้ำประเมินประสิทธิภาพของผู้ขายตาม ขอบเขตที่เป้าหมายโครงการสำเร็จ					

4.2 ความร่วมมือและการพัฒนาเชิงรุก

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.2.1 ความสัมพันธ์กับ outsource เป็นที่น่าพึงพอใจอย่างมาก					
4.2.2 outsource ให้บริการด้วย คุณภาพตามที่ต้องการเสมอ					
4.2.3 แนวทางของเราในการทำธุรกิจหรือ การจัดโครงการคล้ายกับ outsource ของคุณ					
4.2.4 ในความสัมพันธ์กับ outsource ของคุณมักจะร่วมกันไปในทิศทาง เดียวกัน					
4.2.5 เมื่อมีปัญหาหรือข้อสงสัยเกิดขึ้น ระหว่างโครงการ เราตัดสินใจร่วมกับ outsource ของคุณเพื่อหาวิธีแก้ไข ปัญหาที่เหมาะสม					

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.2.6 การแลกเปลี่ยนข้อมูลระหว่างพนักงานของ outsource และพนักงานของบริษัท ของคุณนั้นทำงานได้ดีมาก					
4.2.7 Outsource แสดงให้เห็นถึงนวัตกรรมกระบวนการระดับสูง					
4.2.8 ความร่วมมือกับ outsource ทำให้การควบคุมการทำงานง่ายขึ้น					
4.2.9 การปรับปรุงเชิงรุกรองรับการควบคุมการจ้างงานภายนอก					

4.3 ประสิทธิภาพ

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.3.1 การทำสัญญาจ้างดำเนินการตามสัญญาอย่างเชื่อถือได้และแม่นยำ					
4.3.2 Outsource มีการให้บริการที่รวดเร็ว					
4.3.3 กระบวนการ ขั้นตอน ระบบ และเทคโนโลยีที่จัดหาโดย outsource ทำให้การบริการเป็นไปอย่างราบรื่น					
4.3.4 ความรู้เกี่ยวกับกระบวนการใช้ประโยชน์จากภายนอกเพื่อส่งมอบช่วงของการปรับปรุงกระบวนการที่เกินความคาดหมายด้านประสิทธิภาพของบริษัท					

รายการ	5 <i>Strongly agree</i>	4 <i>Agree</i>	3 <i>Neutral</i>	2 <i>Disagree</i>	1 <i>Strongly Disagree</i>
4.3.5 มีความพึงพอใจ outsource โดยรวมในระหว่างการทำงานร่วมกัน					
4.3.6 Outsource ช่วยให้บริษัท/องค์กรของคุณ เพิ่มคุณภาพการบริการ					
4.3.8 Outsource ช่วยให้บริษัท/องค์กรของคุณ มุ่งเน้นการจัดการที่เพิ่มขึ้น					
4.3.9 Outsource ไม่เคยมีปัญหาทางกฎหมายในระหว่างการทำงานร่วมกัน					
4.3.10 Outsource ช่วยให้บริษัท/องค์กรของคุณ ลดต้นทุนโดยรวม					
4.3.11 ประสิทธิภาพของ outsource ช่วยให้ตัดสินใจจ้าง outsource ในระยะยาว					

ส่วนที่ 5 : เกี่ยวกับการทำสัญญาจ้าง (กรุณาทำเครื่องหมาย ✓)

5.1 คุณจะทำสัญญาจ้าง Outsource นี้ต่อไปหรือไม่?

___ ใช่ ___ ไม่

5.2 คุณต้องการขยายสาขาไปสู่ความร่วมมือกับ Outsource แห่งนี้หรือไม่?

___ ใช่ ___ ไม่

5.3 คุณจะแนะนำโครงการอื่นๆ ในบริษัทของคุณเพื่อจ้าง Outsource นี้หรือไม่?

___ ใช่ ___ ไม่

5.4 คุณจะแนะนำบริษัทอื่นๆ เพื่อจ้าง Outsource นี้หรือไม่?

___ ใช่ ___ ไม่

ส่วนที่ 6 : ข้อเสนอแนะเพิ่มเติม



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