Factors affecting the level of trust and commitment in Tops Supermarket supply chain management, Bangkok

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FACTORS AFFECTING THE LEVEL OF TRUST AND COMMITMENT IN TOPS SUPERMARKET SUPPLY CHAIN MANAGEMENT, BANGKOK

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Business Administration

by
Kamolchanok Saisomboon
Juné 2008
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ABSTRACT

Trust is one of the most important aspects in successful supply chain relationship. It is the aspect that encourages commitment in the relationship. A supply chain relationship which lacks of trust and commitment may affect the performance of partners which in turn results in high-cost or even lost of current suppliers or customers.

This research's objective is to find out and analyze the factors that affect level of trust and commitment in supply chain management in Tops Supermarket, Bangkok.

Convenience sampling will be used to meet the sample size of 64 managers of Tops supermarket in Bangkok. Since the study focuses only on TOPS supermarket and not retail industry as a whole the sample size for questionnaire distribution is 64. A self-administered research instrument was used in this study which consisted of: Demographic Information; General Information; Transaction Cost Variables (Partners asset specificity, Behavioral uncertainty & Information sharing; Social Exchange Theory; Trust and Commitment. Descriptive and frequency statistics will be used for Demographic Profile, General Information. Ordinary least squares regression model was employed to test Hypotheses.
The results indicate that the following hypotheses were supported - the level of trust is positively affected by partners' specific asset investments, information sharing reduce behavioral uncertainty and increase the supply chain partners' trust of the relationship, perceived satisfaction help increase trust among partners within the supply chain, partner's reputation has a positive impact within the supply chain relationship and also in the market as a whole, and finally, positive relationship between the level of trust and commitment was presented.

Businesses must realize and recognize the key role of procurement in prioritizing resources to those activities that provide highest value add benefit and are aligned with the future development of business.
ACKNOWLEDGMENTS

I would like to express the utmost gratitude to my advisor, Dr. Harold Dyck, who has been supporting and teaching me throughout the project process. I would also like to thank my friends TEE and Rose who have always supported me in various of ways. Without you, this project would have never been completed.
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CHAPTER ONE
INTRODUCTION TO THE STUDY

Background

Companies today are placing greater emphasis on establishing stronger relationship with their supply chain partners as it is a key to gaining powerful competitive advantage in the form of lower price, increasing efficiency improved customer service & quality. Changes in buyer seller relationships have been changed to foster closer collaborative approaches as according to Spekman (1998) there has been increased competition from different producers, advancement in new technology and short lifecycle of the product.

The integrated supply chain management stress on the significance to reduce cost teamwork in networking both internal and external along the supply chain. All players should be linked up including the suppliers' supplier to the customer. The information sharing and partners' trust are another important factor for supply chain management.

For a company to be successful with its relationship marketing and effective supply chain performance trust and commitment are important aspect to success. According to Morgan and Hunt (1994) the result implied that trust is
positively affected by shared values and communication among supply chain partners. According to Ellram (1996), only trust business partners are likely to honestly share, without hesitation, cost detail with each other in order to reduce total cost that may arise in supply chain relationship.

Results have proven that the most serious obstacle for strategic coalition between business partners is “the lack of trust” (Sherman, 1992) which consequently consider as a basis for strategic partnership (Spekman, 1988) The available information that cannot be shared to any partners who can respond to a given situation, is considerably useless. To make a buyer seller relationship trustworthy it is crucial to share relevant information when needed. However according to Bowersox et al., 2000 it is likely that confidential financial information might need to be released, and this is a challenging tasks which can only happen with trust starting from inside the firm and then extending to its business partners.

Retail Trade: Traditional and Modern Trades

Traditional and modern trades are the two types of retail business with each having their own characteristics. Traditional trade is usually Thai family owned business that provides conservative service. The
owners mostly afford to invest limited amount of money and manage the business with nonfunctional management structure. Most of the retail businesses were being situated in buildings in local communities. The modern trades, conversely, provide contemporary services, technologies, and displays. The owners tend to invest a large amount of money in standardized management system to set a business structure to facilitate a larger group of customers.

Source: Thai Retailers Association.

Source: Thai Retailers Association

Figure 1. Thai Retail Business Structure
According to www.se-ed.net the following information was found:

Data from Merrill Lynch Phatra showed the distribution of market shares in the retail business in 2000 as follows: hypermarkets (30%), department stores (28%), convenience stores (17%), cash & carry (16%) and supermarkets (9%).
www.se-ed.net stated the following:

Consumer product sales have shifted from a traditional trade having a high gross margin (net profit 20%) to discount stores like hypermarket, supermarket and cash & carry that have a low gross margin (net profit 3-5%). The low gross margin strategy which leads to a lower selling price has helped prevent consumer price index (CPI) from soaring.

The core of research structure is successful supply chain implementation involves a dedication from supply
chain partners. Trust is the most significant aspect for such dedication. This research, according to business.slu.edu, purposes that trust and information sharing will be elevated partner's asset specificity (PAS) which, in turn, would lower behavioral uncertainty in supply chain relationship.

"The partner's asset specificity (PAS) will increase both trust and information sharing of business partners which in turn would decrease behavioral uncertainty for them". In sum, this study illustrates the lower the BU, "the higher the level of trust among supply chain partners" (business.slu.edu).

La Londe's study (2002) found the following:
Trust and risk can be significantly more important in supply chain relationships, because supply chain relationships often involve a higher degree of interdependency between competitors. (p. 9)
Any retailer would like to guarantee a predictable and steady product flow for all of his supplies and this condition works when the number of suppliers is balanced with high performance. TOPS Thailand amongst others, manages and designs its decision on products supply chain relationship.
TOPS Supermarket was facing problems with fresh products categories in terms of quality, safety and stability of supplies when CRC-Ahold joint venture started in 1998. Long lead times, unstable direct store deliveries and the small-scale character of a high number of suppliers resulted in low service level and high post harvest losses and shrinkage. Since 2005, Tops supermarket is run by the Central Food Retail Company.

Improvements were realized by implementing Supply Chain Management (SCM) which is the implementation of facilitation of collaborative processes that derive to reach customer satisfaction and greatest effectiveness for common benefit. Its main goals are reduction of logistic costs and improvement of customer service. For an efficient supply chain that delivers constant product flow and high quality to customers, the first condition is that the number of suppliers is reduced and streamlined. To achieve a reduction of the number of suppliers, TOPS used a number of preferred suppliers which included: “long term agreements on quality, quantity and price; agreements on information flows; agreements on sub-suppliers; agreements on distribution of cost and profit resulting from co-operation; preferred suppliers perform value added activities” such as washing, cutting, trimming, grading
and packing; preferred suppliers control their chain backwards so that products can be tracked and traced; preferred suppliers use refrigerated transport and standardized crates and pallets.

The preferred suppliers led to a number of qualitative and quantitative advantages which were increased controllability; reduction of total distribution costs and lead time.

According to www.klict.org qualitative and quantitative advantage for preferred suppliers are as followed:

- Improved freshness and safety for consumers; lower product prices; reduction of yield loss and shrinkage throughout the chain; more certainty of sales for preferred suppliers; and preferred suppliers obtain feedback about quality and shelf life.
Figure 4. Supply Chain Management System of a Modern TOPS Supermarket, Bangkok

All parties in the chain benefited from the preferred suppliers implementation. There are potential gains for various stakeholders in the value chain: Consumers benefit from improved freshness, broader assortment, less out-of-stock situations, lowers prices (become available because of lower costs), high product safety, and year round delivery of high quality products (Van Weele, 1997).

According to Van Weele, (1997) retailers benefit from increase delivery reliability, lead time reduction, reduction of unnecessary stocks, reduction of direct store deliveries which increases efficiency, buyers can focus more on store needs rather than availability of products at purchasers, increase of competitive advantage compared to other retailers, year round delivery of high quality...
products, more profitable shelf space; Purchasing Organization (World Fresh): reduction of handling costs, reduction of ordering and invoice costs, increase of delivery reliability, reduction of the need for quality checks, outsourcing of production activities such as packing and cutting, products can be tracked and traced, increase of food security, better control over purchasing process; Preferred suppliers: increased certainty because of long-term contracts, raise of volume, income may be increased through value adding activities, increased competitive advantage over other suppliers, possibility of joint new product development, suppliers obtain feedback about quality; Growers: direct delivery may become an option, access to new knowledge that may lead to increased quality of produce, a potential certifying.

A spreadsheet model was developed to get an insight in the cost effects of TOPS project on supplier reduction. It was concluded that the use of a limited number of preferred suppliers instead of many small suppliers lead to a lot of savings in total chain costs. Once it was decided which suppliers would become main suppliers, a systematic approach was followed to organize co-operation throughout the supply chain. Four different stages can be
recognized in this process, as indicated in the figure 5 (Van Weele, 1997).

![Diagram showing the hierarchy of supplier relations and time horizons]

**Figure 5. Co-Operation Throughout the Supply Chain**

From figure 5, the first phase, suppliers were selected on a short term, based on price at the beginning of a new order period and a specified quality. At the second stage, a more stable relationship emerged. The number of suppliers was reduced and contracts were concluded on a yearly basis. Suppliers controlled quality at the back door, customer companies at the entrance door. Prices are more stable. In the third phase suppliers, became partners. Logistical systems were mutually adapted
and became more efficient. Suppliers ensured quality. In the final phase, suppliers were development partners they not only delivered products but also engage in new product development.

TOPS Supply Chain project went through two consecutive development phases. In the initial stage of the supplier relation progression process the emphasis was on chain optimization, reducing costs and the total number of fresh produce suppliers. In the second phase the focus shifted towards integral chain care with food safety assurance and certification being one of the main concerns (Van Weele, 1997).

Statement of the Problem

The Thai supermarket chains such as Foodland, Family Mart, Villa Market, and Food Lion are struggle in competitive upper market levels and premium products. They place themselves at “middle level” but aimed at high quality.

According to Ruben, Boselie, and Lu (2008), the joint venture between Royal Ahold and Central Retail Corporation (CRC), Thailand were built to operate supermarket chain under the name of “Tops Supermarket” in 1997. The company’s initial purpose is to be the number one
supermarket that delivers fresh food to Thai consumer. However, Tops supermarket faced with low delivery quality for small suppliers, they have introduced their own supply chain management program in 1998. The program involves improvement of efficiency and effectiveness in quality and safety of perishable food along their supply chain.

During the period from the year 2002-2004, TOPS supermarket in Bangkok faced consequences of operations with small suppliers. Approximately 200 or more supplier were delivering fresh food at more than two times a week but the percentage of out-of-stock and shrinkage in the storage were high. The lead-time was the major problem because there was roughly 60 hours of lead time caused by lack of pre-cooling and transportation (www.ifama.org). According the Boselie, 2002 there were unclear consistent of product specifications communicated along the supply chain.

According to Buurma and Saranark (2006), the perishable products were delivered in various quality and quantity through non-cooled trucks. The deliveries were also unreliable which leaded to out-of-stock. And as a result, Tops Supermarket needed to spend a lot of money to hold high stock as a buffer. Tracking and tracing of products were very difficult and with frequent price
changes, there were mistakes in price determination. These had an effect on the suppliers’ trust and commitment.

These consequences were faced during the adaptation of supply chain period in 1998-2003 (Buurma & Saranark, 2006).

www.techrepublic.com elucidates the following:

TOPS found the solution by consolidating its two databases used for customer relationship management and the supporting operating system onto Oracle Database with Real Application Clusters on Linux, and integrating its applications with Oracle Application Server.

Purpose of the Study

This research seeks to initiate various perceptions for creating framework that leads to factors that affect trust in customer and supplier relationships. It also assists supply chain managers to be able to study their partner relationship that could lead to better understanding between them.

Significance of the Study

Predictable and steady product flow can be possibly assured from vendor or producer of the products. A condition to come to an efficient supply chain that
delivers products of constant and high quality is that the number of suppliers is balanced, there is trust between Tops Supermarket and suppliers who have a high performance.

According to Kwon and Suh (2004) and Morrow et al. (2004), successful supply chains depend on “a high level of trust and strong commitment among supply chain partners” (Kwon & Suh, 2004). Trust appears to serve as a unique mechanism, which not only largely reduces transaction costs via for example less control mechanisms (Beccerra & Gupta 1999), but also creates value by increasing mutually information sharing, which will in turn improve performance in buyer – seller relationships (Dyer & Chu 2003). According to Lee and Dawes (2005), the more the buying firm’s trusts a supplier, the bigger its long-term orientation with the supplier.

According to Reardon and Timmer (2005), the integration of supply chain is one of the significant strategies to assure dependable source of fresh food to supermarkets in East Asian countries. The integration leads to reduction of “information and screening costs” in order to emphasize “mutual trust” among supply chain partners.
"The presence of trust improves measurably the chance of successful supply chain performance” (business.slu.edu).

Therefore, this study seeks to study whether trust and commitment has been able to cultivate over the past years after changing the supply chain integration. The thesis study attempts to study the relationship quality based on trust and commitment of TOPS Supermarket supply chain management in Thailand and also providing supply chain managers with an comprehensively analysis of supply chain management in supermarket.

Research Objectives

Author Spekman “considered trust so important to call it the cornerstone of the strategic partnership, because mistrust breeds mistrust. And as such, would also serve to reduce commitment in the relationship” (Spekman, p. 79) and “the transaction to one of more direct short-term exchange” (McDonald, p. 834).

This research seeks to find the factors that have an influence on trust and commitment of TOPS Supermarket supply chain management, in Bangkok. Information sharing or IS is the main focus for addressing the trust and
commitment relationship of partners within the center of supply chain relationships.

The main objective of this research is to study the major factors derived from transaction cost analysis that affect the relationships between trust and commitment of supply chain partner.

Research Hypotheses

Based on the objectives and problems of the study, the following research hypotheses are borrowed from Kwon and Taewon, 2004 which was formulated for similar testing purposes:

Ho1: Supply chain partners' on specific asset investments will have increase in the level of trust on partners.

Ho2: There will be a decrease in the level of trust in the relationships with supply chain partners by the perceived behavioral Uncertainty (BU).

Ho3: Information Sharing (IS) will indirectly develop level of trust among partners and lower the degree of BU.

Ho4: The level of perceived satisfaction will straightforwardly develop the level of trust with
his/her trading partners with his/her corresponding person in the supply chain.

Ho5: There is a positive relationship between a partner’s reputation in the market and the level of trust in partners.

Ho6: Perceived conflict with his/her trading partners satisfies the level of trust among trading partners.

Ho7: There is a positive relationship between the level of trust and the level of commitment.

(Kwon & Taewon, p. 8-10)

Scope and Limitations of the Study

Scope

According to Doney and Cannon (1997) and Reichheld and Sasser (1990), suppliers in highly-competitive environment need to successfully nurture “cooperative relationships” with their customers to reduce the increasing of cost in acquiring customers. “Cooperation refers to situations in which parties work together to achieve mutual goals, leading to outcomes that exceed what any of the firms involved would achieve if it acted solely in its own best interests” (Anderson & Narus, p. 46)
In addition, long term relationship is the most crucial thing in building trust among supply chain partners in which, in marketing sense, can be controlled by marketing theory and practice (Dertouzos, Lester, & Solow, 1989; Dwyer, Schurr, & Oh, 1987).

This research investigation is an attempt to examine transaction cost variables and Social exchange theory factors on trust and commitment of TOPS supply chain management, in Bangkok. The study will be conducted by distributing questionnaire to TOPS managers. This research may be of interest to other researchers, suppliers, supermarkets and other types of retail stores as indicators of other prospective factors that affect management along their supply chain and can also be used as a source of secondary information to enhance existing interventions techniques or for further research in their professional fields.

The ten-item measurement of commitment developed by Kumar et al. (1995) was employed in this research through the use of reseller performance scale to help consider the factors involving in level of trust and commitment in TOPS supermarket.

The following related study has been retrieved from authors Kwon and Taewon, 2004, study on variables that are
associated with this research study. The measure for a partner's asset specificity (PAS) was adapted from Joshi and Stump (1999) and Heide (1994). It explains "the specific asset investments in resources, procedures and people made by the partner in its partnership with the respondent firm" (Kwon & Taewon, 2004). Behavioral uncertainty (BU), according to Noordewier et al. (1990), Zaheer and Venkatraman (1995), and Joshi and Stump (1999) was satisfactorily indicated by decision-making uncertainty which is used to forecast behavior of the partners in the future.

The two-item measurement was used to determine the information sharing level that affects the decision making of both partners in this study.

Commitment (COMM) was considered derived from a reseller performance scale and perceived personal conflict (PPC) by Kumar et al. (1995). It is two-item constructs. Perceived satisfaction (SAT) was measured by three-item constructs from Kumar et al. (1992). The partner's reputation (PR) was measured based on a three-item measure by Ganesan (1994). (Kwon & Taewon, p. 11)

All questions were measured by a seven-point Likert scale from 1 = strongly disagree to 7 = strongly agree.
Limitations

The researcher acknowledges that the finding of this study is only applicable to respondents (TOPS managers) of the study. The study is limited to only TOPS Supermarket in Bangkok.

According to Kwon and Taewon, 2004, the ineffective lines of communication are one of the major parts in unsuccessful trust building process which is considered crucial for "successful supplier development effort and ultimate commitment". Trust is, however, very hard to control since it is influenced by many types of economic activities. And as a result, a research model that is being used in this study should be a very wide span that could reflect many types of economic cause for decision making in supply chain.

Definition of Terms

In this section, certain terms that require clarification will be defined in their general and operational sense.

Trust - Trust is one in which confidence is placed willingly on an exchange partner.
Commitment - According to Morgan and Hunt (1994) commitment is an ongoing relationship with each other with dedication or devotion.

Asset Specificity - According to Williamson (1985), asset specificity is defined as an investment including physical and human capital that lasts.

Behavioral Uncertainty (BU) - Authors, Joshi and Stump 1999, defined Behavioral uncertainty as "the inability to predict partner’s behavior or changes in the external environment" (Kwon & Taewon, p. 8)

Information Sharing (IS) - According to Henderson 2002, Information sharing is defined as sharing information on every aspect including strategic information, operational data, financial data, scheduling, new product design, forecasting etc., to utilize benefit from supply chain partners.

Perceived satisfaction - According to Batt 2003 Perceived satisfaction is the trust that can be improved only if there is an availability of mutual understanding between partners that could generate pleasing result for both of them.

Perceived reputation - Having a good and well reputable brand, or company name in the market, that certain
party would be considered as trustworthy in business relationship.

Perceived conflict - Arguments that is likely to occur between partners dealing with each other. During the process of building trust, if a partner is recognized of having disputes with the business, he or she can experience discomfort and be affected from such observation.
Conceptual Framework for This Research Study

**Transaction Cost Variables**
- Asset Specificity
- Behavioral Uncertainty
- Information Sharing

**Social Exchange Variables**
- Perceived Satisfaction
- Partner's Reputation
- Perceived Conflict

H1 H2 H3 → Trust → Commitment

H4 H5 H6

Figure 6. Conceptual Framework for this Research Study
CHAPTER TWO
LITERATURE REVIEW

Introduction

The environment of relationships between an organization, customers and suppliers, has an important business inferences for all firms, no matter the size. With this perspective, this research study focuses on the factors affecting the level of trust and commitment in TOPS Supermarket supply chain management, in Bangkok, Thailand. The review of literature reasons to relevance and is presented in the following order: (a) Concept of Trust in supply chain; (b) Transaction cost variables; (c) Supply chain management commitment; (d) Social exchange variables; (e) Tops supply chain; and (f) Related studies on trust and commitment on supply chain management.

Theoretical Background

Concept of Trust in Supply Chain

Trust plays an important role and is the crucial elements in successful supply chain relationship (Hsieh & Hiang, 2004). According to Doney and Cannon, (1997) “trust is considered to exist only if one party believes that the other party is honest” (p. 37)
Moreover, author Gulati (1995) states the following:

It is the expectation that attenuates that one party in the transaction will behave opportunistically. Therefore, if trust exists in a relational contract, The contracting parties will be convinced that they will not be victims of behavior, such as moral risk, or any type of contractual hazard. (p. 98)

Many authors such as Dyer and Chu, (2000); Joshi and Stump, (1999) mentioned that there are more sub-elements that corporate trust including honesty, generosity, and capability. Trust, according to Anderson and Narus (1990), and Joshi and Stump (1999), refers to hope and expectation that one firm has towards its business partner.

In the same way, Anderson and Narus stated the following:

The firm’s belief that a partner’s company will perform actions will result in positive outcomes for the firm as well as not take unexpected actions that result in negative outcomes. (p. 45)

According to Sako (1998), trust is classified into three categories. These include contractual trust, competence trust and goodwill trust.
Sako’s 1998 study found the following: Contractual trust rests on a shared moral norm of honesty and promise keeping, while competence trust requires a shared understanding of professional conduct, technical and managerial standards. Goodwill trust can exist when there is consensus on the principle of fairness. She argues that there is a hierarchy of trust whereby fulfilling a minimum set of obligations constitutes contractual trust, while honoring a broader set constitute goodwill trust. Therefore, a movement from contractual trust to goodwill trust involves a gradual expansion in the congruence of beliefs about what is acceptable behavior. (p. 99)

On the other hand, author Dyer (1997) had considered trust as a part of “an economic value” only on non-contractual basis. Dyer (1997) states that Non-contractual trust such as “goodwill eliminating the need for formal contracts, which are costly to write, monitor, and enforce in order to reduce transaction costs” (qtd. in Masuko & Kristen, p. 2).

Trust and Supply Chain Performance

Ryssel et al., (2004) quoted that “for supply-chain partnerships to become truly collaborative in nature,
trust is not only a desired characteristic, but a necessary one” (p. 201).

Even in the past as stated by Morgan and Hunt (1994) that “trust is a major determinant of relationship commitment” (p. 24). In another word, trust is a major part in business commitment for supply chain.

Furthermore, Chandra and Kumar, (2000) stated that it is more than true that supply chain partnership in most countries are hard to define the scope since the differences in social and commercial factors in those countries are not the same. Supply chain in both local and multinational relies on many aspects such as trade regulations and laws, and different logistic system and technologies. And as a result, trust and commitment plays crucial roles in attaining coalition of both across-border and local supply chain partnership.

The authors Chandra and Kumar (2000) also said in their research that governments are also benefited from trust and commitment since supply chain development encourages improvement in social and environmental context.

No matter the approach used by authors Chandra and Kumar (2000) to describe and define SCM, there is an agreement that one of the major goals of a supply chain is
to maximize overall business performance and gain competitive advantage through integration, coordination and collaboration between sequentially linked organizations.

Hill's 1995 study found the following:
A smoothly running supply chain requires effective governance mechanisms in inter-organizational relationships, based on either third-party reinforcement or self-reinforcement agreements. Self-reinforcing agreements can be formal, such as joint investments, or informal based on trust and goodwill. Informal mechanisms are more effective and less costly than formal reinforcement mechanisms.

(p. 123)

On the other hand, past research by Joshi and Stump, (1999) identifies that "high commitment and low opportunism" (p. 342) requires trust which is the most important standard for buyer-supplier relationship. Trust can create better sharing of information and mutual understanding.

This research study applies theory and guidance from the Commitment-Trust theory of Morgan and Hunt (1994). The authors had confirmed that "commitment and trust are key mediating variables for long-term relationships between
buyers and suppliers", and are necessary to obtaining success in relationship marketing or else investments in a relationship are not made. Below Figure 7 by Rott (2000) shows the variables that are used in the process to building relationship.

![Diagram of relationship building process]

Figure 7. Variables in the Process to Building Relationship

With reference to past research by Zaheer et al. (1998), trust facilitate sharing of knowledge, and product/process understanding and technology that enable the company to create competitive advantages. However, the sharing of actual sale information could discourage each party to transfer buying tactics. Zaheer suggested that "inter-organizational trust is positively associated with supplier performance and customer satisfaction" (Zaheer, et al., p. 148).
According to Luhmann (2000), the most important general trust factors are positive experiences, which have been made personally, and communication being the bridge to personal relations.

**The Determinants of Trust**

Additionally, researcher Powell, (1990) identified that a firm has a strong belief that its supply chain partners would never break commitment and stay loyal to their relationship. In other words, supply chain partners are believed to "behave" in a credible behavior since failing to do so would result in "social sanctions".

**Social Perspective**

Powell, 1990 also acknowledged that according to the sociological perspective, trust emerges through social interactions between exchange partners and Ellickson (1991) stated that "if a transaction is embedded within a broader reciprocal social relationship, then transaction partners may rely on social sanctions to protect their interests". Therefore several kinds of "social sanction" may perhaps dominate opportunism.

**Economic Perspective**

Another author Williamson (1983) also puts on view that transaction partners may also behave in a trustworthy
manner (refuse to be opportunistic) caused by "credible commitments" with a trading partner.

On the other hand, Powell (1990) mentioned on a social perspective that trust will emerge due to social interactions between exchange partners. The suppliers trust that the buyers will treat them fairly because the buyers' incentives are appropriately associated and there is an economic incentive. With this, trustworthy behavior can be chiefly related to economic rather than social considerations.

**Commitment in Supply Chain Management**

Anderson and Weitz, (1992) mentioned that "business transactions among supply chain partners entail commitment by two parties in order to attain their common supply chain goals. Without commitment, business relationship and subsequent transactions become fragile and vulnerable" (Anderson & Weitz, p. 20).

Commitment is often considered as an important aspect in multi-organizational relationships. There is always "stability and sacrifice" in commitment in organization's internal and external relationship. It is quite obvious to see that each party is willing to give up short-term benefit to obtain long-term relationship.
On the same track, Rott (2000), believes that commitment is another crucial part, in addition to trust, in building and upholding good business relationship. It also helps business partners in saving time, effort in finding a new business partner after the current deal is broken. Commitment includes three major parts: "sacrifice of some value, willingness to act in certain ways, and efforts to secure consistency and continuity in the relationship" (Rott, p. 36)

Commitment is defined as "an enduring desire to maintain a valued relationship" (Moorman, Zaltman, & Deshpand, p. 316). They simply stated that commitment is an important construct in the long-term direction of a relationship and so vital to maintain in order to stay in any business relationship.

By this mean, one supply chain partner is make to believe that the effort he or she will make is worth and guarantees that the relationship will be maintained.

On the other hand, it is being revealed that commitment will ensure a long-term orientation in the relationship (Morgan & Hunt 1994) and is therefore one of the critical variables for the measurement of relationship quality.
Moreover, authors Garbarino and Johnson, (1999) quoted that "commitment to the relationship is defined as an enduring desire to maintain a valued relationship" (Garbarino & Johnso, p. 71). There are three elements for commitment which are "an instrumental component (investment)", "an attitudinal components (effectiveness)", and "a temporal component (relationship)".

Below Figure 8 illustrates the relationship between supplier and buyer relationship by Williamson, (1996). The figure indicates that the relationship between supplier and buyers have no dependence in terms of transaction, there is a risk premium added for value by suppliers to buyers and total commitment occurs between supplier and buyer in their relationship.

![Figure 8. Relationship of Supplier and Buyer](image-url)
Furthermore, authors Anderson and Weitz, (1992) bring to light that in inter-organizational relationships, commitment facilitates in building healthy relationship in which sometime require “short-term sacrifice” and “confidence” in order to maintain constant relationship among supply chain partners.

In contrast, authors Smith, Bailey, and Brynjolfsson, (1999) stated that most partners in committed relationship are able to achieve better access to market information, selection of “customer-oriented assortment”, and even better delivery service (mostly for e-market suppliers) than other ordinary suppliers.

Transaction Cost Variables

Asset Specificity

With reference to Heide (1994), asset specificity is “investments in physical or human assets that are dedicated to a particular business partner and whose redeployment entails considerable switching costs.”

However, author Williamson (1985), described asset specificity as “durable investments that are undertaken in support of particular transactions, and the opportunity cost of (such) investment is much lower in best alternative uses.”
Asset specificity is also considered as "a variety of specific investments" that include two characteristics; "specialized physical and human capital, along with intangibles such as R&D and firm-specific knowledge" (Williamson, 1985)

Shelanski and Klein (1995), however, claimed the fact that transaction-specific investments cannot be easily reorganized and give rise to a safeguarding problem, which poses potential costs. Hence, when a firm tries to minimize transaction costs, the firm’s investments in specific assets provide a rationale for distrust in partners in the relationship.

Additionally, partner’s asset specificity can decrease frustration while positively construct commitment for both business partners (Weiss & Anderson, 1992)

Lastly, authors Heide and John (1990) do claim that “a partner’s specific asset investments are positively related to expectations of continuity” (Kwon & Taewon, 2004)

Behavioral Uncertainty (BU)

According to Joshi and Stump (1999), behavioral uncertainty represents "the inability to predict a partner’s behavior or changes in the external environment". In contrast, Williamson, (1985) stated that
when there are complexities related with supervising partner’s performance where behavioral uncertainty is developed.

Several authors such as, Heide and John (1990); Joshi and Stump (1999) identified that uncertainty has a great cause on authority and is likely that behavioral uncertainty will lower trust since it builds a performance assessment trouble.

**Information Sharing (IS)**

Handfiled and La Londe stated,

The most crucial factor for supply chain management to be successes is information sharing between partners. These authors reveal that with every problematic detail along the supply chain, including high level of inventory and product deficiency is responsible for sub-optimizing outcome. (Handfiled & La Londe, p. 24)

Information sharing is ones of the many solutions that can positively reduces several problems along supply chain management which includes mismatch and subsequent bullwhip effect, ambiguity which caused by multi-layer decision making process. It facilitates collaborate planning, coalition of business partners, forecasting and
replenishment, and also management in information flow (Simchi-Levi et al., 2003).

Social Exchange Variables

Social exchange theory by Morgan and Hunt (1994) introduced many interesting ideas that participate in the evaluate trust and relationship between supply chain partners which includes the following three concepts that play an important roles in evaluating the level of trust among supply chain partners of TOPS supermarket.

1. Perceived Satisfaction (SAT): Author Batt (2003) assumed that the level of trust will be enhanced if there is an understanding that partnerships produce mutually satisfactory outcomes that they can share.

2. Partner’s Reputation (PR): Batt (2003) also stated that if a supply chain partner enjoys a high and credible reputation in a market, it can be interpreted that the partner is trustworthy in relationships.

3. Perceived Personal Conflict (PPC): Batt (2003) claimed that if a partner is perceived as having conflict in dealing with the business, it is
possible that the trust-building process may suffer from such perceived appearance.

Company Background: Tops Supermarket, Thailand

Central Food Retail Co., Ltd. (CFR) is the largest supermarket chain in Thailand. It has been operating since 1996 and is one of the business units under Central Retail Cooperation (CRC) Co., Ltd. Tops supermarket under the Central Food Retail Co., Ltd. has 91 branches nationwide with 65 stores in Bangkok and 26 stores upcountry. The locations of most stores are situated in Central Department stores or Robinson Department Stores and others are freestanding supermarkets in Bangkok (TOPS supermarket, Thailand, 2007).

Figure 9 below illustrates the Thailand retail business structure.
With reference to Van Roekel, (2002) research, there has been a quality and safety concern in fresh food department of Tops Supermarket when there was a joint venture between Royal Ahold and Central Retail Corporation in 1998. It has been reported that the agrochemical toxic were incredibly high in fruit and vegetable that were delivered by local suppliers. The store didn’t recognize the importance of safety measurement or even the origin of the fresh food product. Van Roekel, (2002) stated that most fresh food products were delivered to the stores at least three times a week from roughly 250 different local
suppliers. As a result, products were often out of stock, handling high costs, bad service, and shrinkage loss.

Furthermore, Van Roekel, (2002) stated that, during 1998-2002, TOPS supermarket had employed a supply chain project that yielding customer “high-quality” product which includes freshness and safety at reasonable price. The project, backed up by Thai government, has four main objectives; to raise service level in the perishable segment; to decrease lead time and post harvest losses and shrinkage; to develop product’s quality and safety by using qualified supplier through certificate and preferable supplier program; and to create training for better understanding of workers about Thai food industry.

There were, according to Van Roekel (2002), some small suppliers doing business with TOPS through two networks; formal and informal. The formal network is the network of contract farmers/buyers. These business partners were considered trustworthy because of their potential to control backward of supply chain. On the other hand, the informal network is those suppliers who were introduced through “the informal farmers’ associations”. In the year 2002, the focus on supply chain development had shifted from “chain optimization; i.e. reducing post harvest losses and handling costs” to
"integral chain care; i.e. good agricultural practices". Additionally, TOPS supermarket has been collaborated with several public and private sectors such as international research institutions and Thai Department of agriculture in order to increase products safety standard and certification improvement (Van Roekel, 2002).

The TOPS supermarket supply chain was responsible for product sourcing; innovation and exchange of best practice to improve the performance of stores and operations, socially and environmentally; information, transparency and opportunities for customers to make their own responsible choices.

Furthermore, the project has been associated with certificate program offered by Thai Department of Agriculture’s to raise public awareness and construct framework for retailer’s reliability and responsibility.

With reference to TOPS supermarket management 2007, TOPS supermarket always supports the progress to improve their service level towards their customers. Their suppliers are encouraged to participate in the ECR (Efficient Consumer Response) developments in Thailand. The ECR program involves the co-ordination of activities among all participants in the supply chain in three main
improvement areas: demand management, supply management and enabling technology.

Tops Supermarket applied the ECR as a consumer-driven process starting from the management of consumer demand, working backward through retailers, suppliers, and suppliers to increase efficiency and remove unnecessary supply chain costs such as inventory, excess administration and empty shelves. The ECR (Efficient Consumer Response) has become a new proposal on civilizing the effectiveness of the whole supply chain process of Tops Supermarket Thailand (Tops Supermarket Thailand, 2007).

With reference from Tops Supermarket Thailand, 2007 management website the three areas of Efficient Consumer Response: demand management, supply chain management, and technology. Demand management is about managing demand as a critical success factor in the ECR performance for the reason that unanticipated change in demand pattern will affect the smoothness of the whole supply chain operation of TOPS supermarket Thailand. Supply chain management is equally imperative as demand management, the improvement of the supply-side activities lead to noteworthy savings by increasing the operation efficiency, reliability and reducing inventory costs. The six supply improvement
activities of TOPS supermarket are: Integrated Supplier, Reliable Operation, Synchronized Production, Cross Docking, Continuous Replenishment and Automated Store Ordering. And lastly, enabling Technologies is another vital factor of information-sharing among all participants in the supply chain. This is because the ECR improvement cannot be done successfully without the help of technology. The integration of this information, hence, requires the installment of a rapid communication system such as the Electronic Data Interchange (Tops Supermarket Thailand, 2007).

**Tops Commitment to Tops Supermarket’s Efficient Consumer Response**

With reference from Tops Supermarket Thailand, 2007 management website, the Continuous Replenishment of Tops supermarket Thailand began from the 1999. Tops Thailand and Procter & Gamble had benefit with a view to achieving greater customer satisfaction at less costs. Both companies had agreed to start a logistics project called “Continuous Replenishment Project” (CRP). The objectives are to achieve the right product mix in the right local stores to meet customer needs, to reduce cost and time along supply chain and to minimize inventory levels.
In this way, the continuous replenishment makes the supplier answerable for automatic, regular and frequent ordering and supplying of stock within the supply chain. In turn, Procter & Gamble will benefit from regular demand, based on regular sales as the reliability increases safety stock removed from the system. Thus, the customer will benefit by improved product availability and increased customer services (Tops Supermarket Thailand, 2007).

Quality Chain Management of Tops Supermarket, Thailand

Figure 10 below shows the quality chain management of Tops supermarket Thailand from the management website of TOPS supermarket 2007. Top Supermarket Thailand concentrates on product quality sold at stores by auditing, giving suggestions and developing supplier, controlling product inspection at Food Distribution Center and Stores for consumers' safety.
Figure 11 below shows the supply chain of TOPS supermarket supply chain from the Food and Agri-business forum, 2003. The supply chain provides a continual product flow coordinated to consumption. The chain policy facilitates TOPS supermarket to make certain that fresh products like fruits, vegetables, meat, and poultry are purchased daily by Thai citizens.

However, there are some disputes the supermarket goes through, some of which are, uncertain quality and supply; insufficient quality control; handling high costs, many (small) suppliers; long lead times & low shelf life; and no tracking and tracing options.
Figure 11. Supply Chain Strategy of TOPS Supermarket, Bangkok

Figure 12 below illustrates the supply chain of only fresh vegetables in the TOPS supermarket chain by Boselie, (2003).
In 2003, author Boselie, also confirms that TOPS supermarket had undergone several problems on high lead times and post-harvest losses. The approximate lead-time from production to store presentation is as high as 60 hours. The additional problem is that the quality of transportation is quite bad since the available cooler truck doesn’t meet standard to keep the products fresh.

Moreover, Boselie, (2003) revealed that through "benchmarking" in 'preferred supplier approach and lead-time reduction program, retailers will be able to reduce lead-time from production to store presentation and the total number of suppliers to 60. Nevertheless,
retailers need to continue 'inspection', 'auditing', and managing customer complaints.

Figure 13 below shows the landscapes of certain Asian economies by AC Nielsen in year 2006. Korea, Taiwan, Thailand and Malaysia were more developed food retail markets and changes in the market were equally significant. However, the total outlet growth was stagnant, but all saw a shift in favor of hypermarkets and convenience stores. Such as Thailand, where supermarkets established base of 8% in 2005, convenience stores and hypermarkets grew 26% and 13% respectively (AC Nielsen, 2006).
Related Studies on Trust and Commitment on Supply Chain Management

Milford (2002) stated in a study of value chain in the Australian Sugar Industry, that millers perceive the level of trust between millers and growers to be better than the perceptions of growers and harvesters. Moreover, Milford recognized the lack of trust by growers and harvesters to the poor performance of the industry in the past, individualism on growers' part and perceived power and information imbalances.

Furthermore, from a study conducted by Ramdas and Spekman (2000) six variables (inventory, time, order
fulfillment, quality, customer focus, and customer satisfaction) were used mirrored several approaches to evaluate supply chain performance. The results indicated that authority balance is positively related to "alliance performance". The alliance performance is considerably good when there is a balance of authority between both parties, and it is considerably bad when one party tries to control the network through "authority advantage". It obviously shows that trust has an important effect on authority balance and alliance performance.

With reference to authors Teegen and Doh, (2002) in agreement with Ramdas and Spekman (2000) concluded that "trusting relationships are perceived to promote alliance performance" and that the presence of authority advantage has a "negative effect on alliance performance", which can deteriorate by the absence of trust.

In contrast, trust and commitment for Morgan and Hunt (1994) are imperative factors if a company is going to succeed with its relationship marketing. They concluded that trust is positively affected by shared values and communication among supply chain partners, but negatively affected by the presence of opportunistic behavior. They viewed shared values as the extent to which the trusting parties' goals, behavior and way of work are congruent.
Morgan and Hunt (1994) claimed that communication is sharing of information among the parties, while opportunistic behavior refers to the attempt to gain "individual gain". Morgan and Hunt's findings had matched to their model. They found that the existence of trust in relationship has a positive outcome on commitment, collaboration, functional disagreement and a negative outcome on uncertainty.
CHAPTER THREE
METHODOLOGY

This chapter discusses the research methodology which is presented in the following order: (a) Research Design, (b) Subjects of the Study, (c) Research Instrument, (d) Data Collection, and (e) Data Analysis.

Design of the Investigation

This study employs the regression model to evaluate two sequential linkage processes. The first one is from decisional factors; partner's asset investment, information sharing, and behavior uncertainty, to level of trust and the second linkage is the relationship between trust and commitment. This study also emphasizes the effects of information sharing that somehow reduces partner's behavior uncertainty and, on the other hand, increase level of trust and commitment.

Treatment of the Study

Quantitative method of collecting primary data will be used. Typically, data is gathered by using questionnaires, where the respondents are asked to answer the questions by ranking them on pre-set scales.
The subjects of the study will be managers from TOPS supermarket in Bangkok. The researcher will be giving a permission letter requesting the distribution of questionnaires to the Human resource manager of Tops Supermarket in Bangkok. The researcher contacted the Head office of Tops Supermarket, Bangkok. With reference to the conversation with the Secretary of Operations Manager Khun Sawanee and the website of TOPS supermarket, there are 65 branches of Tops Supermarket in Bangkok. It can be viewed in Table 1.
Table 1. Branches of Tops Supermarket in Bangkok

<table>
<thead>
<tr>
<th>Branches in Bangkok:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nanglynchee</td>
</tr>
<tr>
<td>Bangrak</td>
</tr>
<tr>
<td>Chokchai IV</td>
</tr>
<tr>
<td>Fashion Island</td>
</tr>
<tr>
<td>Jarunsanitwong</td>
</tr>
<tr>
<td>Kaset</td>
</tr>
<tr>
<td>Lardprao</td>
</tr>
<tr>
<td>Rama II</td>
</tr>
<tr>
<td>Lardya</td>
</tr>
<tr>
<td>Mahboonkrong</td>
</tr>
<tr>
<td>Major Phapradaeng</td>
</tr>
<tr>
<td>Pinklao</td>
</tr>
<tr>
<td>Pracha-utis</td>
</tr>
<tr>
<td>Songprapa</td>
</tr>
<tr>
<td>Taling Chan</td>
</tr>
<tr>
<td>Placha Lagul</td>
</tr>
<tr>
<td>Navanakorn</td>
</tr>
<tr>
<td>Budhamonthon</td>
</tr>
<tr>
<td>Ladkrabang</td>
</tr>
<tr>
<td>Ngaemwongwan</td>
</tr>
<tr>
<td>Chareoankrung</td>
</tr>
<tr>
<td>Ekamai</td>
</tr>
<tr>
<td>Ramkamhaeng 2</td>
</tr>
<tr>
<td>River plaza</td>
</tr>
<tr>
<td>Jaranversaille</td>
</tr>
<tr>
<td>Yaowarat</td>
</tr>
<tr>
<td>Daily Dindaeng</td>
</tr>
<tr>
<td>Sukhumvit</td>
</tr>
<tr>
<td>Sukhumvit 24</td>
</tr>
<tr>
<td>Thonglor</td>
</tr>
<tr>
<td>Nana</td>
</tr>
<tr>
<td>Esplanade</td>
</tr>
<tr>
<td>Rangsit</td>
</tr>
<tr>
<td>Prackasa</td>
</tr>
<tr>
<td>Treparak</td>
</tr>
<tr>
<td>Daily Muangthongtani</td>
</tr>
</tbody>
</table>

Convenience sampling will be used to meet the sample size of 64 managers of Tops supermarket in Bangkok. Since
the study focuses only on TOPS supermarket and not retail industry as a whole the sample size for questionnaire distribution are 64. Tops supermarket deals with approximately 60 suppliers, stated by Vice President Ms. Penchan Jonthavoranvittaya of Supply chain and Logistics in Tops Supermarket, Bangkok.

Confidentiality of data was also being assured prior to handing out the questionnaire. The questionnaire distributed will be distributed in English. Questionnaires distributed to managers will be through email. The Human Resource Manager (Khun Wantana) will forward the questionnaire to three departments: Supply Chain and Logistics, Buyer and Marketing and Buyer and Merchandising. The managers from the following three departments will answer the questionnaire and also distribute the questionnaire by emailing and asking through the questionnaire their relationship with specific suppliers. The managers are from specific departments: Purchasing, Buying and Marketing, Operations, Human Resources, Supply Chain and Logistics, Project design Specialist, Safety Specialist, Risk Management, Customer Relationship, Buying and Merchandising and P.R. the process of emailing and filling the questionnaire will
take approximately 10 days (1st October 2007- 11th October 2007).

Research Instrument

This study employs a self-administered research instrument which consisted of: Part 1: Demographic Information Part 2: General Information and Part 3(a) Transaction Cost Variables (Partners asset specificity, Behavioral uncertainty & Information sharing), (b) Social Exchange Theory (c) Trust (d) Commitment.

The main purpose of questions is to analyze the data from the main suppliers of TOPS supermarket that may have an effect on relationship between them. Each questionnaire is described individually in the following section.

Partner’s Asset Specificity (PAS)

The measurement for a PAS from authors Joshi and Stump (1994) was a two-items measurement that portrays specific investment in resources, procedures, and people from partners to the firms. The reliability for the variables under the PAS category was reported 0.67.

Behavioral Uncertainty (BU)

Indication to authors’ Kwon, Ik-Whan G. and Taewon Suh (2004) research study stated from authors’ Noordewier
et al. (1990), Zaheer and Venkatraman (1995), and Joshi and Stump (1999) that "The measure for decision-making uncertainty captures the degree of predictability of a partner’s behavior for the respondent firm. It measures the predictability of a partner’s performance over the next business cycle" (Noordewier et al., 1990; Zaheer & Venkatraman, 1995; Joshi & Stump, 1999).

The alpha coefficient for variables under BU was 0.67.

**Information Sharing (IS)**

The two-item measurement with a reliability of 0.88 was employed to evaluate the Information sharing (IS) in this study.

**Perceived Personal Conflict (PPC)**

Facts applied by Kumar et al.’s (1995) regarding Perceived personal conflict (PPC) was calculated from two-item constructs, with a reliability of 0.75.

**Perceived Satisfaction (SAT)**

Information stated regarding Perceived Satisfaction (SAT) are borrowed from Kumar et al. (1992) three-item measurement that has a reliability coefficient of 0.87

**Partner’s Reputation (PR)**

Citation from authors’ Kwon, Ik-Whan G. and Taewon Suh (2004), the variable, Partner’s reputation (PR),
author Ganesan (1994) measured Partner's reputation (PR) derived from a three-item measurement. However, one of the items was modified to a positive extent in order to align with the measurement at the same level with the other item. The reliability coefficient is 0.81.

Trust

From the indication from journal developed by Kwon, Ik-Whan G. and Taewon Suh (2004) states that according to author Kumar et al., trust is present if and only if the firm considers that a partner is being truthful.

This research, however, employed a measure of trust consisting of ten items by Kumar et al (1995). The first five items are considering partner to be honest, trustworthy, and reliable and another five items are considering partner to be only looking for their interest from the firm.

The reliability of the measure was acceptable with coefficient alpha of 0.94.

Commitment

On the other hand, from the citation from journal developed by Kwon, Ik-Whan G. and Taewon Suh (2004, p. 11), referring to the variable commitment, authors Morgan and Hunt (1994) defined commitment "as the need to maintain a relationship because of a optimistic affect
toward the partner". Commitment is however calculated from reseller performance scale introduced by Kumar et al. (1995).

"The reliability coefficient is 0.83."

Personal Information Questionnaire

This researcher-constructed questionnaire was contrived to collect demographic data concerning the general background of the respondents: gender, age, and monthly income, department of responsibility, years of experience and nationality for descriptive purposes.

Data Collection

The collection of data has been presented in the following procedural steps:

1. A pilot of the English version of the instrument was conducted prior to the actual study. A total of 10 respondents will complete the questionnaires for pilot study. The pilot study is aimed to check whether there were any potential issues with the questionnaire, specifically, whether the topic was too culturally sensitive and whether respondents had any difficult in understanding the contents of the questionnaire. A reliability test was
conducted, to check whether there was consistency in the variables tested for Transaction Cost Variables, Social exchange theory, Trust and Commitment.

**Reliability Statistics - Transaction Cost Variables**

Table 2. Reliability of Transaction Cost Variables

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.720</td>
<td>5</td>
</tr>
</tbody>
</table>

**Reliability Statistics - Social Exchange Variables**

Table 3. Reliability of Social Exchange Theory

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.776</td>
<td>8</td>
</tr>
</tbody>
</table>

**Reliability Statistics - Trust**

Table 4. Reliability of Trust Variable

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.717</td>
<td>10</td>
</tr>
</tbody>
</table>
Reliability Statistics - Commitment

Table 5. Reliability of Commitment Variable

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.894</td>
<td>3</td>
</tr>
</tbody>
</table>

Upon verifying that the instruments and Tables above 2, 3, 4 and 5, the results derived was indeed reliable. With this the researcher proceeded to conduct the actual study.

Data Analysis Procedures

The collected data was statistically analyzed using the Statistical Package for the Social Sciences (SPSS). The following appropriate statistical tests were utilized:

1. Descriptive and frequency statistics will be used for Demographic Profile, General Information.

2. The Ordinary least squares regression model will be used to test Hypothesis 1 through Hypothesis 7. The questions under Part 2 of the questionnaire are: (a) Transaction Cost Variables (Partners asset specificity, Behavioral uncertainty & Information sharing),
(b) Social Exchange Theory (c) Trust
(d) Commitment.
CHAPTER FOUR
PRESENTATION OF FINDINGS

This chapter reports the results obtained through the three-part research instrument that was used to study factors affecting the level of trust and commitment of TOPS Supermarket supply chain management, in Bangkok. The findings of the study are presented in the following order:

1. Analysis of the demographic characteristics of the participants.

2. General information for TOPS managers only.

3. Hypothesis Testing of H1: Supply chain partners' specific asset investments will increase the level of trust on the partners.

4. Hypothesis Testing of H2: Behavioral Uncertainty (BU) perceived in relationships with supply chain partners will decrease the level of trust in the partners.

5. Hypothesis Testing of H3: Information Sharing (IS) will lower the degree of BU and indirectly improve the level of trust among supply chain partners.
6. Hypothesis Testing of H4: The level of perceived satisfaction with his/her counterpart in the supply chain will directly improve the level of trust with his/her trading partners.

7. Hypothesis Testing of H5: There is a positive relationship between a partner's reputation in the market and the level of trust in partners.

8. Hypothesis Testing of H6: Perceived conflict with his/her trading partners attenuates the level of trust among trading partners.

9. Hypothesis Testing of H7: There is a positive relationship between the level of trust and the level of commitment.

Analysis of the Demographic Characteristics of the Participants

The demographic characteristics of the participants were analyzed according to the following variables: gender, age, marital status, occupation, and educational level.

As seen in Table 6 and Figure 14, immediately following, the sample size consisted of 64. Of the sample, 71.9% consisted of males and 28.1% consisted of females.
Table 6. Frequency and Percentage Distribution of Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MALE</td>
<td>18</td>
<td>28.1</td>
<td>28.1</td>
</tr>
<tr>
<td>FEMALE</td>
<td>46</td>
<td>71.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 14. Percentage Distribution of Gender
The following Table 7 and Figure 15 shows that, of the 64, 48.4% belonged to the age category of 31-35 years, 37.5% belonged to the age category of 25-30 years, and 14.1% belonged to age category of 36 yrs and above.

Table 7. Frequency and Percentage Distribution of the Sample Based on Age

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
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</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-30 YRS</td>
<td>24</td>
<td>37.5</td>
<td>37.5</td>
</tr>
<tr>
<td>31-35 YRS</td>
<td>31</td>
<td>48.4</td>
<td>85.9</td>
</tr>
<tr>
<td>36 YRS AND ABOVE</td>
<td>9</td>
<td>14.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 and Figure 16 shows that 75% of the participants had more than 30,000 Baht. income and 25% of the respondents were earning between 20,000 - 30,000 Baht.

Table 8. Frequency and Percentage Distribution of the Sample Based on Income

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 20,001-30,000 BAHT</td>
<td>16</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>MORE THAN 30,000 BAHT</td>
<td>48</td>
<td>75.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 9 and Figure 17 show that 38.4% of the participants were Thai, 14.1% of the respondents were Americans, 10.9% were British and Chinese while minority 3.1% were Dutch.
Table 9. Frequency and Percentage Distribution of the Sample Based on Nationality

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>7</td>
<td>10.9</td>
<td>10.9</td>
</tr>
<tr>
<td>CHINESE</td>
<td>5</td>
<td>7.8</td>
<td>18.8</td>
</tr>
<tr>
<td>INDIAN</td>
<td>3</td>
<td>4.7</td>
<td>23.4</td>
</tr>
<tr>
<td>JAPANESE</td>
<td>31</td>
<td>48.4</td>
<td>71.9</td>
</tr>
<tr>
<td>THAI</td>
<td>9</td>
<td>14.1</td>
<td>85.9</td>
</tr>
<tr>
<td>AMERICAN</td>
<td>7</td>
<td>10.9</td>
<td>96.9</td>
</tr>
<tr>
<td>BRITISH</td>
<td>2</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td>DUTCH</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
The succeeding Table 10 and Figure 18 shows the results of analysis of marital status of the participants: 73.4% had divorced, and for 26.6% of the respondents, were still married and living together.

Table 10. Frequency and Percentage Distribution of the Sample Based on Marital Status

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>MARRIED</td>
<td>17</td>
<td>26.6</td>
</tr>
<tr>
<td></td>
<td>DIVORCED</td>
<td>47</td>
<td>73.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 11 and Figure 19 shows the results of years of working experience of the participants: 54.7% had more than 3 years experience, and for 45.3% of the respondents, had 1-3 years of experience.

Table 11. Frequency and Percentage Distribution of the Sample Based on Years of Experience

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1-3 YRS</td>
<td>29</td>
<td>45.3</td>
</tr>
<tr>
<td></td>
<td>MORE THAN 3 YRS</td>
<td>35</td>
<td>54.7</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 18. Percentage Distribution of Marital Status
Analysis of General Information of TOPS Managers

Table 12. Frequency and Percentage Distribution of the Sample Based on Working through Difficulties with the Suppliers

<table>
<thead>
<tr>
<th>WORK DIFFICULTIES</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid YES</td>
<td>64</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Figure 19. Percentage Distribution of Years of Experience
Figure 20. Percentage Distribution of the Sample Based on Working through Difficulties with the Suppliers

From table 12 and Figure 20 above we can see from the result that all 64 questionnaires that were distributed to TOPS managers prefer to work with the same suppliers rather than doing business with the new ones.
Table 13. Frequency and Percentage Distribution of the Sample Based on Doing Business with Your Current Suppliers

<table>
<thead>
<tr>
<th>DOING BUSINESS WITH SUPPLIERS</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid BETWEEN 2-4 YRS</td>
<td>64</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Figure 21. Percentage Distribution of the Sample Based on doing Business with your Current Suppliers

From table 13 and Figure 21 we can see that all the questionnaires distributed to TOPS managers 100% agree that they have been doing business with their suppliers between 2-4 years.
Table 14. Frequency and Percentage Distribution of the Sample Based on Advising Suppliers of their Performance in Relation to that of Other Suppliers

<table>
<thead>
<tr>
<th>ADVISE SUPPLIER PERFORMANCE</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>YES</td>
<td>45</td>
<td>70.3</td>
</tr>
<tr>
<td></td>
<td>SOMETIMES</td>
<td>19</td>
<td>29.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>

![Bar chart showing frequency and percentage distribution](image)

Figure 22. Percentage Distribution of the Sample Based on Advising Suppliers of their Performance in Relation to that of Other Suppliers
From table 14 and Figure 22 we can see that majority of TOPS managers 70.3% compare and inform supplier about their performance comparing to other suppliers and the minority of 29.7% advise suppliers about their performance.

Table 15. Frequency and Percentage Distribution of the Sample Based on Suppliers not Helping TOPS in Cutting Costs and Resolving Problems

<table>
<thead>
<tr>
<th>Supplier Reducing Cost</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>50</td>
<td>78.1</td>
<td>78.1</td>
</tr>
<tr>
<td>SOMETIMES</td>
<td>14</td>
<td>21.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Figure 23. Percentage Distribution of the Sample Based on Suppliers not Helping us in Reducing Costs and Overall Problem Solving

Table 15 and Figure 23 depicts that 78.1% of TOPS managers agree that suppliers help them in reducing cost and solving overall problems solving and minority 21.9% sometimes feel that their suppliers help them in overall problem solving.

Hypotheses Results

Hypothesis Testing of H1: “Supply chain partners’ specific asset investments will increase the level of trust on the partners” (Kwon & Taewon, 2004).

The Ordinary least squares (OLS) regression model.
Table 16. Model Summary of R Square of Partner's Specific Asset Investments and Total of Trust

**Model Summary(b)**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.419(a)</td>
<td>.176</td>
<td>.162</td>
<td>.26585</td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), TOTAL OF PAS
*b Dependent Variable: TOTAL OF TRUST

Table 17. ANOVA of R Square of Partner's Specific Asset Investments and Total of Trust

**ANOVA(b)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.933</td>
<td>1</td>
<td>.933</td>
<td>13.200</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.382</td>
<td>62</td>
<td>.071</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Predictors: (Constant), TOTAL OF PAS
*b Dependent Variable: TOTAL OF TRUST
Table 18. Coefficients of Partner’s Specific Asset Investments and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>4.087</td>
<td>.302</td>
<td>13.551</td>
</tr>
<tr>
<td></td>
<td>TOTAL OF PAS</td>
<td>.189</td>
<td>.052</td>
<td>.419</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL OF TRUST

Tables above 16, 17, 18 show that the R-square 0.176, F-value 13.200, p < 0.001, the regression value is 0.001 and t-value 3.633 which indicates that the partners’ specific asset investments of TOPS supermarket will increase the level of trust on the partners. The above mentioned result also agrees with Weiss and Anderson (1992) who argued that a partner’s asset specificity reduces dissatisfaction with its trading partners.

Hypothesis Testing of H2: Behavioral Uncertainty (BU) perceived in relationships with supply chain partners will decrease the level of trust in the partners.
Table 19. Model Summary of R Square of Behavioral Uncertainty and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.035(a)</td>
<td>.001</td>
<td>-.015</td>
<td>.29261</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF BU
b Dependent Variable: TOTAL OF TRUST

Table 20. ANOVA of R Square of Behavioral Uncertainty and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.006</td>
<td>1</td>
<td>.006</td>
<td>.074</td>
<td>.786(a)</td>
</tr>
<tr>
<td>Residual</td>
<td>5.308</td>
<td>62</td>
<td>.086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF BU
b Dependent Variable: TOTAL OF TRUST
Table 21. Coefficients of Behavioral Uncertainty and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>5.081</td>
<td>.354</td>
<td>14.359</td>
<td>.000</td>
</tr>
<tr>
<td>TOTAL OF BU</td>
<td>.016</td>
<td>.060</td>
<td>.035</td>
<td>.273</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL OF TRUST

Tables 19, 20, 21 above show that the R-square 0.001, F-value .074, p < 0.786, the regression value is 0.786 and t-value .273 which indicates that Behavioral Uncertainty (BU) perceived in relationships with supply chain partners will not decrease the level of trust in the partners. This hypothesis is not supported.

Hypothesis Testing of H3: Information Sharing (IS) will lower the degree of BU and indirectly improve the level of trust among supply chain partners.
Table 22. Model Summary of R Square of Information Sharing and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.223(a)</td>
<td>.050</td>
<td>.034</td>
<td>.28542</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.227(b)</td>
<td>.052</td>
<td>.021</td>
<td>.28744</td>
<td>.934</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), INFORMATION SHARING
b Predictors: (Constant), INFORMATION SHARING, TOTAL OF BU
c Dependent Variable: TOTAL OF TRUST

Table 23. ANOVA of R Square of Information Sharing and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.264</td>
<td>1</td>
<td>.264</td>
<td>3.241</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5.051</td>
<td>62</td>
<td>.081</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>.275</td>
<td>2</td>
<td>.137</td>
<td>1.664</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5.040</td>
<td>61</td>
<td>.083</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), INFORMATION SHARING
b Predictors: (Constant), INFORMATION SHARING, TOTAL OF BU
c Dependent Variable: TOTAL OF TRUST
Table 24. Coefficients of Information Sharing and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients (a)</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>4.805</td>
<td>.209</td>
<td>22.962</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>INFORMATION SHARING</td>
<td>.067</td>
<td>.037</td>
<td>.223</td>
<td>1.800</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>4.676</td>
<td>.414</td>
<td>11.301</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>INFORMATION SHARING</td>
<td>.067</td>
<td>.037</td>
<td>.225</td>
<td>1.803</td>
</tr>
<tr>
<td></td>
<td>TOTAL OF BU</td>
<td>.021</td>
<td>.059</td>
<td>.045</td>
<td>.364</td>
</tr>
</tbody>
</table>

(a) Dependent Variable: TOTAL OF TRUST

Tables 22, 23, and 24 above show that the R-square 0.052, F-value 1.664, p < 0.004, the regression value is 0.198 and t-value 1.803 which indicates that Information Sharing (IS) will lower the degree of BU and indirectly improve the level of trust among supply chain partners. The hypothesis is therefore supported. The extent to which a supplier shares confidential information with the buyer provides a signal of 'good faith' to the buying firm.

Hypothesis Testing of H4: The level of perceived satisfaction with his/her counterpart in the supply chain will directly improve the level of trust with his/her trading partners.
Table 25. Model Summary of R Square of Perceived Satisfaction and Total of Trust

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.367(a)</td>
<td>.134</td>
<td>.120</td>
<td>.27240</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL PERCEIVED SATISFACTION
b Dependent Variable: TOTAL OF TRUST

Table 26. ANOVA of R Square of Perceived Satisfaction and Total of Trust

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.714</td>
<td>1</td>
<td>.714</td>
<td>9.628</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.600</td>
<td>62</td>
<td>.074</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL PERCEIVED SATISFACTION
b Dependent Variable: TOTAL OF TRUST

85
Table 27. Coefficients of Perceived Satisfaction and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.333</td>
<td>.274</td>
<td>15.806</td>
<td>.000</td>
</tr>
<tr>
<td>TOTAL PERCEIVED SATISFACTION</td>
<td>.190</td>
<td>.061</td>
<td>.367</td>
<td>.003</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL OF TRUST

As expected, the level of perceived satisfaction (SAT) has a positive and significant impact on the level of trust. Any business relationship that results in a sustained degree of satisfaction usually creates an environment where the trust building process becomes much more conducive. This study seems to support such an argument.

Tables 25, 26, and 27 above show that the R-square 0.134, F-value 9.628, p < 0.003, the regression value is 0.003 and t-value 3.103 which indicates that perceived satisfaction with his/her counterpart in the supply chain will directly improve the level of trust with his/her trading partners. This hypothesis is also supported.
Hypothesis Testing of H5: There is a positive relationship between a partner’s reputation in the market and the level of trust in partners.

Table 28. Model Summary of R Square of Partner’s Reputation and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.309(a)</td>
<td>.096</td>
<td>.081</td>
<td>.27841</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF PARTNER’S REPUTATION  
b Dependent Variable: TOTAL OF TRUST

Table 29. ANOVA of R Square of Partner’s Reputation and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regression</td>
<td>1</td>
<td>.509</td>
<td>6.568</td>
<td>.013(a)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>62</td>
<td>.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF PARTNER’S REPUTATION  
b Dependent Variable: TOTAL OF TRUST
Table 30. Coefficients of Partner’s Reputation and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>4.316</td>
<td>.338</td>
<td>12.782</td>
</tr>
<tr>
<td></td>
<td>TOTAL OF PARTNER’S REPUTATION</td>
<td>.174</td>
<td>.068</td>
<td>.309</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL OF TRUST

Tables 28, 29, and 30 above show that the R-square 0.096, F-value 6.568, p < 0.003, the regression value is 0.013 and t-value 2.563 which indicates that there is a positive relationship between a partner’s reputation in the market and the level of trust in partners. Hypothesis 5 is therefore supported. This construct (partner’s reputation) is an especially critical trust-building agent for those who have had no previous track record with this firm, but base their willingness to do business solely on a partner’s recognized reputation in the market.

Hypothesis Testing of H6: Perceived conflict with his/her trading partners attenuates the level of trust among trading partners.
Table 31. Model Summary of R Square of Partner's Perceived Conflict and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.130(a)</td>
<td>.017</td>
<td>.001</td>
<td>.29030</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL PPC  
b Dependent Variable: TOTAL OF TRUST

Table 32. ANOVA of R Square of Partner's Perceived Conflict and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.090</td>
<td>1</td>
<td>.090</td>
<td>1.068</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>5.225</td>
<td>62</td>
<td>.084</td>
<td>.305(a)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.315</td>
<td>63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL PPC  
b Dependent Variable: TOTAL OF TRUST
Table 33. Coefficients of Partner's Perceived Conflict and Total of Trust

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>5.000</td>
<td>.175</td>
<td>28.638</td>
<td>.000</td>
</tr>
<tr>
<td>TOTAL PPC</td>
<td>.062</td>
<td>.060</td>
<td>.130</td>
<td>1.033</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL OF TRUST

Tables 31, 32, and 33 above show that the R-square 0.017, F-value 1.068, p < 0.305, the regression value is 0.305 and t-value 1.033 which indicates that hypothesis 6 Perceived conflict with his/her trading partners attenuates the level of trust among trading partners is supported. A potential conflict with its trading partners, there will be considerable reluctance by the other trading partner to engage in the trust-building process and ultimate relationship. Accordingly, a negative relationship is hypothesized between the degree of perceived conflict (PPC) and the level of trust.

Hypothesis Testing of H7: There is a positive relationship between the level of trust and the level of commitment.
Table 34. Model Summary of R Square of Level of Trust and Commitment

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.256(a)</td>
<td>.065</td>
<td>.050</td>
<td>.51157</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF TRUST  
b Dependent Variable: TOTAL COMMITMENT

Table 35. ANOVA of R Square of Level of Trust and Commitment

<table>
<thead>
<tr>
<th>Model</th>
<th>.</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.134</td>
<td>1</td>
<td>1.134</td>
<td>4.332</td>
<td>.042(a)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>16.226</td>
<td>62</td>
<td>.262</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>17.359</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), TOTAL OF TRUST  
b Dependent Variable: TOTAL COMMITMENT
Table 36. Coefficients of Level of Trust and Commitment

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.312</td>
<td>1.150</td>
<td>2.879</td>
<td>.000</td>
</tr>
<tr>
<td>TOTAL OF TRUST</td>
<td>.462</td>
<td>.222</td>
<td>.256</td>
<td>2.081</td>
</tr>
</tbody>
</table>

a Dependent Variable: TOTAL COMMITMENT

Tables 34, 35, and 36 above show that the R-square 0.065, F-value 4.332, p < 0.004, the regression value is 0.042 and t-value 2.081 which indicates that there is a positive relationship between the level of trust and the level of commitment. This hypothesis is supported.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>P Value</th>
<th>Decision/Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis H1: Supply chain partners' specific asset investments will increase the level of trust on the partners.</td>
<td>.001</td>
<td>H1 - Supported</td>
</tr>
<tr>
<td>Hypothesis H2: Behavioral Uncertainty (BU) perceived in relationships with supply chain partners will decrease the level of trust in the partners.</td>
<td>.786</td>
<td>H2 - Not supported</td>
</tr>
<tr>
<td>Hypothesis H3: Information Sharing will reduce the degree of BU &amp; indirectly increase the level of trust among supply chain partners.</td>
<td>.004</td>
<td>H3 - Supported</td>
</tr>
<tr>
<td>Hypothesis H4: The level of perceived satisfaction with his/her counterpart in the supply chain will directly improve the level of trust with his/her trading partners.</td>
<td>.003</td>
<td>H4 - Supported</td>
</tr>
<tr>
<td>Hypothesis H5: There is a positive relationship between a partner's reputation in the market and the level of trust in partners.</td>
<td>.003</td>
<td>H5 - Supported</td>
</tr>
<tr>
<td>Hypothesis H6: Perceived conflict with his/her trading partners attenuates the level of trust among trading partners.</td>
<td>.305</td>
<td>H6 - Not Supported</td>
</tr>
<tr>
<td>Hypothesis H7: There is a positive relationship between the level of trust and the level of commitment.</td>
<td>.004</td>
<td>H7 - Supported</td>
</tr>
</tbody>
</table>
CHAPTER FIVE

SUMMARY, DISCUSSION OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The final chapter starts with a brief overview of the study and the presentation of findings. The findings are subsequently discussed. The researcher also draws conclusions derived from the findings of the study. Finally, the remaining section offers general recommendations as well as suggestions for further studies.

Overview of the Study

The main principle for this study is to learn aspects that affect level of trust and commitment of TOPS Supermarket supply chain management, in Bangkok. The applications are adapted by a range of variables relating to trust and commitment in supply chain of Tops Supermarket, Bangkok Thailand.

The major purpose of this research is to study the relationships between the level of trust and commitment with several important factors derived from transaction cost analysis.
Kwon and Taewon's hypotheses (2004) are as followed:

(a) Supply chain partners' specific asset investments will increase the level of trust on the partners.
(b) Behavioral Uncertainty (BU) perceived in relationships with supply chain partners will decrease the level of trust in the partners.
(c) Information Sharing (IS) will lower the degree of BU and indirectly improve the level of trust among supply chain partners.
(d) The level of perceived satisfaction with his/her counterpart in the supply chain will directly improve the level of trust with his/her trading partners.

(e) There is a positive relationship between a partner's reputation in the market and the level of trust in partner.
(f) Perceived conflict with his/her trading partners attenuates the level of trust among trading partners.
(g) There is a positive relationship between the level of trust and the level of commitment. (Kwon & Taewon, 2004, p. 9-10)

Convenience sampling was used to meet the sample size of 64 managers of Tops supermarket in Bangkok. Questionnaires were distributed to managers through email. The Human Resource Manager (Khun Wantana) forwarded the questionnaire to three departments: Supply Chain and
Logistics, Buyer and Marketing and Buyer and Merchandising.

A self-administered research instrument was used in this study which consisted of: Part 1: Demographic Information Part 2: General Information and Part 3: (a) Transaction Cost Variables (Partners asset specificity, Behavioral uncertainty & Information sharing), (b) Social Exchange Theory (c) Trust (d) Commitment. The following tests were used for testing the hypothesis.

Descriptive and frequency statistics was used for Part 1 (Demographic) and Part 2 (General questions). The analysis in this study of Hypothesis 1 through Hypothesis 7 employs Ordinary least squares (OLS) regression model.

The hypotheses consisted of (a) Transaction Cost Variables, (b) Social Exchange Theory (c) Trust (d) Commitment. Moreover, a simple regression was used to test hypothesis 7; to measure "level of trust (independent variable) and the degree of commitment (dependent variable)" (Kwon & Taewon, 2004)

Summary and Discussion of Findings

This research investigation is an attempt to examine transaction cost variables and Social exchange theory
factors on trust and commitment of TOPS supply chain management, in Bangkok. The results have successfully answered the research objectives that have been mentioned in Chapter 1.

Hypothesis 1.

Supply chain partners’ specific asset investments (PAS) with the level of trust on the partners. (Kwon & Taewon, 2004)

The findings of this study depicts that positive impact is presented among asset investment of supply chain partner and level of trust on the partner of TOPS supermarket.

The reasoning been addressed is formulated by results, objectives, hypotheses and guidance from Kwon, Ik-Whan G. and Taewon Suh (2004) research study. To this the researches comprehends that the partner firm does make significant investments in resources dedicated to TOPS supermarket. This could be interpreted as a dedication of the partner to the company which in turn will create trust between the two firms. The suppliers’ capability in terms of capacity, quality and technological support should be analyzed in developing and agreeing the Master Supply Plan.
Hypothesis 2

Behavioral Uncertainty (BU) with level of trust in the partners. (Kwon & Taewon, 2004)

No relationship had been presented between the Behavioral Uncertainty and the level of trust in partners. This means TOPS supermarket can predict its partners' reaction which can help them to understand and response to the situation quickly. The partner can cope with the ever-changing business environment.

Referring to Morgan and Hunt (1994), externally sources materials and services should always be grouped into logical groups e.g. commodities and create a clear sourcing strategy that is defined to each group and cope with business uncertainty.

Hypothesis 3

Information Sharing (IS) with the degree of Behavioral Uncertainty (BU) and the level of trust among supply chain partners.

Hypothesis 3 reasoning is being presented in terms of findings of results and related information taken from authors' Kwon, Ik-Whan G. and Taewon Suh (2004, p. 8). As stated, several authors such as, Heide and John (1990); Joshi and Stump (1999) proposed "that uncertainty has a large effect on governance". On the other hand, as stated
by author Bowersox et al. (2000) "behavioral uncertainty is developed by a supply chain partner that will decrease trust of its trading partner since it creates a performance evaluation problem." This can be understood that information sharing is the crucial aspect in the trust formulation along business chain (Bowerson et al., 2000).

The researcher of this study claims that the discovery of this research depicts that there is an impact among Information sharing, Behavioral Uncertainty and trust in partners.

Tops supermarket are believed to share some common information technology with its business partners to make their transaction easier.

However, again referring to author Bowersox et al. (2000) unapproachable "legal issues and ineffective lines of communication may restrain the trust-building process necessary for a successful supplier development effort and ultimate commitment" (Kwon & Suh, 2004). Alternatively, authors Kannan and Tan (2002) reveal that "regular communications on important strategic issues valid to supply chain performance are not an opportunity in the supply chain; rather they are vital requirements in the competitive market."
Hypothesis 4

Perceived satisfaction with level of trust with business partners.

The results of this research depicts that there is a positive effect from perceived satisfaction on level of trust between business partners.

In relation to research study conducted by Kwon, Ik-Whan G. and Taewon Suh (2004), it is considered that the TOPS supermarket is satisfied with the working and existing relationship with the partner. "Any business relationship that results in a constant degree of satisfaction usually generates an environment where the trust-building process becomes much more advantageous. This research finding seems to support such an argument" (p. 15).

It can be said that the complete supply chain for TOPS is all strategically and significant externally sourced materials and services is fully documented. Suppliers are fully integrated into the company's products and services management process.
Hypothesis 5

Partner's reputation and the level of trust in partners.

The results of this research give a depiction that "there is a relationship between Partner's reputation and the level of trust in partners" (Kwon & Taewon, 2004). This indicates that the partner firm is honest and well-trusted in the business.

As mentioned in Chapters 1 and 2, in the past years TOPS supermarket had problems with their supply chain and over time they planned and changed their supply chain to have a better relationship with partners and overcome loss in their products. Moreover, research of this study refers to facts according to Maister et al. (2000), and states that "reputation is based on the perception of partners that other trading partners are honest, they deliver quality products/services, and they keep their word and never second-guess the other's intentions".

Hence, once one of the partners present such qualities, they will receive a high credential in the market. In this way, there is a clear statement of the ethical standards set by company in dealing with its suppliers, and the standards expected of the suppliers themselves.
Hypothesis 6

Perceived conflict with the level of trust among trading partners.

The findings of this study depicts that no relationship between perceived conflict and the level of trust in partners has been illustrated. This indicates that perhaps sometimes there are conflicts existing between the partner and TOPS supermarket but they can come to a mutual understanding to solve disagreements on certain key issues.

As stated by author Bowersox et al. (2000), with perceived conflict with the level of trust among trading partners,

risks may often be resulting in the boundary between the supply chain partners and the respondent firm, in areas such as inter-organizational trust, alignment of organizational cultures, and ineffective communication of potential benefits. Particularly, while the factors that support the difficulty of implementing successful supply chain management may be multifold, one of the biggest challenges is cultivating mutual trust. (Kwon & Taewon, p. 17)
Hypothesis 7

Level of trust with the level of commitment.

The findings of this study depicts that positive relationship is presented between level of trust and commitment between TOPS supermarket and its partners.

This indicates that TOPS supermarket is able to rely on its partners' support and suggestion that may be given TOPS supermarket can acknowledge the advice to their business operations, knowing that it is sharing its best judgment.

Limitations and Conclusion

This research study limits only to the supply chain relationship of TOPS Supermarket Bangkok. The respondents were the Manages of TOPS supermarket Bangkok.

Similarly author Henderson (2002) stated the following:

The finding of the study may include, but not be limited to, operational data (utilization rate, productivity goals, production and distribution systems), financial data (activity costs, cost of goods sold per unit, return on capital, carrier cost-and-profit structure), forecasting data (volume,
product and market strategy), and supply chain data (cost and value-added propositions) (p.45).

With the outcomes from this research, it can be concluded that the encouraging relationship between commitment and trust are presented as hypothesized.

For the stated reasons and facts from different authors and research findings, TOPS supermarket is committed to a supplier development program to sustain long-term improvement goals. Even though, of their past problems they faced, they have managed to retain trust and commitment with their new supplier development program.

Recommendations

Supply chain management professional have long since developed the right values, processes and practices. Businesses must realize and recognize the key role of procurement in prioritizing resources to those activities that provide highest value add benefit and are aligned with the future development of business.

Several strategists concluded that the mutual effort among business is the best way to lessen uncertainty and enlarge trust while information sharing might not be the end solution to solve several obstacles in partnership.
Furthermore, stating recommendation for Tops supermarket, suggestions made by D'Avanzo et al. (2003), cited from Kwon, Ik-Whan G. and Taewon Suh (2004) research study states the following:

senior decision makers in an organization must take ownership of the concepts of supply chain management in order for other managers/decision makers to follow their lead. One way to build relationship management skills is through intensive training and education of existing decision makers. (p. 17)

D'Avanzo et al. (2003) believes that it is top management’s responsibility to recognize the importance of successful supply chain implementation. This can help Tops supermarket to boost its efficiency in supply chain relationship.

In conclusion, the research states that even the academic community, in terms of scholars, university students and researchers should concentrate to both practical and empirical research that is related to one of the theories that illustrate the outcome in supply chain implementation in different fields.
APPENDIX A

QUESTIONNAIRE IN ENGLISH
Questionnaire in English

This is a survey questionnaire that will be used in a study for a masters’ degree thesis fulfillment to California State University (San Bernardino). The topic contributes to the study of factors affecting the level of trust and commitment of TOPS Supermarket supply chain management, in Bangkok.

There is no right or wrong answer. Please answer ALL questions. Thank you for your participation. All information will be held in strict confidentiality. All data will be anonymous.

Part I: Demographic Profile

Please put a tick (√)

1. Gender : □ Male □ Female

2. Age : □ below 25 years □ 25-30 years □ 31-35 years □ 36 years and above

3. Monthly Income : □ 10,000-20,000 baht □ 20,001-30,000 baht □ More than 30,000 baht

4. Nationality : □ Chinese □ Indian □ Japanese □ Thai □ Others (specify______________)

5. Marital status : □ Married □ Divorced □ Never Married □ Single Parent

Part II: General Information

1. We will always work through difficulties with a supplier rather than switch to a new one.
   □ Yes □ No

2. How many years have you been doing business with your current suppliers?
   □ Less than 2 years □ Between 2-4 years □ More than 4 years
3. We advise suppliers of their performance in relation to that of other suppliers.
   □ Yes  □ No  □ Sometimes

4. Our suppliers do not help us in reducing costs and overall problem solving.
   □ Yes  □ No  □ Sometimes

Part III: Questions on (a) Transaction Cost Variables (Partners asset specificity, Behavioral uncertainty & Information sharing), (b) Social Exchange Theory (c) Trust (d) Commitment

<table>
<thead>
<tr>
<th>TRANSACTION COST VARIABLES</th>
<th>Strongly Agree</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>Strongly Disagree</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS – PARTNER’S ASSET SPECIFICITY</td>
<td>This partner firm has made significant investments in resources dedicated to their relationship with us.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This partner firm’s operating process has been tailored to meet the requirements of our organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BU – BEHAVIORAL UNCERTAINTY</td>
<td>We can accurately predict the performance of this partner for our next business cycle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>We know that this partner will adapt quickly, should we have change our specifications at short notice.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS – INFORMATION SHARING</td>
<td>We share a common information technology (software) to facilitate communication with the partner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SOCIAL EXCHANGE THEORY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR – PARTNER’S REPUTATION</td>
<td>This partner firm has a good reputation in the market.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>This partner firm has a reputation for being honest.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This partner firm has a bad reputation in the market (reversed).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPC – PARTNERS PERCEIVED CONFLICT</td>
<td>A high degree of conflict exists between the partner and our firm.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>The partner and our firm have major disagreements on certain key issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>Strongly Disagree</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---</td>
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<td></td>
</tr>
<tr>
<td><strong>PERCEIVED SATISFACTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We are very pleased with our working relationship with the partner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Generally, we are very satisfied with our overall relationship with this partner.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The relationship of our firm with the partner firm has been an unhappy one</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TRUST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Though circumstances change, we believe that the partner will be ready and willing to offer us assistance &amp; support.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When making important decisions, the partner is concerned about our welfare.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When we share our problems with the partner, we know that it will respond with understanding.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the future, we can count on the partner to consider how its decisions and actions will affect us.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When it comes to things that are important to us, we can depend on the partner’s support.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Even when the partner gives us a rather unlikely explanation, we are confident that it is telling the truth.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The partner has often provided us information that has later proven to be inaccurate.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td>The partner usually keeps the promises that it makes to our firm.</td>
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<td>Whenever the partner gives us advice on our business operations, we know that it is sharing its best judgment.</td>
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<td>Our organization can count on the partner to be sincere.</td>
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<td>Even if we could, we would not drop the partner because we like being associated with it.</td>
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<td>We want to remain a member of the partner’s network because we genuinely enjoy our relationship with it.</td>
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<td>Our positive feelings towards the partner are a major reason we continue working with it.</td>
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APPENDIX B

QUESTIONNAIRE IN THAI LANGUAGE
แบบสอบถาม

แบบสอบถามนี้เป็นแบบสำรวจเพื่อประกอบการศึกษาในระดับปริญญาโทของมหาวิทยาลัยเทคโนโลยี สมเด็จพระเจ้าบรมวงศ์เธอ พระองค์เจ้าโสมสวลี พระ尚主พันปีหลวง(ส้านบางนาศิลปิน)

ชิ้นหัวขอหนึ่งนี้เป็นการศึกษาเกี่ยวกับความเชื่อมโยงและการจัดการระบบของ ทั้งปัจจุบันและอนาคต

ชื่อการตอบคำถามไม่มีกำหนดใดๆที่ถูกหรือผิด กรุณาตอบทุกคำถาม ขอขอบคุณที่ให้ความร่วมมือ
ชื่อทุกข้อจะเก็บไว้เป็นความลับเฉพาะไม่มีการเปิดเผย

ลำดับที่ 1. ข้อมูลทั่วไป (เป็นล่าสุดเพื่อที่ปฏิบัติงานที่เกิดขึ้น)

1. การทำงานค่อนข้างยากในการติดต่อกับผู้จ้างหน่วยงานใหม่
   □ ใช่ □ ไม่ใช่

2. คุณไปแลกเปลี่ยนในการติดต่อธุรกิจกับผู้จ้างหน่วยงานใหม่ของคุณ
   □ น้อยกว่า 2 ปี □ ระหว่าง 2-4 ปี □ มากกว่า 4 ปี

3. เราได้มีการเจรจาจ้างหน่วยเป็นส่วนของกิจการปฏิบัติตามสัญญาของพวกเรากับผู้แทนหน่วยงานรายอื่นๆ
   □ ใช่ □ ไม่ใช่ □ บางครั้ง

4. ผู้จ้างหน่วยของเราไม่ขอจัดตั้งหน่วยงานทางภายนอกในการแก้ปัญหาทั้งหมด
   □ ใช่ □ ไม่ใช่ □ บางครั้ง

ลำดับที่ 2. คำถาม ข้อ (1) การเปลี่ยนแปลงหน่วยในการซื้อขาย (ชนิดของผู้มีหน่วยงาน,ความสามารถในการปฏิบัติ และ ลำดับของข้อมูล) (2) ทฤษฎีการเปลี่ยนแปลงทางสังคม (3) ความรับผิดชอบ (4) การมุ่งมั่น

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APPENDIX C

INFORMED CONSENT IN ENGLISH
Informed Consent to Participate in Research

Factors Affecting the Level of Trust and Commitment in Supply Chain
Relationship in TOPs Supermarket, Thailand

You are being asked to participate in my (Kamolchanok Saisomboon) research project for my MBA master's thesis project at California State University, San Bernardino. This study is intended to research the factors affecting the level of trust and commitment in the supply chain management processes of TOPs Supermarket, Thailand. I am conducting this study under the supervision of Prof. Harold Dyck, Professor of Information and Decision Sciences, California State University, San Bernardino. This research has been reviewed and approved by the California State Universities, San Bernardino Institutional Review Board.

The survey should take about 15 to 20 minutes for you to complete. I will not be collected your name or signature on the survey to ensure the anonymity and privacy of your participation in this study. Your participation in this research is totally voluntary. You are free not to answer any questions and withdraw from the study at anytime with no penalty. There are no risks or benefits to participating in this study since, again, I will not be collecting your name or any other personal or business information that can be linked back to you.

If you have any questions or concerns about this study, please feel free to contact my advisor at by advisor, Prof. Harold Dyck, at CSUSB hdyck@csusb.edu and his number is 909-537-5765.

By completing this survey it is your consent to participate in this study.

Thank you for your time,
Kamolchanok Saisomboon
APPENDIX D

INFORMED CONSENT IN THAI LANGUAGE
Factors Affecting the level of Trust and Commitment in Supply Chain Relationships in TOPs Supermarket, Thailand

คุณกำลังถูกเรียกขอให้มีส่วนร่วมในการวิจัยของนักศึกษาปริญญาโท กลับเข้า สายสมบูรณ์ ของมหาวิทยาลัย ศิลปศาสตร์ มหาวิทยาลัย ศิลปศาสตร์
การวิจัยนี้ต้องค้นหาให้เห็นถึงผลตระหนักที่เกี่ยวกับการประเมินการไว้วางใจของ
ทุ่มทุนปริมาณการเกิดต่อผู้ผลิตและพ่อค้าเกษตร

คืนนี้ กลับเข้า สายสมบูรณ์ ดำเนินการวิจัยนี้กับทีมการพิจารณาของ ศาสตราจารย์ 阏โโรคต ติยณ ศาสตราจารย์มหาวิทยาลัย วิทยาศาสตร์คอมพิวเตอร์ ของมหาวิทยาลัย ศิลปศาสตร์ มหาวิทยาลัย ศิลปศาสตร์ การวิจัยนี้ได้รับการอนุมัติจากทาง Institution Review Board
ขอให้บรรณาธิการ ศิลปศาสตร์ มหาวิทยาลัย ศิลปศาสตร์ มหาวิทยาลัย ศิลปศาสตร์ การวิจัยนี้ได้รับการอนุมัติจากทาง Institution Review Board

แบบสอบถามที่จัดทำขึ้นมาเป็นเวลาประมาณ 15 ถึง 20 นาที คืนนี้ไม่ต้องการข้อมูลส่วนตัว เช่น และ

การมีส่วนร่วมของผู้คนเป็นการยินยอมโดยสมัครใจ
และคุณสมบัติที่จะยกเลิกการให้ข้อมูลถึงเมื่อไม่ทำได้
และไม่มีการลงโทษหรือยั่วถึงใดๆที่สั้น
การมีส่วนร่วมครั้งนี้ไม่มีผลเสียหรือผลประโยชน์ในเรื่องการงานหรือส่วนตัวใดๆ เพราะจะ
ไม่มีข้อมูลส่วนตัวหรือข้อมูลทางธุรกิจที่สามารถเชื่อมโยงไปถึงคุณได้

กรุณาติดต่อ ศาสตราจารย์ 阏โโรคต ติยณ ที่ hdyck@csusb.edu หรือ 909-537-5765
dayleng@gmail.com ที่จะมีการเก็บข้อมูลที่เกี่ยวกับการวิจัยนี้

โดยการกระทำแบบสอบถามเสียก่อนได้ถือการยอมมีส่วนร่วมในการวิจัยนี้

ขอคุณสมบูรณ์ กลับเข้า สายสมบูรณ์
REFERENCES

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Building Integrity into Supply Chains for Developing Nations, *Food and Agribusiness Forum*, (2003), Sydney, Australia


