Electronic Distribution Augmented by All Types of Collaboration: A Study between a Distributor and Dealers in the Motorcycle Industry in Thailand

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by

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Abstract

Collaboration between parties is identified as *central* in enabling trading partners to develop competitive advantages when they work together via the Internet. However, the issue is less well developed for the electronic distribution context.

This study examines the collaborative relationship between a distributor and dealers in the Thai motorcycle industry when they use the Internet to conduct business. It also aims to augment the level of collaboration between the parties by focusing on how to improve human collaboration and electronic collaboration.

The approach builds on the conceptual framework for achieving collaboration as proposed by Nøkkentved and Hedaa (2000). It explores the factors of *(i) non-coercive power, (ii) trust,* and *(iii) exception handling*, with reference both to collaboration, and to some of their interconnections.

This required a study of the practices and principles used by the distributor and dealers. The research combined two methods to obtain the information. While the first stage needed semi-structured interviews conducted by the researcher, the second stage was a survey questionnaire which aimed to minimise the variation from the interviews.

The study found that non-coercive power will produce notable effects on the level of collaboration. The study also found the trust between parties enhances collaboration. Similarly, the effective handling of exceptions was shown to be important for achieving collaboration. This thesis makes three contributions to existing knowledge. First, non-coercive power not only enhances collaboration, it also enhances trust and exception handling. Second, collaboration also enhances trust and exception handling, and the effects are therefore reciprocal. Third, the contribution of human and electronic collaboration effectively promotes trust and handles exceptions.

This research recommends several practices for improving collaboration in electronic distribution networks. These are formal meetings, informal meetings, telephones, short messaging service, Web-based applications, electronic mail, text based chat programs, video conferences, and Web-cameras.

Statement of Declaration

"I, Anuphak Saosaovaphak, declare that the DBA thesis entitled 'Electronic Distribution Augmented by All Types of Collaboration: A Study between a Distributor and Dealers in the Motorcycle Industry in Thailand' is no more than 65,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and foot notes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work".

Signature..... Date 26-9-2008

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List of Abbreviations

B2B:	Business-to-Business
CPFR:	Collaborative Planning, Forecasting and Replenishment
CR:	Continuous Replenishment
DOSS:	Dealer Online Service System
ECR:	Efficient Consumer Response Movement
EDI:	Electronic Data Interchange
E-distribution:	Electronic distribution
E-greeting card:	Electronic greeting card
E-mail:	Electronic Mail
E-marketplace:	Electronic Marketplace
E-practice:	Electronic practice
E-supply network:	Electronic Supply Network
GDP:	Gross Domestic Product
SMS:	Short Messaging Service
VCM:	Very Critical Message
VMI:	Vendor-Managed Inventory

Chapter 1

Introduction to the Research

1.1 Background

Why do businessmen collaborate in the motorcycle industry? Although there are many reasons for this, the underlying principle is that they work together to achieve common ends. One of the most recognised collaborative efforts in the motorcycle industry of the world is the similar thinking of the technically brilliant founder, Soichiro Honda, and the practical resourcefulness of Takeo Fujisawa. While Honda carried on developing new, innovative products, Fujisawa excelled at the task of creating an organisational structure in which all aspects of human resource and skill would be integrated to the fullest extent. As a result, their efforts quickly transformed Honda from a producer of bicycles into a manufacturer of motorcycles far beyond expectations. It is also said that the landscape of the world motorcycle industry was changed dramatically due to their successful collaboration.

In the Thai motorcycle industry, the development of a collaborative organisational structure has been notably successful. One reason why motorcycles dominate this country is due to the previous collaborative efforts between distributors and dealers. It could be said that the relationship between distributors and dealers have gradually moved from arm-length marketing relationships to a more effective form of coordination which is now moving towards collaborative relationships. Good collaboration between them is not just a compromise or general agreement among most of parties in the business community. It is an augmented learning activity which needs to be adjusted according to the changing situations. Hence, there is a need to focus on the collaborative efforts between distributors and dealers.

The term collaboration has a similar meaning to cooperation and often refers to planning, developing, and working between or among various parties to achieve a common goal or purpose (Shafritz, Koeppe & Soper 1988). Collaboration also refers to several persons or communities coordinating for the intention of financial production or sharing for the benefit of producers and customers (Murray et al. 1933). Within a supply network, collaboration refers to a method in which firms work jointly to exchange useful information and share resources for managing activities which can enhance each other's capacity to achieve mutual benefit by sharing risks, responsibilities, and rewards (Huxham 1996). It also involves integrating various planning process in a supply network as a means to synchronise its operations, particularly in regards to strategic, tactical, and operational activities (Forrester 2000).

In the early days, collaboration between these parties was only achieved via traditional practices such as face-to-face communication, contact letters, and the telephone (Suntisukwongchote 2004). However, since the Internet has emerged, collaborative practices have been changed to incorporate Internet based activities (Cooper, Lambert & Pagh 1997; Golicic et al. 2002). The several parties are now connected via the Internet medium which enables them to develop collaborative practices at anytime, from anywhere, and to anyplace (Suntisukwongchote 2004).

When a supply network is connected by the Internet technologies, it is often referred to as an electronic supply network (E-supply network) (Caputo et al. 2004).

In modern complex supply networks, the Internet based activities are seen as an important strategy for organisations as they enable parties to enlarge opportunities (Croom 2005; Golicic et al. 2002; Harrison & Van-Hoek 2002). The business strategy of an enterprise that has to do with electronic message exchanges with one or more of its trading partners often refers to business-to-business (B2B) collaboration (Bussler 2003).

1.2 The Motorcycle Industry in Thailand and the Internet

Since Thailand recovered from the Asian economic crisis in 1997-1998, its economy has continued to rise by achieving relatively good growth rates. In fact, its Gross Domestic Product (GDP) had risen from minus 4.6 per cent in 1997 to plus 7.5 per cent during the third quarter of 2000. This is considered to be an extremely high rate of the post-crisis period (Office of Industrial Economics 2007). In addition, the Thai government adopted a free-market approach by encouraging the private sector to play the leading role in private investment through the institutional and infrastructure support from the public sector. Consequently, the overall investment has increased resulting in expansion of the whole economy.

Since the national economy has continued to grow, the expansion of urbanisation throughout the country has also dramatically increased leading to a demand for transport by commuters. However, as many forms of public transportation in Thailand are currently underdeveloped, most people tend to use their own automobiles or motorcycles to satisfy their travel needs. Comparison of both vehicles shows that motorcycles are more cost effective and therefore more suitable for the majority of Thai people, who have low incomes. Besides, the climate in this country also adds to the popularity of motorcycles. This region contains large tropical areas with high temperatures which are considered to be good weather for motorcycles. In actual fact, each rider uses the motorcycle for various purposes such as delivering commercial goods, shopping, dating, visiting friends and so on. For these reasons, motorcycles are by far the dominant means of transport.

In Thailand, there are six motorcycle makers including Honda, Yamaha, Suzuki, Kawasaki, Tiger, and JRD. In general, the way in which these makers deliver motorcycles to users is similar. The process begins at the manufacturer where the finished products are domestically assembled. The motorcycles are then sold wholesale to an authorised distributor which has a warehouse located near the manufacturer. When each distributor receives orders from its dealers, the distributor then delivers the motorcycles to those dealers throughout the country. Besides, it should be noted that some dealers also sell the motorcycles to their own sub-dealers.

At the end of this process, motorcycles are finally sold at outlets which are operated either by dealers or sub-dealers.

Most dealers and sub-dealer are family owned businesses. This means that they are free to give a discount to customers which result in an increase of sales. The trade-in is usually incorporated into their businesses and hence encourages users to change their motorcycles every five to ten years. Thus, although the geographical distribution of motorcycle use in Thailand is concentrated in cities and provinces with a large population, this kind of vehicle is still easily seen throughout the country. In 2007, for example, 1,598,876 units were sold domestically (Office of Industrial Economics 2007). Note that the richness of the relationships between the distributor and dealers is explained in Chapter 5.

Since the Internet has emerged, it has become prevalent in the motorcycle industry in Thailand. Apart from basic tools such as electronic mail (E-mail), the Web-based application for improving B2B strategy was also introduced into this industry. The purpose of employing the Web-based application is to replace the traditional inter-company processes, which had been performed using paper documents such as purchase orders and invoices. In fact, the new system allows the companies to exchange business documents in a structured format via the Internet medium which has become an additional tool to gain an edge by allowing all parties to decrease market transaction costs, and to intensify intra-industry competition (Teo, Ranganathan & Dhaliwal 2006).

1.3 The Basic Research Problem

The developments outlined in the previous section have now extended to all distributors and dealers in the motorcycle industry in Thailand. They also have incorporated the Internet technology in their business processes and systems, and most of them use the Web-based application for transacting.

However, what appears to be a popular and useful idea has also raised some basic questions about collaboration between the parties. First, it is suggested that the issues of business environmental context, variations in organisational routines, and

variations in business process and resources need to be taken into account when parties conduct their business via the Internet environment (Teo, Ranganathan & Dhaliwal 2006). Second, in line with contingency theory, it is also recommended that managerial actions should be adjusted according to changed situations (Luthans 1973). Third, in the academic literatures, the coverage of best practice on the outbound side of distribution is very rare, and even rarer within the Thai business context. On grounds of efficiency, there is a need to investigate how collaboration relates to establishing a new business process in the Thai motorcycle industry. Consequently, novel procedures need to be worked out for developing collaboration in this business.

1.4 Collaboration in E-supply Networks

Many scholars in the relevant literature claim that collaboration is an important issue when parties conduct business using the Internet (Ross 2003; Simchi-Levi, Kaminsky & Simchi-Levi 2000). Within an e-supply network, collaboration consists of electronic collaboration (E-collaboration) and human collaboration (Cheng et al. 2006; Kock 2005; McCarthy & Golocic 2002; Treachy & Dobrin 2001).

E-collaboration is defined as collaboration between involved parties via the Internet and digital technologies (Gharavi, Love & Cheng 2004; Kock 2005; Lee-Kelley, Crossman & Canning 2004). In this regard, many scholars identify the benefits of e-collaboration as listed below.

- Increasing the level of information sharing among the parties (Cooper, Lambert & Pagh 1997; Ellram & Cooper 1990; Golicic et al. 2002)
- Allowing parties to integrate their activities (Kotler 2000)
- Encouraging the long-term relationships among parties (Golicic et al. 2002)
- Creating standardisation for a business community to conduct its business (Trebilcock 2000)
- Being a single-point-of-contact within a supply network (Simchi-Levi, Kaminsky & Simchi-Levi 2000)
- Establishing the cooperation which is developed into coordination (Harrison & Van-Hoek 2002)

Although e-collaboration has been increasingly adopted into e-supply networks, many scholars suggest that supply chain collaboration need not necessarily depend on high technology (Ireland & Bruce 2000; McCarthy & Golocic 2002). Even when all partners usually conduct business via the Internet, the basic communication devices such as fax and telephone can still provide connectivity, which then supports the inter-firm collaboration (Treachy & Dobrin 2001). In addition, research conducted by Golicic et al (2002) identifies that most companies would never move away from traditional collaboration as it guarantees a long-term relationship with their business partners. In this regard, Cheng et al (2006) points out that human collaboration can be both direct interaction, and indirect interaction based on non-Internet communication media.

1.5 Collaboration within Electronic Distribution

Since the Internet allows buyers to contact suppliers directly, the distributors are perceived as middlemen who add cost to the supply chain (Gellman 1996). One aspect of this changing business environment has been the trend to eliminate of the distributor within a supply network, and this is often referred to as a disintermediation (Mills & Camek 2004).

To respond to this new environment, the distributors need to focus on their core competency of providing support functions for the key activity of building relationships within the supply chain (Jespesen & Skjott-Larsen 2005; Lawrence, Jennings & Reynolds 2002). "The new expectation will, therefore, revolve around the distributor as information manager in either marketing or logistics. The distributors will continue in their role of marketer for manufacturers and logistician for end user, but that role will become information intensive and customer/supplier expectations will drive distributors towards better gathering, handling, and analysis of that information" (Lawrence, Jennings & Reynolds 2002, pp. 22-3). Shunk et al (2007) also asserted that one of the critical factors for a successful distributor is the ability to establish a collaborative environment among all involved parties. Many scholars conclude that collaboration between partners can add more value beyond simply delivering the product, and this offsets any rationale for disintermediation (Hammer 2000; Lawrence, Jennings & Reynolds 2002; Shunk et al. 2007).

1.6 Previous Approaches on Supply Chain Collaboration

Although there have been some approaches of collaborative processes in a supply chain context, only a few have been recognised. Some of these are listed below.

1.6.1 The Efficient Consumer Response Movement (ECR)

Seifert (2003, p. 3) defines the Efficient Consumer Response Movement (ECR) as "a comprehensive management concept based on vertical collaboration in manufacturing and retailing with the objective of an efficient satisfaction of consumer needs". The original idea began in 1992 when the organisation ECR proposed four critical factors consisting of 'efficient replenishment', 'efficient promotion', 'efficient product introduction' and 'efficient store assortment' (Salmon Associates 1993). All are claimed to be significant factors in the achievement of collaboration particularly within a consumer goods environment (Salmon Associates 1993).

According to the concept of ECR, manufacturers, retailers, and customers need to be involved closely for creating a value resulting in advantages for all parties (Duffy & Fearne 2004; Mitchell 1997; Seifert 2003). The principle of ECR is concerned with a seamless flow of information throughout the supply chain, and this changes confrontational relationships in traditional practices to a new type of relationship based on co-operation (Lamey 1996; Wood 1993).

1.6.2 The Collaborative Planning, Forecasting and Replenishment (CPFR) Model

The Collaborative Planning, Forecasting and Replenishment (CPFR) concept suggests that all partners need to reach agreement throughout their business planning in which sales forecasts, order forecasts, and delivery execution become coordinated (Nøkkentved & Hedaa 2000). Historically, this concept was further developed from the ECR principle in the mid 1990s (CPFR Roadmap 1999). It was developed because of the opportunities afforded by the Internet which allowed parties to control and optimise the entire process efficiently (Seifert 2003). This means that parties need to

exchange key information resulting in the visibility of status data, and this allows them to work jointly through the principle of cooperation (Nøkkentved & Hedaa 2000). Although the CPFR model was originally developed in the consumer goods industry, it is today being adopted in various industry segments and countries (Nøkkentved & Hedaa 2000).

The CPFR model is proposed as a nine-step process model which guides the way to achieve collaboration (CPFR Roadmap 1999). The model is divided into three phases including '*Planning*' (steps 1 and 2), '*Forecasting*' (steps 3-8) and '*Replenishment*' (step 9) (Seifert 2003). Specifically, these nine steps are (1) developing collaboration arrangements, (2) creating joint business plans, (3) creating sales forecasts, (4) identifying exceptions for sales forecasts, (5) resolving/ collaborating on exception items, (6) creating order forecasts, (7) identifying exceptions for order forecasting, (8) resolving/ collaborating on exception items, and (9) generating orders (CPFR Roadmap 1999).

1.6.3 Other Approaches

There are also some approaches of other collaborative process methodologies such as Vendor-Managed Inventory (VMI) and Continuous Replenishment (CR). However, they also share concepts with the CPFR model by comprehensively focusing on planning, forecasting and replenishment processes (Skjoett-Larsen, Thernoe & Anderson 2003).

1.7 Implications of Previous Approaches

As a successor from the ECR model, the CPFR model also requires a high degree of professional effort for its implementation (CPFR Roadmap 1999). It also has some weaknesses which are not appropriate for all B2B relationships (CPFR Roadmap 1999). Research conducted by Barratt and Oliviera (2001) shows that lack of trust is a weak point for this model. Tucker and Jones (2000) dispute that trust between trading partners and trust towards the transaction media are important issues that effect collaboration. Ross (2003) points out that security issues, trust and branding must be considered to achieve collaboration. *Nøkkentved and Hedaa (2000) argue that power,*

trust and management of exceptions must be taken into account when parties want to achieve collaboration in e-supply networks.

1.8 Outline of the Proposed Model

The present study examines and proposes possible improvements that all relate to the key success factors for achieving collaboration in e-supply networks as outlined by Nøkkentved and Hedaa (2000). These significant factors are power, trust, and exception handling and they are briefly specified below.

Power

Power is defined as the ability of one member to dominate the decision variables of another member in business relationships (Dwyer, Schurr & Oh 1987; Heide & John 1990). Different scholars identify different power taxonomies such as coercive/non-coercive power (Hunt & Nevin 1974), economic/non-economic power (Etgar 1978), contingent/non-contingent power (John 1984) and reward/coercive/ legitimate/referent/expert power (French & Raven 1959). Yavas (1998) asserts that the most favourite dichotomy is coercive and non-coercive power. He explains that coercive power is the ability of one firm to make another firm comply by using potential penalties, whilst non-coercive power is used to obtain compliance through various types of assistance from one firm to another.

Non-coercive power can also be seen as the cornerstone of supply chain relationships since it allows all parties to work effectively via the principle of coordination (Bretherton & Carswell 2002; Doney & Cannon 1997; Pole & Haskell 2002). Indeed, non-coercive power can build trust between trading partners (Ratnasingam 2000), whilst coercive power, in contrast, can generate a situation of uncertainty and increased tension in a complex situation (Bartol et al. 2001; Ratnasingam 2000).

Cox (1999) asserts that power structure needs to be understood in order to build successful relationships between parties. Nøkkentved and Hedaa (2000) declare that the power dimension between parties is one factor determining the level of

collaboration among them. Therefore, in order to increase the knowledge of collaborative process, the issue of power must be understood.

Trust

Trust is the willingness of a party to perform a particular action based on the expectation of another party in a risky situation (Deutsch 1960; Mayer, Davis & Schoorman 1995). The basic reason for developing trust among partners is to solve the problem of imperfect information, bounded rationality, risk and uncertainty (Simons 1997). Many scholars identify trust as a significant factor in achieving collaboration in an electronic-marketplace (E-marketplace) (Larkins & Luce 2000; Mattsson 2003; Tucker & Jones 2000)

The Internet also can be used to increase the level of trust since it provides the interactive communication among partners (Overby & Min 2001). Golicic et al. (2002) claim that trust is established because the Internet enables firms to use accurate data which then results in a defect free transaction and thus firms will be credited with credibility and reliability by customers as well as business partners.

In view of the fact that the knowledge in this area is still not reliable (Svensson 2001b), understanding more about trust in collaborative processes will improve the chance of implementing successful collaboration in e-supply networks.

Exception handling

Fundamentally, exceptions occur when a business activity cannot be performed according to its plan (Vojevodina 2005). Auramaki and Leppanen (1988) define exception as a situation where a complete set of rules or regulations is not available to handle such a situation. By linking exceptions to the concept of rules, exceptions can be defined as situations where rules are not applicable (Auramaki & Leppanen 1988; Saastamoinen 1993, 1995; Saastamoinen & Savolainen 1992).

The principle of exception-based management is similar to the principle of rules management (Saastamoinen 1993). This is because rules are considered as tools for solving problems by using a variety of concepts such as precepts, regulations, rule of

thumb, conventions, principles, guidelines, and maxims (Twining & Miers 1976). As noted by Nøkkentved and Hedaa (2000), exceptions work against the collaborative concept which tries to achieve efficiency and effectiveness.

It has been argued that exceptions can be handled by integrating flexibility mechanisms into existing systems (Heinl et al. 1999). This means that parties are allowed to adjust the rules to deal with exceptions based on the dynamic evolution (Heinl et al. 1999). It also refers to 'delegated authority' where the party holding real authority doest not exist in a real situation. Although this adaptable workflow process can be seen as a challenge in the future (Aalst & Hee 1996), the main disadvantage of this approach is lack of explicit knowledge to deal with exceptions (Shaohua et al. 2006). Indeed, if exceptions become abstract or contain less detail, some parties dealing with exceptions may make a wrong decision; thus, the result may negatively impact on the whole system (Shaohua et al. 2006). Gil, Deelman and Blythe (2004) conclude that a lot of knowledge is still required although the flexibility mechanism has been integrated.

This work, therefore, takes the position for the Thai motorcycle industry that flexible rules are not appropriate because the lack of knowledge of most dealer staff would cause a difficult business situation. Consequently, it is important to understand and develop strategic improvement on how exceptions can be handled in collaborative processes in e-supply networks.

1.9 Background to Theoretical Problems

It is not known how the three critical factors proposed by Nøkkentved and Hedaa (2000) are important for collaboration in the outbound side of distribution in e-supply networks. In fact, the topic of collaboration within e-distribution is very rare in academic literature. Specifically, there has not been any previous study conducted on the subject of power, trust and exception handling in collaborative processes between a distributor and dealers in the motorcycle industry in Thailand when they conduct their business in the Internet environment. In addition, there is a need to study collaboration in the Thai context since national culture always influences organisational behaviour (Hellriegel & Slocum 2004). There is also limited coverage

of how trust and exceptions can be managed using both human collaboration and e-collaboration. This research will be the first study examining a framework of collaborative planning process between a distributor and dealers in Thailand. It intends to improve the knowledge of how trust and exceptions can be managed by using both human collaboration and e-collaboration.

1.10 Scope of the Study

In addressing the issue of collaboration, this research focuses only on the relationship between a distributor and dealers in the Honda motorcycle network in Thailand. The justifications for concentrating on the Honda motorcycle network are given below.

First, the Honda motorcycle is the leader in terms of production and sales results. It now dominates the domestic market by gaining around a 70 percent share for ten consecutive years (Office of Industrial Economics 2007).

Second, Honda motorcycles have the largest network. There are 860 authorised Honda motorcycle outlets which operate throughout the country by 490 different dealers. When compared with other networks, this number of dealers is not only considered to be the biggest number in the motorcycle industry, but also in the Thai automotive industry. Therefore, focusing on the Honda motorcycle network will provide a strategic view of collaboration between all parties.

Note that all motorcycle dealerships in Thailand which hold several outlets must have their own systems to manage their outlets. There are 860 authorised Honda outlets, but only 490 outlets are the 'headquarters' which deal directly with the distributor. The Internet system, therefore, connects the distributor to the dealers' headquarters, but does not link to any subdivisions of dealers in every aspect. In other words, the application has not been utilised anywhere else on the outbound side of distribution other than the direct interaction between a distributor and dealers. This research studies only phenomena in which the Web-based application exists; consequently, it concentrates on the direct relationship between a distributor and dealers.

Additionally, this research only focuses on non-coercive power in the relationship between all involved parties. It must be further noted that this study assumes that there is coercive power, but does not propose its possible improvement. The first reason why this research does not explore the issue of improvement is that the relationships between parties always have their own power regimes which may not be remediable (Cox, A. 1999, 2004; Cox, A., Lonsdale & Watson 2003; Cox, B. 1991). Second, in terms of culture, it is hard to alter the power regime in the Thai business context. In terms of power distance, several pieces of evidence confirm that the less powerful parties in Thailand usually follow the more powerful parties; and they also are more likely to accept the existing power structure, and are not keen to change it (Hofstede, G. 1986; Hofstede, G.H. & Hofstede 2005). Third, as mentioned earlier, coercive power usually produces a negative result in the relationship, and hence should be ignored. For all these reasons, this research only aims to measure the effect of non-coercive power, but not to change it in any way. Only understanding the importance of non-coercive power will allow parties to understand the appropriate ways in which they can achieve collaboration.

1.11 Aims of the Research

The main purpose of this research is to increase the knowledge and suggest possible improvements which all relate to non-coercive power, trust, and exception handling in the relationship between a single distributor and multiple dealers regarding the collaborative process augmented by means of human interaction and Internet communication.

1.12 Specific Aims

1. To examine how non-coercive power, trust, and exception handling impact on the collaborative process between a distributor and dealers employing the Internet.
2. To identify how non-coercive power affects trust and exception handling.
3. To identify types of trust, and types of exceptions in the collaborative processes between a distributor and dealers.

4. To find out how human collaboration can be used to promote trust and handle exceptions within a collaborative process between a distributor and dealers using the Internet.
5. To provide increased knowledge on how the Internet can enhance trust and handle exceptions when a distributor and dealers use the Internet to conduct their business.

1.12 Contribution to Knowledge

This thesis will provide empirical information offering a better understanding of the importance of non-coercive power, trust and, exception handling towards a collaborative process when supply chain partners use the Internet as a tool to conduct business. Since there is limited information on the study of collaboration between partners in e-distribution networks (Ross 2003), this study will provide a consolidation of knowledge within this area. It is also expected to extend the knowledge of electronic collaboration, which can be used in conjunction with human collaboration to enrich relationships among parties. Furthermore, as collaboration can be achieved with a proper business process and work practice (Kock 2005; Midwinter & Sheppard 2000), this research will propose a new theory for managing a collaborative process effectively in the Internet environment.

1.13 Statement of Significance

This research is the first study addressing the issue of collaboration in e-distribution in Thailand. It is expected that the result of this research will be useful in terms of both practical and theoretical implications for the following participants. First, this research is expected to provide an understanding of collaboration within an e-distribution network in the motorcycle industry in Thailand enabling involved parties to develop and improve their business process and work practice. Second, this study is expected to provide a benchmark study of human collaboration and e-collaboration which can be adapted to other similar businesses using the Internet as a tool to conduct their business. Third, since the knowledge of collaboration in the Internet environment is still poorly investigated, this research study will provide further knowledge for researchers in terms of how collaboration can be achieved in the Internet environment.

1.14 Overview of the Thesis

This thesis is structured to provide important information by offering a better understanding and suggesting possible improvements, which all relate to non-coercive power, trust, and exception handling in the relationship between a single distributor and dealers regarding collaborative process augmented by both human collaboration and e-collaboration. This thesis consists of eight chapters constructed in the following manner.

Chapter 1 provides an introduction to the background of the study leading to the research problem. By briefly summarising the key points from the literature, this chapter explains how such problems can be tackled by collaborative practices. This chapter also presents the objective, scope, contribution to knowledge, statement of significance, and the structure of the research, all aligned with the subject of collaboration.

Chapter 2 examines and reviews all relevant literature on the issue of collaboration in e-distribution. It also explores three critical factors for achieving collaboration: these are non-coercive power, trust, and exception handling.

Chapter 3 presents the conceptual framework and the main research questions. Fundamentally, all are constructed from information in the literature. Based on this framework, the chapter presents the research propositions which were used to design the method chosen to conduct the research.

Chapter 4 explains the choice of integrated research methodology which contains qualitative and quantitative approaches. It describes the theory relevant to methodology together with design of method. It clarifies the approach taken including design, development of the instrument, population, participants, data collection, and data analysis.

Chapter 5 describes the result from the first qualitative study, based on the participant observation, and semi-structured interviews. While the former clarifies the

existing collaboration between parties, the interviews provide materials to address the research questions.

Chapter 6 shows the result from the dealers' survey. Building on the outcome from the previous study provides an advantage in conducting this survey. It presents statistical analysis of data.

Chapter 7 discusses the key findings of this research. It synthesises the results from the interviews (Chapter 5), and the result from the dealers' survey (Chapter 6) to answer the research questions. The review of literature (Chapter 2) is engaged to improve the meaning of the findings.

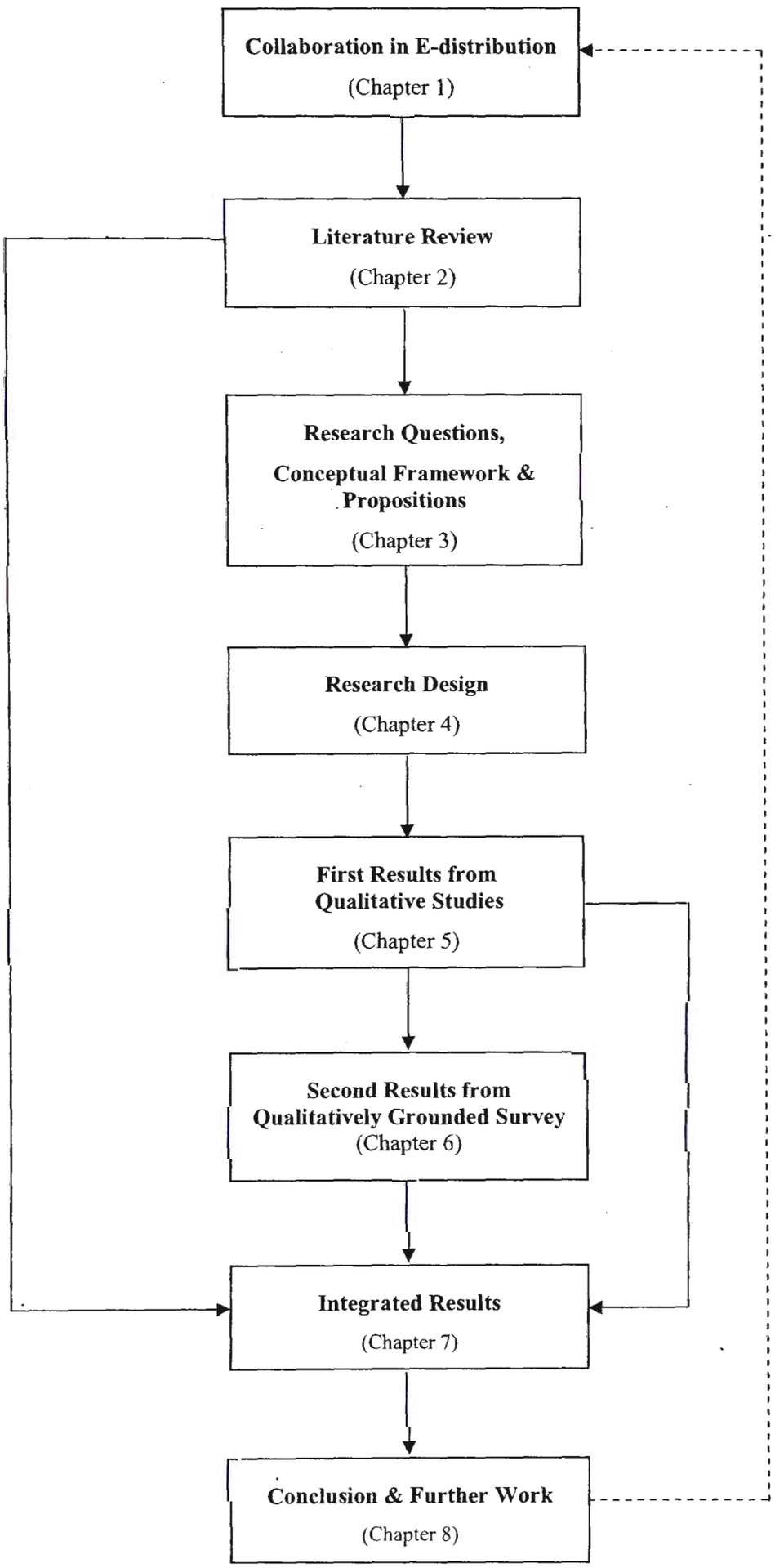
Chapter 8 shows the extent that this thesis meets its objectives. Research implications including theoretical and practical aspects are also discussed. The limitations of this study as well as suggestions for further research are also documented.

1.16 Summary

This chapter presents the rationale for this research by showing how the research problem applies to the motorcycle industry in Thailand, particularly in the relationship between a single distributor and its dealers. As collaboration is the focus for tackling those relationships, the definition of collaboration is also briefly outlined. The subsequent development of the main research questions was arranged in line with these three factors, including power, trust, and exception handling. This chapter also presents the research objectives, the significance of the study, its contribution to knowledge, its scope, and finally the overall structure of this thesis. The structure of this research is depicted Figure 1.1 as shown below.

The next chapter will present a review of literature issues of collaboration along with other appropriate issues.

Figure 1.1: Structure of the research



Chapter 2

Literature Review

2.1 Introduction

This chapter reviews the existing literature on the subject of collaboration in the context of this research. It concentrates on the topics which are relevant to e-supply networks by assessing the extent to which that literature has addressed the importance of collaborative processes. In particular, it examines how collaboration can be achieved by focusing on the significant factors including power, trust, and exception handling, as proposed by Nøkkentved and Hedaa (2000).

This chapter is therefore divided into four main sections. Section 2.2 identifies the generic term of collaboration. Section 2.3 highlights the characteristics of collaboration between parties, as covered in the literature. In essence, this part identifies the difference between human collaboration and e-collaboration along with exploring several practices in regard to these issues. Section 2.4 justified the choice of the three important factors for achieving collaboration in an e-supply network as proposed by Nøkkentved and Hedaa (2000). It also reviews theoretical perspectives based on the key topics of power, trust, and exception handing. The connections between collaboration and those key success factors as proposed by Nøkkentved and Hedaa (2000) are also explored. Section 2.5 indicates how the knowledge gaps in the review of literature suggest direction for the proposed research.

Various literatures from different disciplines are used to review the above-mentioned issues. Although most of literature originates in the area of the supply chain management, others are also derived from the areas of marketing, organisational behaviour, and information systems.

2.2 Collaboration

The generic term of collaboration is defined as cooperation between various parties; it generally relates to the process of planning, developing, and working together to achieve a common goal or purpose (Shafritz, Koeppe & Soper 1988). The topic of collaboration has been widely studied across areas including sociology, psychology, marketing, management, and supply chain management (Min et al. 2005). However, the present research focuses on the subject of collaboration within the supply chain management context.

Collaboration can be conceptualised into two primary perspectives including collaboration as inter-organisational business process, and collaboration as a foundation of inter-organisational relationships (Min et al. 2005). The former perspective has been viewed as a business process whereby all involved parties work closely to achieve common goal; this then produces mutual benefit to the entire business community (Mentzer & Konrad 1991; Stank, Keller & Daugherty 2001). For example, a collaborative process may involve the practice in which multiple parties attempt to solve some exceptions (Mohr & Spekman 1994; Stank, Keller & Daugherty 2001). In contrast, the second perspective views collaboration as the way to form inter-organisational linkages in which all trading partners are required to work closely by sharing information, resources, and risk (Ellram & Cooper 1990; Golicic et al. 2002). In other words, all involved parties "voluntarily agree to integrate human, financial, or technical resources in order to create a better business model" (Bowersox, Closs & Stank 2003, p. 22).

2.3 Collaboration in E-supply Networks

As mentioned in Section 1.1, e-supply networks refer to the ways in which supply networks utilise the Internet to facilitate coordination and collaboration among relevant parties (Nøkkentved & Hedaa 2000).

Within an e-supply network, collaboration plays the leading role in terms of synchronising all involved activities (Ross 2003). In this day and age, information technology is considered as an advantageous mechanism to integrate all activities within supply networks (Fontanella 2000). It also can build up collaboration by

enabling firms to perform collaborative tasks based on the principle of coordination (1993). Several supply networks employ information technology, in particular the Internet for establishing cooperation, which then will be changed into coordination and will ultimately be developed into collaboration (Harrison & Van-Hoek 2002). However, although the popularity of the Internet has increased dramatically, several firms assert that non-Internet communication is important, and can still provide advantageous mechanisms to synchronise their activities (Golicic et al. 2002).

2.3.1 Human Collaboration and E-collaboration

As already mentioned in Section 1.4, collaboration comprises human collaboration and e-collaboration (Cheng et al. 2006; Kock 2005; McCarthy & Golocic 2002; Treachy & Dobrin 2001). These two subjects are reviewed below.

Human collaboration is based on both direct and indirect interactions without the involvement of the Internet media (Cheng et al. 2006). However, e-collaboration is defined as collaborative efforts between all trading partners via the Internet system (Gharavi, Love & Cheng 2004; Kock 2005; Lee-Kelley, Crossman & Canning 2004). The relationship between them is categorised into two general aspects (Kock 2005). The first aspect is that e-collaboration can interfere with effective communication by removing critical elements existing in direct human communication such as the use non-verbal cues, and the integration of effective feedback (Kock 2005). The disappearance of these elements then produces some conflicts within the collaborative process (Dennis 1996; Kock 2005; Strauss 1996). The second aspect seemingly contradicts the first aspect because e-collaboration can also enhance levels of performance when the members conduct collaborative tasks by using the Internet technology as a good management practice (Kock 2005). Although previous research confirms the important roles of human collaboration and e-collaboration (Cheng et al. 2006; Kersten, Schroeder & Schulte-Bisping 2004), they both require high levels of effort to execute (Ross 2003).

Hence, the topics of human collaboration and e-collaboration need to be carefully investigated so that they can be successfully implemented. The following section reviews aspects of human collaboration and e-collaboration in greater detail.

Human Collaboration

In this research, human collaboration is based on non-Internet communication which can be broken down into smaller components, which consist of direct human interaction, indirect human interaction. The former component is always founded on formal and informal interaction based on face-to-face communication (Cheng et al. 2006). The second component, on the other hand, is based on the use of communication media such as fax, telephone, and mail (Mohr & Nevin 1990). Short Messaging Service (SMS) is also seen as a tool to enhance the level of collaboration (Herman 2007). As far as human collaboration is concerned, there are some practices which can be employed to improve the level of collaboration between trading partners. Based on existing literature, these practices include the communication via *(1) formal meetings, 2) informal meetings, (3) facsimiles, (4) telephones, (5) SMS,* and *(6) postal mail.*

1) Formal Meetings

Formal communication plays a good role for all involved parties to achieve collaboration; it influences the flow of communication and allows all trading partners to understand the information effortlessly, precisely, and timely (Holton 2001; Pauleen & Yoong 2001). In this regard, the information normally flows vertically or horizontally according to the organisation structure and related task requirement (Bartol et al. 2001). It is also claimed that formal communication can be achieved via formal meetings among parties (Ross 2003).

2) Informal Meetings

An unofficial meeting is a hybrid between informal and formal communication. This probably is the most effective way to build up the relationships between parties (Pauleen & Yoong 2001). Face-to-face meeting enables all members to understand individual member communication styles, personalities, and professional motivations; it provides an easier way to develop relationships in their community (Holton 2001; Pauleen & Yoong 2001). Therefore, communications via high technology media still cannot replace face-to-face communication in terms of building high-quality relationships between parties (Young 1995).

The literature also addresses the role of a coordinator in lifting the level of collaboration. For example, this could be done by ensuring the success of informal communications. Another possibility is that a coordinator can help the members to understand their roles so that mutual benefit can be achieved (Belbin 1993).

However, the main task of the coordinator role is in the exchange of information. Different authors develop this in different ways. For example, Bartol (2001), the coordinator enhances collaboration by clarifying and synthesising information that helps tie together the work of all the parties. For McMurry (1961), the collaborative task for the coordinator is the exchange of useful information with the members in order not only to build friendliness but also to enable the joint solving of problems. Further, the marketing literature suggests that sales representative can act as coordinator by performing a superior process of information exchange with buyers (Kotler 2000). This kind of coordination can transform the emphasis from transaction to relationship marketing based on the principle of the long-term relationships (Kotler 2000).

3) Facsimile

The members of a business community can exchange information via the facsimile machine. With the emerging of the Internet technology, the death of the facsimile machine has been predicted many times, but it is still widely used in the collaborative process (Rao 1999).

4) Telephone

There are several ways in which telephone communication can improve collaboration. The telephone is probably the most important way to build up the relationships within a virtual community (Pauleen & Yoong 2001). Research conducted by Wynn & Katz (2000) also reveals that using the telephone creatively can establish collaboration by enabling members to monitor the community so that internal conflicts can be reduced. In the special case of the mobile telephone, the bearing on collaboration is in the enhanced accessibility which it provides (Ling 2000).

5) Short Messaging Service

SMS is the service available on most digital mobile phones enabling the users to send short messages or text messages between mobile phones (Herman 2007). Research conducted by Herman (2007) suggests that SMS is also a relevant form of communication and this can be used in the collaborative process.

6) Postal Mail

Fundamentally, postal mail is the method of communication between two or more parties in different locations. This can be used as correspondence whether for personal, diplomatic, or business reasons. With this practice, important messages that need to be retained (e.g., receipts) can be kept more easily and securely.

E-collaboration

As mentioned earlier, e-collaboration is defined as collaboration between involved parties via the Internet system (Gharavi, Love & Cheng 2004; Kock 2005; Lee-Kelley, Crossman & Canning 2004). The popularity of Internet technology has been considered as the major revolution of the 1990s (Tatnall et al. 2000).The Internet is the most common driving force for businesses; it alters the competitive landscape by increasing the performance of organisations in terms of transferring production and knowledge from one place to another (Thompson & Strickland 2001). It also directly impacts on inter-organisational activities especially when it is compatible with business processes (Ettlie & Reza 1992). It can be used to integrate business activities involving resources and products management, resources and products flow systems, and resources and products distribution (Kotler 2000). E-collaboration can also enhance satisfaction between parties as the information can be exchanged more rapidly (Croom 2005).

A review of literature reveals that e-collaboration can be analysed according to the '*frames of Internet use*' proposed by Hoflich (1998). The frames consist of *(1) the frame of distribution, (2) the frame of public discourse,* and *(3) the frame of technically mediated interpersonal communication.* These are outlined below.

1) The Frame of Distribution

In this frame, the Internet is employed as a medium to retrieve information and data (Eisend 2002; Hoflich 1998). The Web-based application, which can be accessed only by specific vendors for adjusting useful information, is an obvious example for this practice (Archer & Yuan 2000; Eisend 2002; Lankford 2004). Archer and Yuan (2000) point out that this application allows parties to integrate their internal information system with suppliers' catalogues, to build business transaction regulations consistent with purchase contracts, to order products online without the involvement of a purchasing department, to access automatic replenishment provided by a supplier organisation, and to pay via electronic funds transfer. Furthermore, the Web-based interfaces also provide useful information in terms of what products are needed by the consumers, what products are available in stock, what materials are still being produced, and how to physically move those products (Golicic et al. 2002; Lancioni, Smith & Ovliva 2000). By employing the Internet to integrate supply activities, inventories are decreased; the overall cost is reduced; the price is reduced; and customers' satisfaction is ultimately increased (Croom 2005; Eisend 2002; Hoflich 1998; Muffatto & Payaro 2004; Papazouglu, Ribbers & Tsalgatidou 2000)

2) The Frame of Public Discourse

In this way, the Internet is employed as a medium for discourse or as a forum to discuss an interesting issue (Eisend 2002; Hoflich 1998). There are some examples that can be categorised as the frame of public discourse. First, the Internet-based asynchronous computer conference system can be fitted in the frame of public discourse (Koama 2002; Rutkoski et al. 2002). Likewise, a forum via the Web-based application allowing its members to post questions or suggestions to a large number of people at the same time, is also considered as an effective communication in the public discourse (Granger & Schroeder 1996). Additionally, the Internet news which is similar to a physical bulletin also can be employed for posting messages publicly (Eisend 2002; Granger & Schroeder 1996; Hoflich 1998). Documents including help files, the collection of frequently asked questions that are available on the Web-based application, moreover, can be seen as public discourse (Eisend 2002). Lastly, the text based chat program, which sometimes refers to the instant chat room, can be used publicly by holding a meeting among members even though it may not be suitable for formal meetings (Pauleen & Yoong 2001).

3) The Frame of Technically Mediated Interpersonal Communication

In regard to this issue, the Internet is used to communicate with a single person (Eisend 2002; Hoflich 1998). There are some patterns that can be categorised in the frame of technically mediated interpersonal communication. Firstly, e-mail both text and multimedia messages can be exchanged for interpersonal communication (Eisend 2002; Rutkoski et al. 2002). With cost effectiveness, e-mail is recognised as an universal platform that most people can easily access and learn (Granger & Schroeder 1996). Likewise, a text-based chat program allowing individuals to communicate via the Internet channel can be seen as producing interpersonal written communication (Eisend 2002).

Note that the literature also reveals that the Electronic Data Interchange (EDI) system has been redesigned to be compatible with Internet-enabled possibilities (Angeles 2000). This is the computer-to-computer system which allows trading partners to exchange business information in a standard format (Emmelhainz 1993). However, appropriate resources (e.g., hardware, software, communication support, and personnel skill) are needed for successful EDI implementation (Petrosky & Emmelhainz 1991). Research shows that small businesses lack the technical capabilities to handle Internet-based EDI (Ratnasingam 1998). For this reason, this research does not focus on the use of EDI via the Internet because most of parties in the phenomena studied are small businesses.

2.4 Theoretical Perspectives on the Success Factors

The purpose of this research is to examine and propose possible improvements that all relate to the key success factors for achieving collaboration in an e-supply network as outlined by Nøkkentved and Hedaa (2000). Those key success factors are power, trust, and exception handling.

2.4.1 Rationale for Using Factors Proposed by Nøkkentved and Hedaa (2000)

The justifications for focusing on the three critical factors proposed by Nøkkentved and Hedaa (2000) are listed below.

First, most of the important factors proposed by other scholars can be grouped into the critical factors proposed by Nøkkentved and Hedaa (2000). In this regard, Nøkkentved and Hedaa (2000) assert that exception handling is considered to be a very broad spectrum issue, which usually covers all the important factors raised by previous studies. In fact, many studies show that exception handling covers more than 70 percent of the time for establishing a close collaborative partnership (CPFR Roadmap 1999). Thus, combining the issue of exception handling with power and trust will cover most issues raised by others as well.

Second, since the knowledge of collaboration in supply chain is just starting (Ross 2003), "it would be appropriate at this stage of development of collaboration to examine supply chain collaboration in as many contexts as possible" (Barratt 2004, p. 40).

Third, the study of these three success factors will fill gaps and extend the knowledge of previous collaborative frameworks such as the VMI, CR, and CPFR models. Nøkkentved and Hedaa (2000) clarify that the central concept of previous collaborative models is the same as the concept of exception handling, which is to deduct, classify, and handle exceptions within the collaborative process. Hence, by integrating the issue of trust and power with the concept of exception handling,

critical factors proposed by Nøkkentved and Hedaa (2000) will provide a comprehensive approach for a collaborative process beyond the ambit of previous frameworks.

Fourth, the three crucial factors proposed by Nøkkentved and Hedaa (2000) are consistent with the concept of the systems approach to management. Since there are different subsystems forming completed system in an organisation, the system management approach asserts that the subsystems must be synchronised in order to achieve organisational functions (Kast & Rosenzweig 1970; Kenyon 1973). Hence, by using the significant factors proposed by Nøkkentved and Hedaa (2000), the technical subsystem (exception handling) and the psychological subsystem (power and trust) are coordinated to achieve collaboration.

For these reasons, studying three critical factors proposed by Nøkkentved and Hedaa (2000) will consolidate all relevant prior knowledge of collaborative processes within e-distribution networks, and this ultimately can be applied to the motorcycle industry in Thailand.

2.4.2 Power

In the context of the relationships among parties, behavioural theory identifies power as the ability of one member to dominate the decision variables of another member (Cox, A. 1999; Cox, A., Lonsdale & Watson 2003; Nøkkentved & Hedaa 2000). Power can impact partners' satisfaction (Dickson & Zhang 2004), that is the degree to which a party is satisfied with the agreement and the exchange relationship (Frazier & Summers 1986). Hence, the use and abuse of power can influence the level of collaboration among parties (Cox, A. 1999; Cox, A., Lonsdale & Watson 2003; Emmett & Crocker 2006; Nøkkentved & Hedaa 2000).

Power and Relationships

Power plays a primary role in inter-organisational relationships (Stern 1988). Many academics confirm that the structure of power is crucially important; it needs to be precisely understood so that successful relationships between parties can be established (Cox, A. 1999; Cox, A., Lonsdale & Watson 2003; Nøkkentved & Hedaa

2000). In regard to buyer-seller relationships, it is claimed that the structure of power needs to be at the centre of any useful analysis (Cox, A., Lonsdale & Watson 2003). However, the issue of power in supply networks has been overlooked and treated as a less essential issue (Cox, A., Lonsdale & Watson 2003; Duffy & Fearne 2004).

Different researchers propose different concepts of power in supply chain relationships. Academics viewing power in a coercive sense claim that it blocks the effectiveness of those exchange relationships which depend mainly on trust and co-operation (Bretherton & Carswell 2002; Doney & Cannon 1997; Ford 1982; Kumar 1996; Pole & Haskell 2002). Other scholars argue that the issue of power is not important for parties to build a good relationship (Naude & Buttle 2000). However, many researchers view power as a significant factor to achieve mutual relationships (Cox, A. 1999; Cox, A., Lonsdale & Watson 2003; Hingley 2005; Nøkkentved & Hedaa 2000). In this regard, good relationships are not only based on the importance of trust and cooperation; they are also based on some aspects of power (Blois 1997; Campbell 1997; Earp, Harrison & Hunter 1999; Kalafatis 2000; Svensson 2001b). Hence, ignoring the issue of power means ignoring ways to enrich relationships (Earp, Harrison & Hunter 1999).

Most relationships between partners are imbalanced (Kumar 1996). All members in a business community already have some degree of power which is usually spread disproportionately (Shipley & Egan 1992). In the supply chain context, buyers follow the development approaches from suppliers (Cox, A. 2004). This is because they tend to rely on resources provided by suppliers (Ford 1982). These resources can be information, raw materials, and heavily demanded products (Dahl 1957; Stern 1980; Stern & El-Ansary 1982). Other desired resources can also be rewards, supports for marketing functions, the right to influence other parties, and the ability to enforce punishment of parties who break regulations in the business community (El-Ansary & Stern 1972; Hunt & Nevin 1974; Stern 1980).

The role of power and the ability of firms to manage power imbalances also impact on B2B relationships (Hingley 2005). Many studies suggest that the imbalance of power between trading partners can influence their relationship structure when they conduct business jointly within the e-market place (Ratnasingam 2000). A study by Johnson and Ford (2002) demonstrates that the weakness of relationships between parties is

often seen in the situations where the dominant parties take control over weaker parties. Consequently, it is recognised that power imbalance has an unfavourable effect on the relationship between trading partners (Duffy & Fearne 2004; Gummesson 1996).

Coercive Power and Non-coercive Power

Many academics identify different power taxonomies such as coercive/non-coercive power (Hunt & Nevin 1974), reward/coercive/legitimate/referent/expert power (French & Raven 1959), economic/non-economic power (Etgar 1978), and contingent/non-contingent power (John 1984). Of these, the most favoured dichotomy is *(1) coercive* and *(2) non-coercive* power (1998), and this is the one selected as a basic taxonomy for the current research. Specifically, this is the version proposed by Hunt and Nevin (1974), and it is outlined below.

1) Coercive power

Coercive power is the ability of one firm to request another firm to comply by using potential penalties (Hunt & Nevin 1974; Yavas 1998). This means that powerful parities can enforce punitive capabilities and actions when their partners present errors or failings (Kumar, Scheer & Steenkamp 1998; Ratnasingam 2000). A study conducted by Yavas (1998) shows that the powerful firms are more likely to use coercive power sources to enforce those less powerful parties. They may also use coercive power sources to ensure that those less powerful will behave in ways that can generate mutual benefit (Shipley & Egan 1992). In other words, coercive power is sometimes used when other trading partners do not cooperate (Ratnasingam 2000). However, coercive power has several disadvantages; it can diminish channel performance, increase the cost of channel coordination, and reduce the level of or even terminate the relationships (Yavas 1998). In the automobile industry, for instance, research conducted by Lusch (1976) demonstrates that an increase in coercive sources of power can cause conflict between manufacturers and dealers. It is clear that coercive power can generate uncertainty and can increase tension in complex situations (Bartol et al. 2001; Frazier & Summers 1986; John 1984; Ratnasingam 2000; Xie & Elangovan 2000; Yavas 1998). Therefore, it can be claimed that ultimately collaboration between parties may not exist in the tension situations (Shipley & Egan 1992).

2) Non-coercive power

Whilst coercive power is the ability to apply punishment, non-coercive power sources can be seen as a positive factor which enriches the relationships between parties (Hunt & Nevin 1974). Indeed, non-coercive power is used to obtain compliance through various types of assistance from one firm to another (Yavas 1998). It can increase the level of trust as well as create a long-term relationship among trading partners (Ratnasingam 2000). Other research also proposes that non-coercive power as outlined by Hunt and Nevin (1974) is the foundation of relationships enabling multiple parties to work closely via the principle of coordination (Bretherton & Carswell 2002; Doney & Cannon 1997; Frazier & Summers 1986; Hunt & Nevin 1974; Pole & Haskell 2002).

In order to understand more about non-coercive power, the classical sources of non-coercive power as outlined by Hunt and Nevin (1974) need to be reviewed. These sources consist of *(i) reward power, (ii) legitimate power, (iii) referent power, (iv) expert power,* and *(v) information power*. They are also the favoured framework to conduct this research which is outlined below.

i) Reward Power

Reward power is employed for achieving compliance through the promising of rewards (Aguinis et al. 1994; Hunt & Nevin 1974; Shipley & Egan 1992). Rewards can be both *tangible* and *intangible* (Aguinis et al. 1994). In reality, reward power provide specific directions on how the business should develop by promising rewards to those who achieve behaviours and performance that support the success of business goals (Armstrong 2000). Trading partners therefore are induced to work corporately by rewards which they expect to receive from their efforts and investments (Shipley & Egan 1992). More specifically, rewards can motivate people's performance, and help retain people with the knowledge, skill and abilities required for the firm's strategy (Galbraith, J R 1973; Kilmann 1889; Nadler & Tushman 1988). Rewards should be integrated into mechanisms that encourage the efforts of various sub-units to undertake business for the achievement of strategic business goals (Gomez-Mejia & Balkin 1992). Using reward systems which are compatible organisation requirements can support change, and reinforce and validate mechanisms for

resolving business thrust (Armstrong 2000). It is concluded that rewards and cooperation between trading partners are positively related (Hunt & Nevin 1974)

ii) Legitimate Power

Legitimate power is the ability of one member to prescribe behaviours of another member based on authority and legitimate rights (French & Raven 1959). Later studies also indicates that legitimate power can be broken down into four categories including *(a) legitimate reciprocity, (b) legitimate equity, (c) legitimate dependence,* and *(d) legitimate position* (Raven 1992, 1993). These categories are reviewed below.

- Legitimate Reciprocity

This power is based on a power holder who did something positively for a target in particular circumstances; the target feels obliged and complies with the power holder (Raven 1992, 1993).

- Legitimate Equity

This power is based on power holder who has worked hard and suffered, so it is only fair that the target should do something which the power holder asks as the way to return the favour. In other words, the target has done things which caused pain or difficulty for power holder, so the target feels obliged and complies to compensate for this (Raven 1992, 1993).

- Legitimate Dependence

This power is based on the power holder who truly needs assistance from a target; the target complies because of the feeling of social responsibility to assist another who is in need (Raven 1992, 1993).

- Legitimate Position

This power is based on a legitimate right, status or position, for making requests from the target. Legitimate power seeks private compliance that comes from within the target; therefore, it does not require surveillance by the power holder to be successful (Bruins 1999). Although this power sometimes can generate stress among parties, it is

positively related to internal motivation, satisfaction, and commitment (Vroom 1964). In fact, perceived legitimate power is an important predictor of behaviour; "extending this, it can be understood that high perceived legitimate power of the supervisor will increase the salience of duties and enhance a sense of responsibility and obligation" (Xie & Elangovan 2000, p. 3). In regard to expectancy theory, legitimate power increases motivation between trading partners (Vroom 1964).

iii) Referent Power

Referent power is the power or ability of individuals to persuade and influence others based on the charisma, admiration, or respect of the power holder (French & Raven 1959). The target complies or agrees with the power holder since he or she desires to gain approval from the power holder (French & Raven 1959). Shipley and Egan (1992, p. 45) assert that "referent power seeks compliance through the pursuit of mutual interests"; therefore, it leads to private compliance, and enables the target to maintain satisfactory relationships with the power holder on certain relevant phenomenon.

iv) Expert Power

This power regime is based on the situation where the target complies because he or she views the power holder as someone having superior expertise, which normally does not exist in a general situation (French & Raven 1959; Lam 1996). This power usually involves a particular topic which requires special expertise or qualifications (Dowding 1996). It occurs fundamentally as rational persuasion in which the power holder proposes logical argument along with evidence that supports a particular plan or request (Green 1999). In other words, expert power is based on the difference of knowledge or ability between the power holder and the target (Green 1999).

v) Information Power

Information power is established when the target complies since he or she views the power holder as someone having superior ability to control the required information (Raven 1965). In fact, this power is defined in a similar way as expert power (Raven 1965). However, because compliance is based on the perceived relevance and validity of the information, this power is independent of the power holder and of the relationships between power holder and the target (Bruins 1999; Raven 1965).

2.4.3 Trust

As various academics from different schools of thought have defined the meaning of trust in their own discipline (Doney & Cannon 1997), there is no "universally accepted scholarly definition of trust" (Rousseau et al. 1998, p. 394). In generic terms, however, trust is defined as the willingness of a party to perform a particular action based on the expectation of another party in a risky situation (Deutsch 1960). Indeed, trust is a phenomenon which contributes to the strength of interpersonal, intra-organisational, and inter-organisational relationships (Sahay 2003).

Dimension of Trust

Although there has been a variety of research proposing different dimensions of trust during the last five decades (Svensson 2001a), the classical theory of dimensions developed by Swan, Trawick, and Trawick (1985) and Swan and Trawick (1987) is useful for understanding trust. In fact, research on the topic in the Swedish automotive industry also shows that this classical theory also covers other dimensions of trust proposed by other scholars (Sahay 2003).

According to Swan, Trawick, and Silva (1985) and Swan and Trawick (1987), the construction of trust consists of five dimensions *(1) dependability/reliability, (2) honesty, (3) competence, (4) buyer/seller orientation,* and *(5) friendliness.* These dimensions are outlined in Table 2.1. By integrating these dimensions with other dimensions of trust shown in Table 2.1, the measurement and evaluation of trust in B2B relationships can be achieved (Svensson 2001b). Because this approach is the most inclusive, it was the one selected for the research.

Table 2.1: The multidimensional constructs of trust

Basic dimensions of trust Swan & Trawick (1987); Swan, Trawick & Silva (1985)	Related dimensions of trust	Authors
Dependability/Reliability	Confidence	Dwyer & Lagace (1986); Luhmann (1979)
	Consistency	Butler & Cantrell (1984)
	Faith	Zaltman & Moorman (1988)
	Loyalty	Butler & Cantrell (1984)
	Predictability	Coleman (1990); Gambetta (1988)
	Respect	Jackson (1985a, 1985b)
	Security	Zand (1978)
Honesty	Fairness	Butler (1991); Hart et al (1986)
	Motivation not to lie	Hovland, Janis & Kelly (1953)
	Openness of management	Hart et al (1986)
Competence	Ability	Cook & Stimpson & Maughan (1978)
	Character	Gabarro (1978)
	Expertness	Giffin (1967)
	Integrity	Butler (1991); Butler & Cantrell (1984)
Buyer/seller orientation	Altruism	Frost, Stimpson & Maughan (1978)
	Business sense & judgment	Gabarro (1978)
	Congruence	Sitkin & Roth (1993)
	Intention or motive	Deutsch (1960); Giffin (1967); Kee & Know (1970)
Friendliness	Acceptance	Bonoma (1976)
	Benevolence	Mayer, Davis & Schoorman (1995)
	Linking	Swan & Trawick (1987)

Level of Trust

According to Sydow (1998), there are fundamentally three levels of trust including *(1) the personal level, (2) the organisation level,* and *(3) the network/environment level.* This model shares similar characteristics with other models such as the one proposed by Lane (1998) and a framework proposed by Kimber and Birchall (1998). Lane (1998) proposes that the different levels of trust consist of *(1) the micro level, (2) the institution level,* and *(3) the system and society level* while Kimber and Birchall (1998) claim that three level of trust are *(1) trusting one self and inter personal trust,(2) organisational or group trust,* and *(3) social or societal trust.* Table 2.2 compares these three models.

Table 2.2: A comparison of studies in the different levels of trust

Sydow (1998)	Lane (1998)	Kimber & Birchall (1998)
Trust at the personal level	Trust at the micro level between individuals and between organisations	Trusting one self and inter personal trust
Trust at the organisational level	Institution-based trust or system trust	Organisational or group trust
Trust at the network level	System trust or impersonal trust	Social or societal trust

There are some connections between trust at the personal level and trust at the organisational level. In essence, trust at a personal level can influence the level of trust between two or more organisations (Lewis 1999). By considering trust at the organisational level, prior study also reveals that the nature, structure, and ability of each organisation can influence the level of trust between parties (McKnight, Cummings & Chervany 1998). As summarised by Sydow (1998, p. 47), "the analysis of the constitution of inter-organisational trust requires the investigation of the process in which agents interact and refer, in a way which enhances trust, to the structural properties of their action context".

Trust and Relationships

It is recognised that trust is an important issue for the developing and managing of business relationships (Grönroos 1990; Håkansson & Snehota 1995; Morgan & Hunt 1994; Sahay 2003). While Goodwin (1996) defines trust to be like the grease which keeps the wheels spinning, Beckett (2005) identifies trust as the relationships based on the senses of confidence, reliability, expectation, credibility, honesty, fairness, benevolence, and risk. It is often claimed that trust assists parties to deal with imperfect information in risky or uncertain situations (Simons 1997; Svensson 2001b). Trust is also dynamic; it can be changed all the time even in the same relationship (Lewicki & Bunker 1996). Many researchers identify trust as a significant factor to achieve collaboration in an e-marketplace (Larkins & Luce 2000; Mattsson 2003; Morgan & Hunt 1994; Tucker & Jones 2000).

Trust and Collaboration

Without trust, collaboration is difficult to achieve (Mohr & Spekman 1994; Morgan & Hunt 1994). In supply networks, trust is positively related to the degree of collaboration (Myhr & Spekman 2005). Indeed, collaboration and trust are positively related since collaboration cannot be developed without trust (Tschannen-Moran 2001). This is because collaborative efforts between trading partners always involve some investments (e.g., resources, time, energy, responsibility, and rewards), which require high levels of trust among parties (Mattessich & Monsey 1992). Those investments may build up tension situations which parties are more likely to avoid unless they trust each other (Tschannen-Moran 2001). Therefore, trust is not only a desired characteristic, but an important factor if a business community is to achieve true collaboration (Speckman, Kamauff & Myhr 1998).

Although there is less empirical evidence showing the link between collaboration and trust in the supply chain context, trust is still relevant to the effectiveness of working groups (Tschannen-Moran 2001). Many sources demonstrate that trust is crucial to participative management practices in business (Deutsch 1958, 1960; Svensson 2001a, 2001b). When trust is absent, for example, a leader is less likely to involve team members particularly when making an important decision (Rosen & Jerdee 1977). This results in exclusion of perspectives and insights from team members

(Dunn 1988). It is revealed that high-trust teams always solve problems more effectively than low-trust teams (Zand 1971). Many studies summarise that trust plays a key role in building up collaboration among team members (Awe 1997; Glacel 1997; Holton 2001; Senge et al. 1994).

Importance of Trust in Collaboration

This section reviews existing literature on how trust can lead to collaboration. This includes *(1) complexity reduction, (2) increasing communication,* and *(3) enhancing the willingness to cooperate.* For this research, these categories were selected to identify the importance of trust in the relationship between parties, and they are reviewed below.

1) Complexity Reduction

Building trust is a strategic method for handling complex and uncertain situations (Dunn 1988). As a new means of communication, in particular the Internet, has emerged, it was recognised that modern technologies have generated complexity in the lives of individuals (Lawrence, Jennings & Reynolds 2002; Mecker 1999; Schaffer 2004). Because of complexity and lack of control, the ability to predict the behavioural patterns of people is more likely to fail (Luhmann 1979). It is claimed that the complexity and uncertainty in the business environment are some of the critical factors which prevent good relationships (Osborn & Hagedorn 1997; Tjosvold 1990).

Trust between parties becomes an important issue in situations of complexity (Osborn & Hagedorn 1997; Seligman 1999; Tjosvold 1990). The reason why trust plays a leading role in reducing complexity is that it creates predictability, which is considered to be one function for complexity reduction (Schaffer 2004). Trust enables trading partners to exchange useful information which allows a subjective estimation of possible future events (Schaffer 2004).

2) Increasing Communication

According to Anderson and Weitz (1889), trust is needed before parties establish a constructive relationship of communication. They assert that an open and constructive way of communication relies on the inner commitment of a partnership (Anderson, E. & Weitz 1889). In fact, it is possible to make communication without trust, but impossible to create trust without communication (Becerra & Gupta 2003). Trust also increases the quality of communication by allowing all involved parties to interact and exchange sensitive information in more open ways (Schaffer 2004). In a similar way, trust can deepen the level communication by means of "open-mindedness vis-à-vis the other party, decreased fear of information misuse, mutually accepted dependency leading to the willingness to provide on-time delivery of accurate information" (Zand 1971, p. 230). Finally, research conducted by Lane (1998) on the issue of strategic alliances provide further demonstration that trust not only leads to increased communication, it also allows partners to exchange sensitive information.

3) Enhancing the Willingness to Cooperate

Decreasing complexity as well as increasing the level of communication will encourage all involved parties to work together (Schaffer 2004). It is confirmed that the spirit of mutual confidence and trust can effectively lead multiple parties to sustain their coordinated action (Gray 1985). In the supply chain context, some evidence demonstrates that trust is an important factor enabling parties to collaborate in their work process, which results in a mutual relationship (Campbell 1997; Doney & Cannon 1997; Morgan & Hunt 1994). When all parties trust each other, they usually spend more time together solving problems and improving product quality (Sako 1998). They also tend to improve the operational processes within their relationships (Cannon & Perreault 1999). It is understood that trust provides a supplier with complete confidence in the credibility of the buyer, and this ultimately turns into a willingness to engage in high risk situations and create coordinated behaviours (Pruitt 1985). By expanding the amount of information shared among parties, therefore, trust is recognised as a mechanism to enhance the willingness to conduct cooperative work (Hart & Saunders 1997).

Types of Trust

Although the important role of trust towards collaboration has attracted many scholars (Mattessich & Monsey 1992; Mohr & Spekman 1994; Myhr & Spekman 2005; Tschannen-Moran 2001), types of trust within the e-market place have not been yet well understood (Jones, Wilikens & Masera 2000).

To begin an investigation of trust in relation to collaboration, it is necessary to specify the relevant type of trust. Once it is specified then procedures for assessing, promoting, and maintaining trust can be established. By identifying different types of trust based on different terminology for similar types, and by separating the same types of trust in traditional markets, the various options are *(1) personality-based trust, (2) affect-based trust, (3) cognition-based trust, (4) calculative-based trust, (5) familiarity-based trust, (6) knowledge-based trust, (7) deterrence-based trust, (8) institutional-based trust,* and *(9) integrated trust.* The details of each type of trust are summarised in Table 2.3.

Table 2.3: Types of trust

Type of Trust	How is trust produced?	Authors
Personality-based	Trust can be obtained from those willing to help.	Bowlby (1982)
Affect-based	The emotions that tie parties together can create trust regardless of egocentric profit motives.	Child (1998); Jarvenpaa & Leidner (1999); Lewicki & Bunker (1996); Lewis & Weigert (1985); McAllister (1995);Newell & Swan (2000); Sako (1992, 1998); Zaheer, McEvisly & Perrone (1998)
Cognition-based	The information passing though the parties creates the trust.	Lewis & Weigert (1985); McAllister (1995)
Calculative-based	Trust is the outcome of rational calculation by comparing cost against benefit.	Child (1998); Dasguta (1988); Lane (2000); Lewicki & Bunker (1996); Mayer, Davis & Schoorman (1995); Newell & Swan (2000); Williamson (1993)
Familiarity-based	Past experiences towards other parties produce trust.	Schaffer (2004); Williamson (1993)
Knowledge-based	Trust is obtained from the accumulation of appropriate knowledge.	Lewicki & Bunker (1995); Schaffer (2004)
Deterrence-based	Trust arises as a consequence of dependable behaviour that is sustained by the threat of punishment.	Lewicki & Bunker (1996)
Institutional-based	Trust is established due to the norms and rules of the surrounding institution.	Coutu (1998)
Integrated	Trust is created from various reasons. The above-mentioned types of trust are related to each other and can be mixed together in some situations.	Lewicki & Bunker (1996); Mayer, Davis & Schoorman (1995); Rousseau et al. (1998); Zaheer, McEvisly & Perrone (1998)

2.4.4 Exception Handling

To conduct this research, the following section describes the meaning of exceptions, perspectives on sources of exception, and approaches to handle exceptions.

Exceptions

According to Klein and Dellarocas (1999, p. 62), all "departures from ideal collaborative behaviour can be called exceptions". Exceptions arise when a business activity cannot be performed according to its plan (Vojevodina 2005). In fact, they are recognised as a primary part of organisational processes (Gasser 1986; Suchman 1983). Many scholars define exceptions as situations where a complete set of relevant rules is not available (Auramaki & Leppanen 1988; Saastamoinen 1993; Saastamoinen & Savolainen 1992). In addition, by linking exceptions to the concept of rules, exceptions can be defined as situations where rules are not applicable (Auramaki & Leppanen 1988; Saastamoinen 1993, 1995; Saastamoinen & Savolainen 1992).

Whilst some exceptions may impact only slightly on particular processes, others may affect the whole workflow (Kammer et al. 2000). Generally, workflow is the automatic result of a business process in which particular work is transferred consistently with a set of procedures from one member to another (Vojevodina 2005). Exceptions could easily impact on the workflow extending beyond the boundaries of a single organisation (Kammer et al. 2000). Therefore, exceptions can impact on an organisation on three levels: employee, group, and organisation (Saastamoinen 1995).

Exception handling across inter-organisational relations is a particular challenge: any consistent control over different policies, products and procedures is reduced (Kammer et al. 2000). Exception handling is difficult; it requires coordinated changes from multiple parties who may not have sophisticated handling capabilities (Klein 1997). Empirical studies reveal that exception handling sometimes consumes extra time resulting in high costs of operation (Saastamoinen, Savolainen & Markkane 1994). As concluded by Nøkkentved and Hedaa (2000), exceptions work against the collaborative concept which tries to achieve efficiency and effectiveness.

Perspectives on Sources of Exception

Exceptions are very diverse, and they can be either unpredictable or predictable and addressable in advance (Vojevodina 2005). One way of analysing how exceptions can be handled is to examine where they come from (Strong & Miller 1995).

The different sources of exception can be grouped under five perspectives including *(1) the random-event perspective* (Gasser 1986; Strong & Miller 1995; Suchman 1983), *(2) the operation errors perspective* (Kammer et al. 2000; Strong & Miller 1995), *(3) the design error perspective* (Kammer et al. 2000; Strong & Miller 1995), *(4) the dynamic organisation perspective*, (Kammer et al. 2000; Strong & Miller 1995) and *(5) the political system perspective* (Kling & Iacono 1984; Strong & Miller 1995). This research takes these perspectives to identify existing types of exception between parties and they are reviewed below.

1) The Random-event Perspective

In this perspective, exceptions are random and infrequent occurrences (Kammer et al. 2000; Strong & Miller 1995). Exceptions can occur during normal processing and during events such as fires and floods (Strong & Miller 1995). Some managers and researchers use this perspective since they trust that the designed system will work most of the time, and exceptions will occur very infrequently (Strong & Miller 1995). Although truly random exceptions cannot be eliminated, they are included in the sources of exception for the completeness (Strong & Miller 1995).

2) The Operation Errors Perspective

In this perspective, exceptions are mistakes in the running of a process (Kammer et al. 2000). In this regard, mistakes made by people are generally considered to be operating errors (Rasmussen, Duncan & Leplat 1987). Strong and Miller (1995, p. 211) further clarify that operating errors consist of "mistakes in processing (for example, promising delivery when there is no inventory) and mistakes in inputs to the process (for example, orders for non-existent products)".

In highly computerised systems, operating errors are rare since people are not involved in the processing; but they can be common problems in manual interventions (Strong & Miller 1995).

3) The Design Error Perspective

This perspective holds that exceptions come from the mistakes in designing and implementing the system (Kammer et al. 2000). For example, many managers and researchers claim that exceptions are the results of poor process design (Anderson, J.R. 1980; Cohen & Bacdayan 1994; Ericsson 1984; Klein & Dellarocas 1999; Strong & Miller 1995). It is also claimed that if the process is designed and implemented properly, only random-event exceptions should occur (Strong & Miller 1995).

There are several reasons why process design can be poor. First, some academics state that the designing process is complex and not well understood; this leads to problems in designing organisational routines and information processes (Cohen & Bacdayan 1994; Galbraith, J.R. 1973; Simon 1981; Vojevodina 2005). Second, it is difficult to design a proper process when the process outcome is unpredictable (Markus & Robey 1988; Vojevodina 2005). Third, many operational processes evolved gradually, and were not explicitly designed (Hammer 1990).

4) The Dynamic Organisation Perspective

In this perspective, exceptions are seen to occur because of changed situations which force organisations to adjust over a period of time (Kammer et al. 2000; Klein 1997). Those adjustments can refer to procedures and goals, as well as routine processes (Nelson & Winter 1982). As a result, exceptions could be generated by the emerging discrepancies between the routines embedded in organisations and the organisational decision rules (Kammer et al. 2000; Strong & Miller 1995). Hence, exceptions occurring on the basis of a changed situation are the consequence of design error, and therefore overlap with the previous perspective (Strong & Miller 1995).

5) The Political System Perspective

In this view, exceptions arise due to the conflicts of interest where different sub-units in a business community have different goals (Strong & Miller 1995). "This perspective views exceptions as a normal part of organizational process" (Kammer et al. 2000, p. 271). Exceptions, therefore, could be generated when the specification of work process is influenced by different parties (Kammer et al. 2000). There is also the requirement to manipulate the goals of entities so that mutual benefit can be achieved

(Kammer et al. 2000; Kling & Iacono 1984). In general, the goals of less powerful parties may need to be readdressed (Strong & Miller 1995).

Approaches to the Handling of Exceptions

The principle of exception-based management is similar to the principle of rules management. As pointed out by Twining and Miers (1976), rules can take the form of any precept, regulation, rule of thumb, convention, principle, guiding standard, and even maxim that gives a rule for sensible behaviour. Specifically, there are different approaches to handle exceptions including *(1) knowledge-based exception handling, (2) workflow exception modelling, (3) exception handling and adaptive workflows,* and *(4) cross-organisational approaches.* These issues are reviewed below.

1) The Knowledge-based Exception Handling Approach

This approach suggests that a good process uses procedures that assist participants to analyse and predict possible exceptions which can then be successfully detected and avoided (Klein & Dellarocas 1999). Unlike a traditional approach relying on the experience and understanding of managers to deal with exceptions, the knowledge-based approach is systematic (Klein & Dellarocas 1999). The approach depends on extensible knowledge using generic strategies for detecting, avoiding, and resolving exceptions (Klein 1997; Klein & Dellarocas 1999).

There are many suggestions to deal with exceptions in this approach. Deiter et al (1998), for instance, propose flexibility when dealing with exceptions. Lou et al (1998), furthermore, suggest that the knowledge-based approach can be implemented by integrating various experiences from selected cases of exceptions handling in order to solve upcoming exceptions. Moreover, Klein and Dellarocas (1999) reveal that acquiring this knowledge would help multiple participants to develop and evaluate the systems in collaborative design, which can then reduce the conflict in their relationships.

2) The Workflow Exception Modelling and Specification Approach

This approach involves a model of a workflow representing of the logical sequence of work which needs to be completed to achieve the specific goal of the business environment (Edelweiss & Nicolao 1998). Each process could be combined with several activities, with different methods for execution, and possibly needing to be executed by different participants (Luo 2001). The illustration of this information is known as exception modelling because it creates an understanding of the whole process, and allows possible exceptions to be identified (Edelweiss & Nicolao 1998; Luo 2001). When exceptions are identified during the analysis stage, possible solutions can be established (Edelweiss & Nicolao 1998). However, one weakness of this approach is that the multiple parties need to spend a lot of time analysing the entire workflow (Edelweiss & Nicolao 1998).

3) The Exception Handling and Adaptive Workflows Approach

In this view, the purpose is to support dynamic evolution by integrating flexibility mechanisms into existing systems (Vieira 2005). It is suggested that two basic issues of 'flexibility by adaptation' and 'flexibility by selection' need to be taken into account when sub-units conduct their businesses in a dynamic environment (Heinl et al. 1999). 'Flexibility by adaptation' refers to the ability to change workflow definitions and to apply those changes to the workflow living environment according to dynamic evolution (Heinl et al. 1999). In contrast, 'flexibility by selection' refers to an open point allowing firms to add a special construction into the workflow definition (Heinl et al. 1999). It should be also noted that the difference between the workflow exception modelling approach and the adaptive workflow approach is that the former does not encompass with these two types of flexibility (Vieira 2005).

The significance of this concept has been acknowledged by many scholars during the last decade (Aalst & Hee 1996; Casati et al. 1996; Chiu, Li & Karlapalem 1998; Ellis, Keddara & Rozenberg 1995; Han & Sheth 1998; Reichert & Dadam 1997; Sheth 1997). It is claimed that to develop systems for supporting dynamic and adaptable workflow processes is challenge for future evolution (Kochut, Sheth & Miller 1999).

However, the main disadvantage of this approach is the lack of explicit knowledge to deal with exceptions (Shaohua et al. 2006). If exceptions become abstract or contain less detail, the people dealing with them may make a wrong decision, and this may negatively impact the whole system (Shaohua et al. 2006).

4) The Cross-organisational Exception Handling Approach

In general, the purpose of exception handling in workflow management is to integrate the consistency of the workflow under a variety of failure scenarios (Rusinkiewicz & Sheth 1995). Although there are several studies of the workflow management across organisational boundaries (CAISE 2000; Ludwig et al. 1999), there is still lack of coverage of cross-organisational exception handling (Luo et al. 2002).

According to Luo et al.(2002), cross-organisational exceptions occur because of heterogeneity, lack of coordination, and lack of understanding of the other party's business process. In the above-mentioned studies, there are three mechanisms to handle exceptions within the inter-organisational process including *(i) knowledge sharing, (ii) coordinated exception handling,* and *(iii) intelligent problem solving* (Luo 2001; Luo et al. 2002; Luo et al. 1998). These three mechanisms are outlined below.

i) Knowledge Sharing

In order to begin developing mechanisms to handle exceptions, all involved parties need to share their experiences, particularly those of exceptions, at the inter-organisational level (Kock 2005; Luo 2001).

ii) Coordinated Exception Handling

The multiple parties need to share information so that they must develop explicit principles of coordination to predict and avoid exceptions (Luo 2001).

iii) Intelligent Problem Solving

Intelligent problem solving is the way in which various parties work closely to find an appropriate way to handle exceptions (Luo 2001). By using the knowledge derived from all involved parties, intelligent problem solving shares some characteristics of a

knowledge-based approach in terms of what types of exceptions would occur in the workflow, how these exceptions could be detected and solved (Luo 2001).

For this research, the cross-organisational approach was used as the framework to suggest the recommendations regarding how exceptions should be handled in the relationship between the distributor and dealer.

2.5 Knowledge Contributions and Gaps in the Literature

This review provides the outline for building a conceptual framework. Based on relevant literature, collaboration is an important issue when multiple parties carry out their business together in the e-market place. Within a complex business environment, collaboration consists of human collaboration and e-collaboration. To obtain efficiency, there is a need to investigate how collaboration assists in establishing a new business process.

This review of theory is developed around three important factors for achieving collaboration in e-supply networks as proposed by Nøkkentved and Hedaa (2000): these factors are power, trust, and exception handling. The justification for employing these three factors was discussed in Section 2.4.1. In the literature, several academics claim that non-coercive power is the cornerstone of supply chain relationships since it enables multiple parties to work effectively via the concept of coordination. Coercive power, on the other hand, could generate uncertainty and increased tension in a complex situation. In addition, trust is recognised as an important factor in improving the level of collaboration among parties. Furthermore, various articles identify that exceptions work against the collaborative concept. Therefore, exception handling can be considered as a tool for enhancing the level of collaboration by using a variety of extra procedures.

However, most studies fail to notice the importance of collaboration within an electronic distribution (E-distribution) context by only focusing on e-supply networks as a whole. Specifically, it is not known how the three critical factors proposed by Nøkkentved and Hedaa (2000) are important for collaboration in the outbound side of distribution in e-supply networks. Additionally, studies of the integration of both

human collaboration and e-collaboration for achieving mutual benefit are rare in the literature, and even rarer within the e-distribution context. There has not been any previous study of collaboration which integrates the three critical factors proposed by Nøkkentved and Hedaa (2000) with the issues of human collaboration and e-collaboration. There is also limited material on how trust and exceptions can be managed using both human collaboration and e-collaboration. In this thesis, the main research questions are developed in accordance with these contributions and these omissions identified from literature review.

2.6 Summary

Collaboration is an important matter if multiple parties are to achieve a mutual benefit. Indeed, collaboration is not only judged as the way to increase the business performance, but is also the way to form inter-organisational linkages which improve the relationships within a business community. As the modern business environment is now dominated by advanced technologies, particularly the Internet, the combination of both human collaboration and e-collaboration should assist all involved parties to achieve that mutual benefit.

Briefly, the concept of non-coercive power, trust, and exception handling have been extracted from the literature and examined for their relevance to collaboration in e-supply networks. Non-coercive power consists of reward power, legitimate power, referent power, expert power, and information power. Moreover, within an e-supply network, trust between involved parties needs to be developed to reduce complexity, increase communication, and increase the willingness to cooperate. Exception handling is another essential issue because everything that departs from the collaborative process should be considered as an exception. The source of exceptions have been analysed according to five different perspectives that are 'random-event', 'operating error', 'design error', 'dynamic organisation', and 'political system'. The solutions require four different approaches: knowledge-based exception handling, workflow exception modelling and specification, exception handling and adaptive workflows, and cross-organisational exception handling.

The next chapter presents main research questions along with the methodology of how such research questions can be tackled successfully.

Chapter 3

The Conceptual Framework

3.1 Introduction

This chapter clarifies how the basic approach as proposed by Nøkkentved and Hedaa (2000) was used to construct the conceptual framework. The selected approach suggests that three main factors, power, trust, and exception handling are important for all the involved partners to achieve collaboration within an e-supply network. The distinction of human collaboration and e-collaboration was also integrated into their framework.

This chapter is divided into four main sections. Section 3.2 explains the importance of conceptual framework for conducting research. Section 3.3 identifies the original concept used to develop the conceptual framework. Section 3.4 clarifies how the conceptual framework of this thesis was developed; it also presents the main research questions to bridge the knowledge gaps. Section 3.5 shows the research propositions by discussing and identifying the logical link between three main factors along with additional variables derived from the literature. The summary table showing all logical links, from the aims to propositions, is also presented at the end of this chapter.

3.2 The Need for a Conceptual Framework

Before conducting research, it is important to make decisions about designing a conceptual framework (Kripanont 2007). This is a model or set of theories which can support a research study (Hussey & Hussey 1997). It shows logical relationships among several variables identified as significant issues in the research problem, and it assists the researcher to understand the dynamics of situation (Sekaran 2003). It is also constructed to produce testable propositions which examine how far the guiding

theory is valid (Sekaran 2003). The following section outlines how the conceptual framework was developed; the logical relationships also indicate the ways in which the research propositions were formed.

3.3 Assembling the Fundamental Concepts

The fundamental concepts of this study were constructed for the aims of the research. As mentioned in Section 1.11, the main purpose of this research is to increase knowledge and suggest possible improvements to non-coercive power, trust, and exception handling in the relationship between a single distributor and multiple dealers regarding the collaborative process comprising both human interaction and Internet communication.

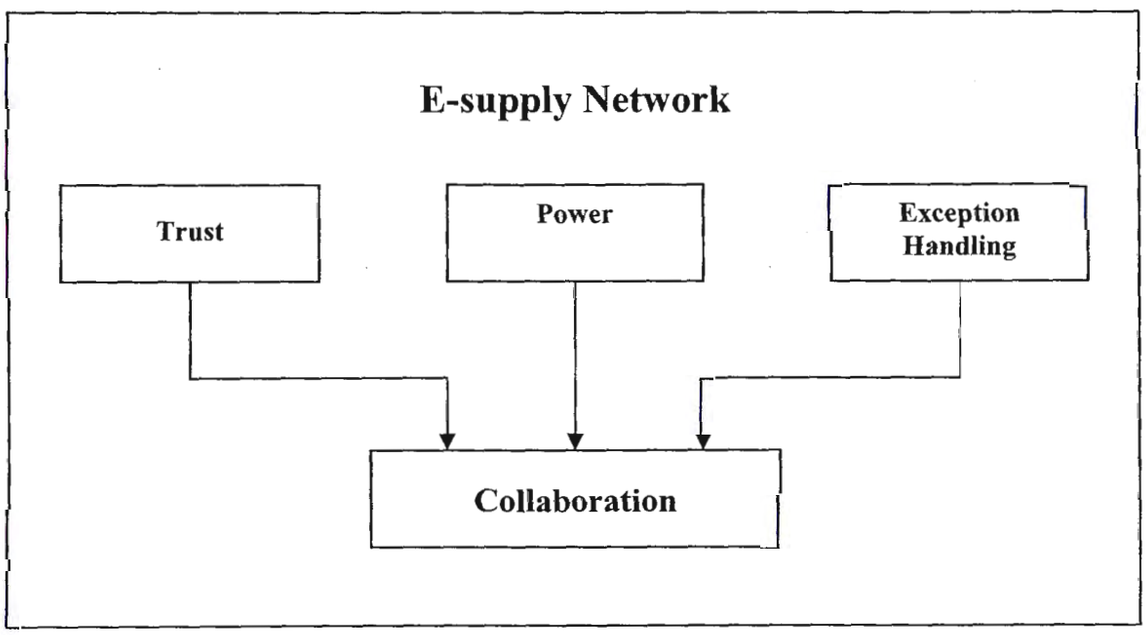
3.3.1 Specific Aims

1. To examine how non-coercive power, trust, and exception handling impact on the collaborative process between a distributor and dealers employing the Internet.
2. To identify how non-coercive power affects trust and exception handling.
3. To identify types of trust and types of exceptions in the collaborative processes between a distributor and dealers.
4. To find out how human collaboration can be used to promote trust and handle exceptions within a collaborative process between a distributor and dealers using the Internet.
5. To provide increased knowledge on how the Internet can enhance trust and handle exceptions when a distributor and dealers use the Internet to conduct their business.

3.3.2 The Fundamental Framework

The conceptual framework in this study was developed from the basic approach for achieving collaboration in an e-supply network as proposed by Nøkkentved and Hedaa (2000). The approach assumes that the three important factors of power, trust, and exceptions handling are critical if the involved parties are to achieve collaboration. Figure 3.1 clarifies the elements and relations of the approach.

Figure 3.1: The original approach for achieving collaboration in e-supply networks from Nøkkentved and Hedaa (2000)



3.4 Research Questions to Bridge the Knowledge Gaps

The review of literature demonstrates an increasing knowledge about the subject of collaboration within e-supply networks. The literature shows that collaboration within the Internet environment can be broken down into smaller components including human collaboration and e-collaboration. Within the e-supply network, the literature confirms three important factors as proposed by Nøkkentved and Hedaa (2000). It also highlights the need to readdress these three important factors in their e-distribution context.

During 2000-2003, the outbound side of distribution in the motorcycle industry in Thailand adopted the Internet to conduct its business. This has generated a complex business environment because of a dynamic interaction between information technologies and business structures. This complexity can partially explain the low rate of successful collaboration (Ross 2003).

To address the issue of collaboration within this industry also required an examination of many other potential variables regarding technical, institutional, and environmental aspects. Therefore, it was important to readdress this issue by using a broader set of '*what*' and '*how*' questions. This allowed the nature of the relevant variables to be established, and hence provided a better understanding of their complex inter-relationships.

3.4.1 The Direct Factors and the Research Questions

In line with the approach in Figure 3.1, the research questions were based on the direct factors of power, trust, and exception handling. On the issue of power, it should be noted that the research focused only on non-coercive power. The reasons for ignoring coercive power are identified in the scope of the study in Section 1.10. The following section demonstrates the alignment of each factor with its associated research questions.

Power (Non-Coercive)

- *Q1: How important is non-coercive power in the relationship between a distributor and dealers for achieving a collaborative relationship?*
- *Q2: How does non-coercive power impact on trust in the relationship between a distributor and dealers?*
- *Q3: How does non-coercive power impact on exception handling in the relationship between a distributor and dealers?*

Trust

- *Q4: How important is trust in the relationship between a distributor and dealers for achieving a collaborative relationship?*
- *Q5: What are the existing types of trust in the relationship between a distributor and dealers?*
- *Q6: What are the factors leading to the use of human collaboration to increase the level of trust in the relationship between a distributor and dealers?*
- *Q7: What are the factors leading to the use of electronic collaboration to increase the level of trust in the relationship between a distributor and dealers?*

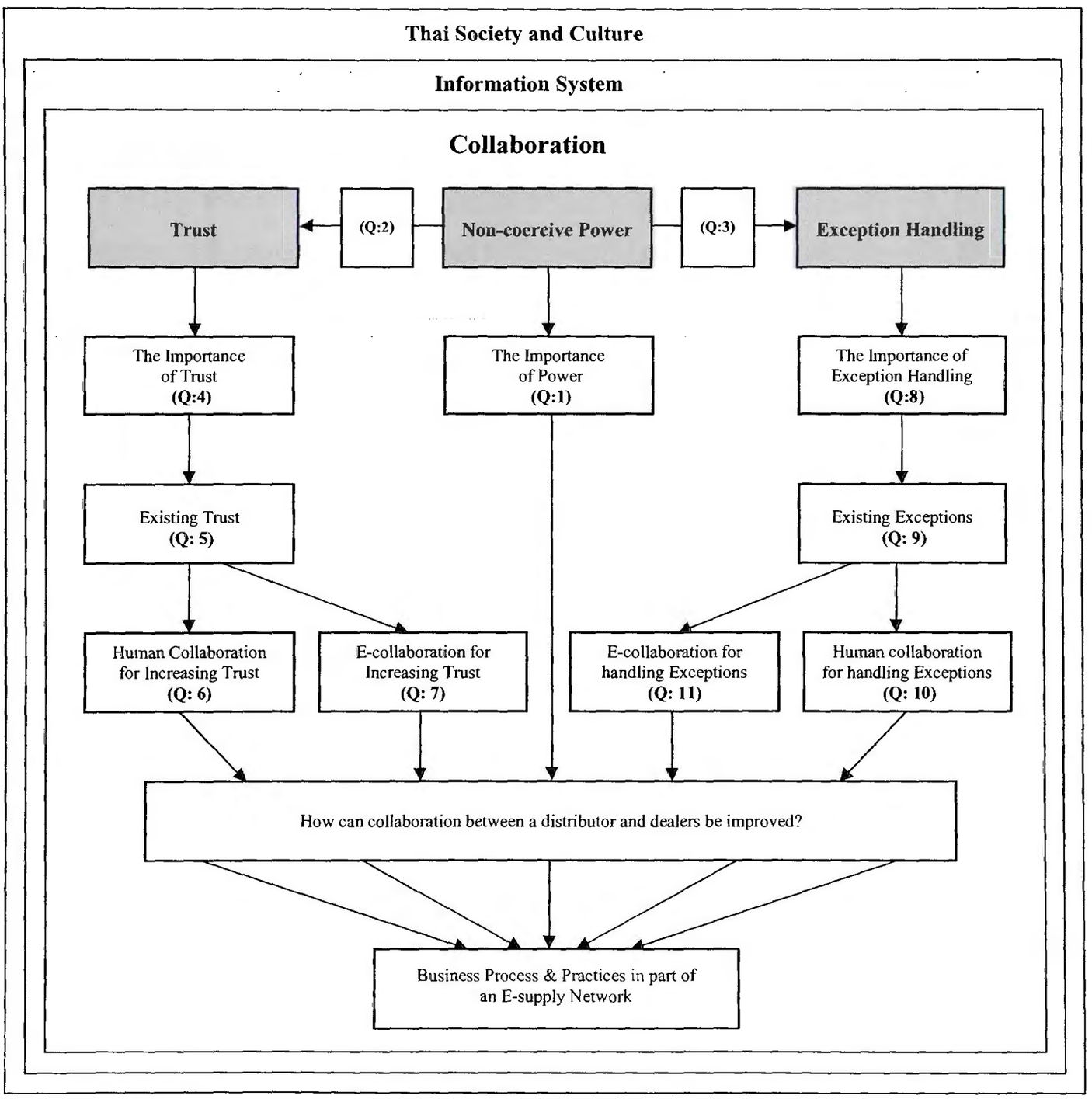
Exception handling

- *Q8: How important is effective exception handling in the relationship between a distributor and dealers for achieving a collaborative relationship?*
- *Q9: What are the existing exceptions in the relationship between a distributor and dealers?*
- *Q10: What are the factors leading to the use of human collaboration to handle exceptions between a distributor and dealers?*
- *Q11: What are the factors leading to the use of electronic collaboration to handle exceptions between a distributor and dealers?*

3.5 The Conceptual Framework and Testable Propositions

The conceptual framework was constructed from those direct factors and their research questions. It is also ground in the basic research problem which identifies that the business environmental context and culture will influence organisational behaviour (see Section 1.3 and 1.9). Figure 3.2 shows the conceptual framework of this research. It also clarifies the connections between each factor and its questions.

Figure 3.2: The conceptual framework of this research



3.6.1 Propositions to Bridge the Conceptual Framework

The conceptual framework was used to develop the research propositions. These propositions were directly related to the questions, but they specified operationally defined variables in the testable form. In fact, they proposed assertions relevant to the scope of this study and they suggested how data should be collected. Additional information obtained from the literature review also played a leading role in providing background for diagnosing the dimension of problems and formulating the research propositions. The following section takes each main factor through its development propositions.

Moderators of Non-coercive Power

As mentioned in Section 2.4.2, the review of literature clarifies that the classical social power model as proposed by French and Reven (1959), Hunt and Nevin (1974), and Reven (1965) is the major source of non-coercive power. According to the literature, non-coercive power consist of *(1) reward power, (2) legitimate power, (3) referent power, (4) expert power,* and *(5) information power* (Hunt & Nevin 1974). The literature further specifies reward as both a *(i) tangible,* and *(ii) intangible* entity (Aguinis et al. 1994), whilst legitimate power can be divided into four categories including *(i) legitimate reciprocity, (ii) legitimate equity, (iii) legitimate dependence,* and *(iv) legitimate position* (Raven 1992; 1993). With these considerations in mind, the propositions on non-coercive power were formulated as listed below.

P1: A collaborative relationship between the distributor and dealers can be achieved by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

P2: Trust in the relationship between the distributor and dealers can be enhanced by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

P3: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

Moderators of Trust

The review of literature shows that trust is an important issue for trading partners to achieve collaboration. Although numerous scholars discuss the relation of trust towards collaboration, most arguments can be categorised as *(1) complexity reduction, (2) increasing communication,* and *(3) enhancing the willingness to cooperate* (see Section 2.4.2). On the importance of trust between all involved parties, therefore, the following proposition was formulated.

P4: Trust in the relationship between the distributor and dealers can reduce the complexity, increase the level of communication, and increase the willingness to cooperate.

Furthermore, the review of literature indicates that different types of trust can be categorised as *(1) personality-based trust, (2) affect-based trust, (3) cognition-based trust, (4) calculative-based trust, (5) familiarity-based trust, (6) knowledge-based trust, (7) deterrence-based trust, (8) institutional-based trust,* and *(9) integrated trust* (Bowlby 1982; Child 1998; Coutu 1998; Lewicki & Bunker 1995, 1996; Lewis & Weigert 1985; Schaffer 2004) (see Table 2.3). Under this consideration, the following proposition was proposed regarding the existing types of trust between all involved parties.

P5: Existing types of trust in the relationship between the distributor and dealers are based on personality-based trust, affect-based trust, cognition-based trust, calculative-based trust, familiarity-based trust, knowledge-based trust, deterrence-based trust, institutional-based trust, and integrated trust.

On the issue of human collaboration, the literature points out that it can be achieved when all involved parties employ *(1) a formal meeting* (Holton 2001; Pauleen & Yoong 2001), *(2) an informal meeting*, (Bartol et al. 2001), *(3) a facsimile* (Rao 1999) *(4) a telephone* (Pauleen & Yoong 2001), *(5) an SMS* (Herman 2007), and *(6) the postal mail* (see Section 2.3.1). This suggests that the level of trust is related to the level of use of such communications. Therefore, the following proposition was formulated.

P6: Trust in the relationship between the distributor and dealers can be enhanced by means of human collaboration, which relates to the use of a formal meeting, an informal meeting, a facsimile, a telephone, an SMS, and the postal mail.

In regard to e-collaboration, the literature identifies several practices which can be employed to improve the level of collaboration between all involved parties (see Section 2.3.1). These practices can be grouped into three different frames of Internet use consisting of *(1) the frame of distribution, (2) the frame of public discourse,* and *(3) the frame of technically mediated interpersonal communication* (Hoflich 1998). For this research, the frames of Internet were used as the 'point of reference' regarding the types of Internet use. By considering all variables deriving from the literature, the following proposition was formulated regarding the issue of e-collaboration and trust.

P7: Trust in the relationship between the distributor and dealers can be enhanced by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'.

Moderators of Exception Handling

The review of literature asserts that exceptions work against the collaborative concept which tries to achieve efficiency and effectiveness (Nøkkentved & Hedaa 2000). It is concluded that exception handling is an important factor if all involved parties are to achieve collaboration (see Section 2.4.4). Therefore, in order to investigate this subject within this industry, the following proposition was proposed.

P8: Effective exception handling between the distributor and dealers can assist them to achieve a collaborative relationship.

As discussed in Section 2.43, the literature reveals that there are five perspectives for sources of exceptions which are *(1) the random-event perspective* (Gasser 1986; Strong & Miller 1995; Suchman 1983), *(2) the operation errors perspective* (Kammer et al. 2000; Strong & Miller 1995), *(3) the design error perspective* (Kammer et al. 2000; Strong & Miller 1995), *(4) the dynamic organisation perspective* (Kammer et al. 2000; Strong & Miller 1995), and *(5) the political system perspective* (Kling & Iacono 1984; Strong & Miller 1995). In order to investigate the existing exception in this industry, hence, the following hypothesis was then proposed accordingly.

P9: Existing types of exceptions in the relationship between the distributor and dealers can be analysed by the perspectives taken on sources of exception, which are random-event, operation errors, design error, dynamic organisation, and political system perspectives.

As noted above, the literature identifies six practices for human collaboration : *(1) a formal meeting, (2) an informal meeting, (3) a facsimile (4) a telephone, (5) an SMS,* and *(6) the postal mail.* By applying this concept to the issue of exception handling for the business context, the following proposition was then proposed.

P10: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of human collaboration, which relates to the use of a formal meeting, an informal meeting, a facsimile, a telephone, an SMS, and the postal mail.

As already mentioned, three different frames of Internet use consist of *(1) the frame of distribution, (2) the frame of public discourse,* and *(3) frame of technically mediated interpersonal communication.* Note again that these three frames were used as the 'point of reference' regarding the types of Internet use. By relating these three contexts to the process of exception handling within this industry, the following proposition was formulated.

P11: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'.

In short, the proposed propositions are more detailed development of the initial research questions given more information from the literature. A summary of the relations linking the aims to the direct factors, the research questions, the measurement items, and propositions are presented in Table 3.1. In order to address these propositions, the data needs be collected in accordance with the eleven propositions.

Table 3.1: The logical linkage from aims to propositions

Aims of Research	Direct Factors	Research Questions	Moderators	Propositions
1	Non-coercive power	Q:1	Reward, Legitimate, Expert, Referent, Information	P:1
	Trust	Q:4	Complexity reduction, Increased communication, Increasing the willingness to cooperate	P:4
	Exception handling	Q:8	Increase collaboration	P:8
2	Non-coercive power	Q:2	Reward, Legitimate, Expert, Referent, Information	P:2
	Non-coercive power	Q:3	Reward, Legitimate, Expert, Referent, Information	P:3
3	Trust	Q:5	Personality-based, Affect-based, Cognition-based, Calculative-based, Familiarity-based , Knowledge-based, Deterrence-based, Institutional-based, Integrated	P:5
	Exception handling	Q:9	Random-event , Operation errors, Design error , Dynamic organisation, Political system	P:9
4	Trust	Q:6	Formal meeting , Informal meeting, Coordinator , Telephone, Facsimile, SMS, Postal mail	P:6
	Exception handling	Q:10	Frame of distribution, Frame of public discourse, Frame of technically mediated interpersonal communication	P:10
5	Trust	Q:7	Frame of distribution, Frame of public discourse, Frame of technically mediated interpersonal communication	P:7
	Exception handling	Q:11	Formal meeting , Informal meeting, coordinator , Telephone, Facsimile, SMS, Postal mail	P:11

3.7 Summary

This chapter has proposed a conceptual framework for this research based on theoretical knowledge and business environmental factors. The conceptual framework was developed from an approach proposed by Nøkkentved and Hedaa (2000). This model proposes that factors including power, trust, and exception handling are important for all involved parties to achieve collaboration in an e-supply network. The conceptual framework was developed in line with the research aims; it was based on an understanding of (a) how non-coercive power, trust, and exceptions handling impact on the collaborative efforts between a distributor and dealers, (b) how non-coercive power effects on trust and exception handling, (c) the types of trust, and exceptions that exist in the relationships between parties, (d) how human collaboration can be used to promote trust and handle exceptions, and (e) how e-collaboration can enhance the level of trust and handle exceptions. The propositions were developed by combining the information derived from the review of literature. Eleven propositions were proposed in accordance with the basic model as proposed by Nøkkentved and Hedaa (2000).

The ways in which the data were collected in this research are outlined in the next chapter on methodology.

Chapter 4

Research Methodology

4.1 Introduction

This chapter identifies the research methodologies for investigating the issue of collaboration between a distributor and dealers within the motorcycle industry in Thailand. The methodological foundation of this research is based on both qualitative and quantitative approaches by merging the findings from the both into a single set of conclusions.

This chapter is divided into four main sections. Section 4.2 identifies that this research is an *"interpretive study"*. Section 4.3 reviews the three major approaches related to this project: qualitative, quantitative, and triangulation approaches. By reviewing these relevant perspectives, this section presents the method of choice used in this study. The justifications of selecting each instrument are also discussed by comparing those against the alternative methods. Section 4.4 covers courses of action employed throughout for conducting this research. The development of instruments, population searched, sample taken, data collection, data analysis, and information management are also discussed in this section. Section 4.5 confirms that the relevant ethical issues were addressed.

4.2 Research Paradigm

The current research is primarily an *"interpretive study"*. The aim was to understand how the distributor and dealers see their collaborative relationships. This requires a focus on the practices and principles which the actors use to achieve their goals. The emphasis therefore was on the perceived realities in the collaborative relationships, rather than an attempt to explain causally by means of hypothesis testing. The underlining assumption is that the conduct of business life is to a larger extent based on the interplay of meaning. This suggests that the achievement of collaboration is

more accessible from interpretive approaches than from causal ones. In other words, the research employed a personal interpretation to explain the different experiences of all involved parties in the collaborative relationship based upon their understanding of reality (Gill & Johnson 1997).

4.3 Research Design: Approaches and Their Instruments

The research methodology needs to follow research questions in a way that provides the best chance to achieve useful answers (Johnson, R.B. & Onwuegbuzie 2004). As discussed in the previous chapter, the main research questions were used to develop propositions; the next step is to select and justify the appropriate research method. This means beginning with the research approaches; these include qualitative, quantitative, and the triangulation approaches (Hussey & Hussey 1997). They are discussed in the following section.

4.3.1 Qualitative Approaches

The qualitative approach can be described as ethnographic, naturalistic, anthropological, field, or participant observer research (Saunders, Lewis & Thornhill 2003). This approach focuses on the importance of variables in their ordinary setting and on the interactions between them (Gill & Johnson 1997). It is also used to describe complex phenomenon by providing an understanding of people's own experience of the problems (Johnson, R.B. & Onwuegbuzie 2004). A phenomenological researcher argues that the social environment is too complex to construct a map or model; by trying to make a map, the researcher is oversimplifying the phenomena studied, and hence loses the subtleties in that phenomenon (Hussey & Hussey 1997). Zikmund (1991) asserts that a qualitative study is necessary for a less studied topic since the more detailed data is obtained through the instruments that offer direct quotations. Although there are many instruments for obtaining qualitative data, the major ones which could be employed for this project consist of participant observation, and semi-structured interviews.

Participant Observation

Participant observation enables the researcher to become familiar with a particular group in their natural environment (Gill & Johnson 1997). Their practices usually involve informal interviews, direct observation, participation in the everyday life of people, collective discussions, analyses of personal documents, self-analysis, and life-histories (DeWalt, DeWalt & Wayland 1998). Junker (cited in Marie 2006) lists the roles of participant observer in the following options.

- Complete Participant
- Participant as Observer
- Observer as Participant
- Complete Observer

Many studies from different disciplines confirm that the '*observer as participant*' is a helpful technique to gain background information in the phenomena studied (Fogel 2007; Patton 1990). With this practice, the researchers stay away from the ideal of participation; they usually engage with a one-visit interview, and ask the interviewee for relatively more formal observations (Marie 2006).

Semi-structured Interviews

An interview is a useful technique to gather preliminary information during an exploratory stage (Sekaran 2003). It is a social situation involving a relationship between the interviewer and interviewee (Huberman & Miles 2002); thus, it is a non-standardised discussion enabling the researchers to cover a list of themes and questions (Patton 1990; Saunders, Lewis & Thornhill 2003). The principle of an interview is to allow a researcher to comprehend the participant's perspective based on the assumption that the perspective of the participant is meaningful, knowable and able to be explored (Patton 1990). Additionally, some extra questions can be used to further explore the research questions and objectives in some situations (Saunders, Lewis & Thornhill 2003).

Patton (1990) lists some benefits of the semi-structured interview:

- the list of themes and questions can be prepared in advance so that the same basic outlines of inquiry are pursued with each interview;
- the list of themes and questions enable a researcher to establish a conversational style which finally can lead such conversation focus on a particular predetermined subject;
- the list of themes and questions enables a researcher to plan for the limited time available in each interview session;
- the list of themes and questions allows a researcher to interview different people more systematically; and
- the list of themes provides a structure of dialogue so that a researcher can develop more enquiries to pursue any interesting issues in greater depth.

Samples for Interviews

There were two practices that could benefit this study: a judgmental sampling, and a maximum variation sampling. A judgmental sample is defined as the best sample which has some experience of the phenomena being studied and can provide the required information (Collins & Hussey 2003; Sekaran 2003). In contrast, maximum variation sampling refers to the samples required for capturing and describing the central issue by focusing on a maximum variation of samples (Collins & Hussey 2003; Sekaran 2003). Note that a judgmental sampling and a maximum variation sampling can also be combined for selecting the best samples based on variation (Patton 1990).

Interviews and Data Analysis

Content analysis is an appropriate way to analyse the data from the recorded human communications in an interview (Bordens & Abbott 1999). It is defined as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (Holsti 1969, p. 14). This technique objectively determines the presence of certain words, concepts, themes, phrases, characters, or sentences; therefore, it can discover the existence of misinformation; identify the meanings, focal points or communication trends of an individual, group or institution; describe attitudinal and behavioural responses to communications; and re-create the

psychological or emotional states of persons or groups (Berelson 1952 cited in Krippendorff 2004).

Appropriate content analysis has three defining characteristics (Holsti 1969). First, each step of the analysis should be directed by a set of rules which identifies how information will be obtained and categorised. Second, the categorised information should be systematically based on the developed rule. Third, it should have enough generality so that the finding can be fitted within a theoretical context.

In particular, the set of rules could include the following;

- describe characteristics of communication by asking *what*, *how*, and *to whom* something is said,
- infer the antecedents of communication by asking *why* something is said, and
- infer the effects of communication by asking *with what effects* something is said (Holsti cited in Krippendorff 2004).

Qualitative Research and the Selecting of Instruments

A participant observation technique and semi-structured interviews were considered to be appropriate ways to conduct the research. Although observation is claimed as unsystematic and difficult to replicate, this research argues that the '*observer as participant*' technique can provide background information that leads to more complex issues. Additionally, it should be noted that the focus group technique was compared with one-on-one interviewing. A focus group may be more suitable for exploratory study and may assist the identification of general themes. However, it was rejected because this research was not completely exploratory; in fact, the literature already provided some clues on several variables and propositions. The one-on-one interview also implies a principle of confidentiality that encourages the interviewee to talk openly about sensitive issues; this is quite different from the focus group technique. This issue was critical in this study since this research was interested in the relationships between the parties. Furthermore, the diary research method was considered, but rejected since the participants may be unwilling to comply with the requirement of a diary regime. Likewise, the critical incident method was ignored as this technique encourages a participant to inform about organisational incidents

instead of answering direct questions, and hence some important issues may be omitted.

4.3.2 Quantitative Approaches

With this approach, a researcher takes "the role of an objective analyst, coolly making detached interpretations about those data that have been collected in an apparently value-free manner" (Saunders, Lewis & Thornhill 2003, p. 85). Those favouring this approach believe that the methodology can be replicated, the data collected is quantifiable, and it can be analysed statistically (Sekaran 2003). As a result, a quantitative approach uses statistical techniques to test the formulated hypothesis on a population or subpopulations (Johnson, R.B. & Onwuegbuzie 2004). Results may be displayed in forms of tables, charts, histograms and graphs (Collins & Hussey 2003). Although there are many instruments for obtaining quantitative data such as activity sampling and secondary sources of data, the major instrument in business research is the questionnaire survey.

The Questionnaire Survey

A survey is the most popular method for obtaining quantitative data. The advantages for employing a questionnaire survey include the following.

- A questionnaire is a useful technique for collecting data when a researcher recognises what is required and how to measure the relevant variables (Sekaran 2003).
- The result from a questionnaire presents quantified information regarding the specific population (Ticehurst & Veal 2000).
- A survey questionnaire is an inexpensive method and is less time consuming for collecting data from a large number of respondents (Collins & Hussey 2003).
- A survey questionnaire is relatively free from several types of errors because of its standardisation (Sekaran 2003).

Samples for Surveys

It is suggested that the sample size must be large enough to provide the necessary confidence in the data (Sekaran 2003). By considering the rule of thumb for establishing sample size in general, Roscoe (1975) proposes that sample size should be between 30 and 500.

In reality, however, there is a likelihood that some respondents may refuse to answer the entire questionnaire or be involved in the study. Such problems can be minimised by using the entire population for collecting data. Many scholars also suggest that the entire population should be used to collect data if that is a possibility (Collins & Hussey 2003; Sekaran 2003).

Quantitative Research and the Selecting of Instruments

A survey was the most relevant technique to gather quantitative data for this research. The research employed a 'descriptive survey' rather than an 'analytic survey'. It could be argued that the method selected may not be appropriate to the study. However, the current research argues that an analytic survey relies on the statistical controls of multivariate analysis to manipulate the variables, and this seems to obscure the causal conclusions (Gill & Johnson 1997). For example, "the criterion for statistically significant remains highly controversial" (Lösch 2006, p. 137). In fact, a probability of $p< 0.05$ (why not $p< 0.06$?) does not mean that there is no effect (Field 2005). Therefore, the analytic survey presents a strong barrier to the generation of deeper information. For the same reason, factor analysis was considered, but rejected because it is not consistent with the interpretive approach adopted.

In contrast to the analytic survey, the descriptive survey secures a representative of the variables within the phenomena studied. If this method is combined with qualitative practice, then rich information can be generated. For a quantitative study grounded in qualitative approach, Glaser (1994) suggests that statistical tests should be used mainly as a means of revealing interesting differences between variables. Some recent studies adopted this principle (e.g., Hackney, Jones & Lösch 2007; Lösch 2006), this study followed the same suggestion by focusing on the consistency and size of effect.

Note also that the activity sampling technique was considered, but rejected since the majority of research propositions do not rely on the percentage of observations in a particular activity. Likewise, secondary sources of data were also rejected due to lack of available information.

4.2.3 Triangulation Approaches

The use of different research methods in the same investigation refers to triangulation approaches; they are also known as multi-method or mixed methods (Collins & Hussey 2003; Johnson, R.B. & Onwuegbuzie 2004). Researchers from different disciplines are increasingly claiming that multiple methods can assist researchers to deal with complexity and to achieve more comprehensive explanations (Creswell 2003; Gil-Garcia & Pardo 2006; Johnson, R.B. & Christensen 2004; Tashakkori & Teddlie 2003). The weakness of employing only a single approach is that each one "describes their data, constructs explanatory arguments from their data, and speculates about why the outcomes they observed happened as they did" (Sechrest & Sidana 1995, p. 78). In contrast, multi-method approaches enable researchers to combine and design components that give the best chance to investigate their research questions; hence, they aim to fit together the insights provided by qualitative and quantitative approaches into a workable solution (Johnson, R.B. & Onwuegbuzie 2004). Note that triangulation approaches assist researchers to understand fully the phenomenon, and therefore generate an overall better and more complete explanation (Mingers 2001). Some scholars also assert that this practice allows researchers to validate interpretations of what happens in a particular phenomenon (Tashakkori & Teddlie 2003).

Although there are many ways to combine qualitative and quantitative approaches, the option of merging the findings from the two approaches into one set of conclusions was selected for this research. The objective here is to draw on the strengths and minimise the weaknesses from both approaches into a single study by covering a large set of focal issues (Johnson, R.B. & Onwuegbuzie 2004). It is claimed that, if the results from different approaches are corroborated, then more confidence can be held in a singular conclusion; if the results clash with each other, researchers will also have better knowledge and can modify conclusions accordingly (Johnson, R.B. & Onwuegbuzie 2004). The bottom line is that mixed method approaches "offer great

promise for practicing researchers who would like to see methodologists describe and develop techniques that are closer to what researchers actually use in practice" (Johnson, R.B. & Onwuegbuzie 2004, p. 15).

Triangulation as the Method of Choice

This research employed the triangulation approach by utilising the qualitative work to determine the design of the questionnaire survey; the results from both findings were ultimately merged into one set of conclusions. The justification for this choice is described as follows.

It was necessary to begin qualitatively because of the relatively unstructured complexities in the problem. The project addressed reasons behind attitudes and behaviour for which there was limited knowledge and understanding. Further, the research questions themselves were complex and involved with many unidentified variables. It would have been premature to use structured questionnaires at this stage. However, once some of the issues had come to light, then there was a justification for quantitative assessment, especially given the possibility of multiple responses from diverse perspectives during the interviews.

Overall, qualitative research techniques remained the primary instrument. Further, the variation in information obtained during the interviews was minimised by using descriptive statistics to provide a typical and simplified snapshot. The qualitative outcome provided a guideline to construct the questionnaire and its descriptive statistics. The results from both approaches were then integrated into a single conclusion; the final outcome was hopefully more likely to uncover "the reality working behind the reality" (Saunders, Lewis & Thornhill 2003, p. 86).

The research included induction (discovering the phenomenon), deduction (testing formulated propositions), and abduction (uncovering and relying on the best explanations).

4.4 The Approach Taken

As discussed in the previous section, this research was conducted through qualitative and quantitative approaches. The following section clarifies how the research was conducted.

4.4.1 Problem Recognition

This was to identify the broad problem in which there was a requirement to investigate empirically. At the outset, the problem was focused on collaboration between a distributor and dealers in the motorcycle industry in Thailand when they employed the Internet to conduct business (see Chapter 1). At this stage, the specific variables were not yet identified; the initial idea was still uncertain and not well organised.

4.4.2 Preliminary Information Gathering

Preliminary information was gathered through a review of literature. This process identified the main research questions and the direct factors required for the involved parties to achieve collaboration in e-supply networks (see Chapter 2). The information obtained from the literature was also used in the next stage.

4.4.3 Assembling the Conceptual Framework and Propositions

After such direct factors were identified, the initial conceptual framework was constructed by combining the variables in a logical manner. As a result, the significant variables provided a framework consisting of a set of concepts and courses of action for systematic research. The research propositions were then developed from additional variables that could influence the direct factors. The propositions were also used as a set of parameters by linking the research questions to the process of data collection (see Chapter 3). The propositions were also used to justify the choice of methodology.

4.4.4. Preparing for the First Study

Since the methodology was identified, preparing for qualitative data collection was then carried out. The first study included observation (*observer as participant*), and semi-structured interviews. There were two procedures during this stage: preparing the interview script, and identifying the participants.

The Interview Script

The propositions were employed to design the interview questions (see Appendix 1.1). The interview script was separated into two main sections consisting of background information about the participants and the questions on the variables to be investigated.

The purpose of first part was not only to obtain factual information about the participants, but also for warming-up the discussion. The second part consisted of questions connected to the relevant variables including non-coercive power, trust, and exception handling. These variables are crucial factors for achieving collaboration in an e-supply network. The semi-structured interview was conducted for gathering the following information:

- the importance of non-coercive power on collaboration;
- the impact of non-coercive power on trust;
- the impact of non-coercive power on exception handling;
- the importance of trust on collaboration;
- the existing types of trust between the parties;
- the use of human collaboration to increase trust;
- the use of electronic collaboration to increase trust;
- the importance of an effective exception handling for collaboration;
- the existing exceptions between the parties;
- the use of human collaboration to handle exceptions; and
- the use of electronic collaboration to handle exceptions.

To ensure that interview questions were clear, precise and accurate, the initial scripts were pre-tested and revised by incorporating feedback obtained from colleagues and potential respondents.

Identifying Participants for the First Study

As mention in the scope of the study (see Section 1.10), the participants in this study were a distributor and dealers in Honda motorcycle network in Thailand. Two schemes were engaged to select participants for qualitative study. The first involved selecting the participant from the distributor while the second method related to choosing six dealers. The following section clarifies the method by which these participants were selected.

Selecting the Distributor Participants

A judgmental sampling technique was used to identify the distributor participants. The rationale was to recognise the best samples of people who have experience of collaboration between a distributor and dealers, and who also have the ability to provide the required information. The distributor participants were finally selected on the following assumptions.

- The number of participants is not limited to one person, because the variables being studied are multifaceted and may involve several members in the organisation. Thus, if there are many interviewees, the answers from them will be integrated as a single unit of analysis.
- Participants should be persons who hold the senior position in the organisation and who understand the relationship between the distributor and dealers.
- Participants should be staff members who have worked closely with dealers for more than five years.

The distributor was then approached and agreed to be a participant in this study.

Selecting the Dealer Participants

According to Yin (2002), six to ten cases, as conducted during an exploratory study, should provide compelling support to address the proposition. A judgmental sample with a maximum variation sampling technique was employed to identify participants from dealers. During this process, the criteria for selecting dealers to be potential participants were identified as follows.

- Differences of geographical locations are employed to increase the maximum variation. As there are five geographical locations in Thailand, all participants in this study must include at least one party from each geographical location.
- All participants from each geographical location must be identified by recommendations from a distributor in terms of the best samples which can provide essential information.
- As the issue being studied is complex and may engage numerous members in the organisation, the number of participants from each dealer is not limited to one person. If there are many interviewees from one organisation, the answers from them will be treated as a single unit for analysis so that each dealer is given the same weight in the final result.

The distributor initially recommended ten dealers from each five geographical locations in Thailand (50 dealers in total). The samples were then randomised with the condition that there must be at least one participant from each geographical location.

It should be noted that the recommendations from the distributor are very important for the interviews. This was because the majority of dealers in this business community tend to belong to older generations; some of them also have lower education levels. Without some recommendations from the distributor, therefore, conducting the interview would be very difficult. In other words, the recommendations from the distributor were based on the samples which could provide the required information.

Following these considerations, six dealers from five different geographical locations were approached and they agreed to be part of the study.

4.4.5 Conducting the First Study

The qualitative study was achieved by using the '*observer as participant*' technique and semi-structured interviews. Initially, this research intended to use these two techniques with all participants. However, the '*observer as participant*' technique was employed only when first visiting the distributor and dealer. It must be also noted that the observations and semi-structured interview were on different sessions although

they were conducted on the same day. The following section outlines the two processes.

Observer as Participant

The participant observation technique was conducted at the workplaces of distributor and one dealer. As mentioned earlier, this process always takes place along with an interview. In this research, it was accompanied by informal interviews, as the purpose was only to derive some background information, not to gain data to address the propositions. Specifically, it was conducted with different members of the organisations by asking them to demonstrate how they used the Web-based application to perform collaborative tasks with partners. During this process, those conversations also provided material for the research propositions. Some special words or phrases used only within this industry were also learned; this provided an advantage when conducting the semi-structured interviews.

The Semi-structured Interviews

Semi-structured interviews were conducted with the distributor and six dealers to seek information to address the research propositions on their collaborative processes. Interview scripts were sent to each interviewee before the interview sessions. This practice provided a general idea to all potential participants on how the interview would be conducted. Prior to the interview sessions, the interviewees were advised that there was no obligation to participate in the investigation; thus, they were free to stop at any time during the interview if they felt the questions were too sensitive. As open-ended questions were used, the discussions during this study varied slightly from interview to interview depending on the flow of conversation (see Chapter 5). After all the interviews had been completed, content analysis was used to analyse the data.

4.4.6 Preparing for the Second Study

The information derived from the review of literature and the semi-structured interviews was used to construct a questionnaire. This draft consisted of three types of alternative choice items: a multiple choice format, a true or false format, and a 5-point Likert scale. Whilst the multiple choice questions were applied to gain background information of respondents, the true or false questions were intended to describe the relationship between variables. The true or false questions measured issues involving non-coercive power. This is an appropriate way to avoid moderate-frequency of outcomes. The 5-point Likert scales, ranging from 'strongly agree' to 'strongly disagree', were integrated with a range of statements. The reason for adopting the 5-point Likert scale was it is one of the dominant methods for measuring in the business context; it was also expected to make the respondents feel comfortable and less confused compared with the 7-point Likert scale. The questionnaire was also pre-tested with colleagues and potential respondents and redrafted where necessary.

Because this survey was conducted in Thailand and all respondents used the Thai language, the questionnaire was translated from English into Thai by utilising the double translation approach as suggested by McGorry (2000). In applying this double translation method, the following procedures took place.

1. The version in English was translated by a first translator into the Thai language.
2. A second independent translator took the results from the previous step and independently translated the questionnaire back to English.
3. The researcher compared both versions of questionnaire in English and checked with the translators for inconsistencies, mistranslations, meanings, cultural gaps and/or lost words or phrases. The questionnaire was then revised to remove the differences that were found during this process.

After the questionnaire was pre-tested, it comprised of twelve pages divided into twelve main sections (see Appendix 1.2). Although there was a large number of items on the questionnaire, each question was considered to be important to address the research questions. The main reason for using large number of items was the range

and varieties of information obtained from the interviews. The function of each section in the final questionnaire is summarised in Table 4.1.

Table 4.1: The organisation of the questionnaire used in this study

Sections	Research Questions	Propositions	Questionnaire Format	Purpose & Measurement	Number of Items
1	n/a	n/a	Multiple choice	Background information	4
2	Q:1	P:1	True or False	The importance of non-coercive power	9
3	Q:2	P:2	True or False	The impact of non-coercive power on trust	9
4	Q:3	P:3	True or False	The impact of non-coercive power on exception handling	9
5	Q:4	P:4	Likert scale	The importance of trust	3
6	Q:5	P:5	Likert scale	Existing types of trust between parties.	9
7	Q:6	P:6	Likert scale	The use of human collaboration to increase the level of trust	17
8	Q:7	P:7	Likert scale	The use of e-collaboration to increase the level of trust	11
9	Q:8	P:8	Likert scale	The importance of exception handling	1
10	Q:9	P:9	Likert scale	Existing exceptions between parties.	13
11	Q:10	P:10	Likert scale	The use of human collaboration to handle exceptions	18
12	Q:11	P:11	Likert scale	The use of e-collaboration to handle exceptions	12

n/a = 'not applicable'

4.4.7 Conducting the Second Study

A mail survey was employed for gathering data for this stage. The respondents for this study were the dealers in the Honda motorcycle network in Thailand. The purpose of this study was to minimise the variation of information derived from the dealers' interviews. At this stage, a package consisting of the questionnaire with a purpose statement, an instruction sheet and a pre-paid envelope was sent to all respondents.

Since it was possible to use the total population as respondents, 490 sets of questionnaire were launched out. The reason for using the whole population was to minimise the non-response problem. A reminder letter was also sent to those who had not responded by the deadline date. In this case, the reminder letter re-emphasised the importance of the research as well as the importance of their response (see Appendix 2.2). From the 490 questionnaires, the total of 180 was returned. The total response rate was approximately 37 percent. This meets all requirements of sample size (see Section 4.3.2).

This research used descriptive statistics to describe the characteristics and to provide a typical and simplified snapshot from the samples (see Chapter 6).

4.4.8 Merging the Findings

The final data analysis was achieved by integrating the findings from both qualitative and quantitative studies (see Chapter 7). Knowledge from the literature also played a role in clarifying the meanings. The result provided empirical information offering a better understanding of the importance of non-coercive power, trust, and exception handling for the collaborative process when supply chain partners use the Internet to conduct business. Existing types of trust and exceptions in the relationship between them were also identified. The factors determining the use of human collaboration and e-collaboration to increase the level of trust and handle exceptions in the relationships between parties were established. The final outcome was directed to uncover the reality behind the phenomena studied (Saunders, Lewis & Thornhill 2003).

4.5 Research and Ethics

This research was approved by the Victoria University Human Research Ethics Committee. It used the normal actions to maintain confidentiality for participants and respondents. During the interviews, all participants were advised that information obtained during the interviews would be kept confidential. Each interviewee was also informed that their personal information as well as their organisation's name would not be disclosed to the public; a proxy name would be used for identifying each organisation in the published thesis. For the questionnaire survey, a covering letter described the purpose of the research. It also included the researcher's details, the supervisor details, and the university's details for answering any enquiries regarding the investigation. In addition, all questionnaire respondents were informed that all information they provided would be kept completely confidential. All respondents were also advised that their name and organisation's name were not required on the questionnaire, and the results would be published in a summarised form only.

4.6 Summary

This chapter covers the choice of approach and method used in the research. It starts with the importance of the research proposition to design research methodology. Relevant perspectives that would benefit this project are discussed; they are based on three main research approaches: qualitative, quantitative, and triangulation approaches. The multiple approaches were considered valuable for the phenomena studied by arguing for the need to combine qualitative and quantitative approaches. The methods chosen are justified by drawing on the strength and minimise the weaknesses from both approaches in a single study. The instruments chosen are also discussed in relation to their alternatives. This chapter explains that the research began by using the '*observer as participant*' technique to gain some background information. Then, the semi-structured interviews were used to explore the issues in regard to the research propositions. In order to minimise the variation from the dealers' interviews, a questionnaire survey grounded in the qualitative study was conducted. The data was analysed by descriptive statistics. The findings from both approaches were merged together into a single set of conclusions. In addition, the chapter clarifies the development of instruments, the population searched, the sample taken, data collection, information management, and ethical issues regarding the project.

The next chapter presents details of the first study that was conducted with seven organisations in the Honda motorcycle network in Thailand.

Chapter 5

Results from the First Study

5.1 Introduction

This chapter outlines the findings from the first study which consists of participant observation and semi-structured interviews. The participant observations were conducted at two organisations to identify existing collaborations between all involved parties. The semi-structured interviews were conducted in seven organisations to address the research propositions which relate to non-coercive power, trust, exception handling, and collaboration. The participants were a single distributor and six dealers in the motorcycle industry in Thailand.

This chapter is divided into four main sections. Section 5.2 explains an overview of the first study. Section 5.3 introduces the participants and shows their significance for the study. Section 5.4 identifies the existing collaborative processes between the distributor and dealers by focusing on human and e-collaboration. Section 5.5 analyses the data derived from the interviews in line with the main research questions. The first study found that collaboration would be enhanced by most aspects of non-coercive power, trust, and exception handling. Most aspects of non-coercive power also appeared to be important issues for enhancing trust, and for handling exceptions. Several practices of human collaboration and e-collaboration were found to be mechanisms to enhance the level of trust and to handle exceptions.

5.2 Overview of the First Study

The first study contained two qualitative techniques: the participant observation technique by means of '*observer as participants*', and semi-structured interviews. At the outset, all expected participants were approached by phone to confirm the location, date, and time of study. Furthermore, there were confirmations that the participants involved in this study understood the issues of collaboration between the distributor and dealers. For semi-structured interviews, the duration for each was approximately one and half hour. The topics covered in each interview related to the main research questions (see Section 3.4.1 and Appendix 1.2) The following section provides some backgrounds of the participants in the study and indicates their relevance to this study.

5.3 Participants in the First Study

The first study was conducted at the distributor and six dealers in the Honda motorcycle network in Thailand. The justification for selecting the participant is discussed in Section 4.4.4. To preserve confidentially, the following section uses proxy names for each organisation.

5.3.1 The Distributor

The Honda distributor is the largest motorcycle distributor in Thailand. Its sales are limited to a range of Honda products including motorcycles and spare parts. It also supports dealers by conducting the business for mutual benefit. Its business mission, which is also applied to the entire network, is based on the five 'S' concepts: 'Sales', 'Service', 'Spare Parts', 'Safe Riding', and 'Second-hand'. While 'Sales' refers to selling the motorcycles, 'Service' means providing good service to the customers. 'Spare Parts' suggests that spare parts will be available after products are sold; 'Safe Riding' means encouraging people to ride motorcycles in a safe manner. Finally, 'Second Hand' is the provision of good quality used products. For this organisation, there were five people involved in the first study: a sales manager, two coordinators from the 'Sales Department', and two staff from the 'Business Development Department'.

5.3.2 Ping Motor

'Ping Motor' has several outlets operating throughout the various sites of the southern provinces of Thailand. This dealer had conducted business with Honda for more than 20 years and is now managed by the second generation. The participant was the daughter of the founder who was also the general manager of this business. By growing up in the motorcycle shop, she had been involved with her family business for her entire life. During the study, she provided a lot of experience regarding the subject being studied; this was very useful to the research.

5.3.3 J.R. Honda

'J.R. Honda' has a few showrooms located within a large city in southern Thailand. It has been a Honda dealer for more than 30 years. Other than the motorcycle business, the owner also conducts a business as a car retailer. Being a car dealership also needs collaboration between parties; in fact, it is achieved in a similar way to that of the Honda motorcycle. As such, the owner usually compared the two systems against each other during this study. Therefore, having conversations with this dealer proved to be very useful.

5.3.4 Fresh Honda

'Fresh Honda' has only one outlet located in central Thailand. Despite establishing a dealership contract with Honda only a few years ago, the owner has considerable experience in the motorcycle business. In fact, he used to manage his brother's Honda showroom before starting his own business. The distributor stated that he is very keen to promote the business by conducting several marketing activities. There were two people involved with this study: the owner, and his wife. During the study, both were interviewed simultaneously; they provided a variety of perspectives which benefited this study.

5.3.5 V.I.P. Honda

'V.I.P. Honda' operates its business in one of the north-eastern provinces of Thailand. It had been in this business for more than 30 years. Apart from Honda, this dealer also holds a Yamaha dealership. It must be noted that this study was not conducted at a Honda outlet, but at a Yamaha showroom in the headquarters of the business. Interestingly, all collaborative works in regard to Honda are completely done at the Yamaha site. For example, Honda products are ordered via the Internet at the Yamaha showroom, but the products are delivered to the Honda outlet. There were four people involved in this study: the owner, his wife, their daughter, and a senior manager. They addressed the questions at the same time. The participants also provided a helpful perspective by comparing the collaborative process used by Honda against that of Yamaha. The dealer pointed out that the collaborative processes used by Yamaha and Honda are similar. The dealer considered that this is because Honda is the leader and therefore its competitors tend to follow its development in almost every aspect. Significant information was derived from this organisation as all participants have a lot of experience in the motorcycle business.

5.3.6 Prince Motorcycle

'Prince Motorcycle' is located in the north of Thailand. It has two outlets operated in different provinces. While its headquarters is located in the heart of city, another outlet is in a small town. It had been a Honda dealer for around 15 years. The study was divided into two sessions. The first one involved the owner who has a better understanding of the issues of power and trust. His participation notably involved the understanding of strategic issues. The second person was a senior staff member whose job is to directly contact the distributor. As she had performed this duty for more than 10 years, discussing with her gave perspective particularly at the operational level.

5.3.7 H.T. Honda

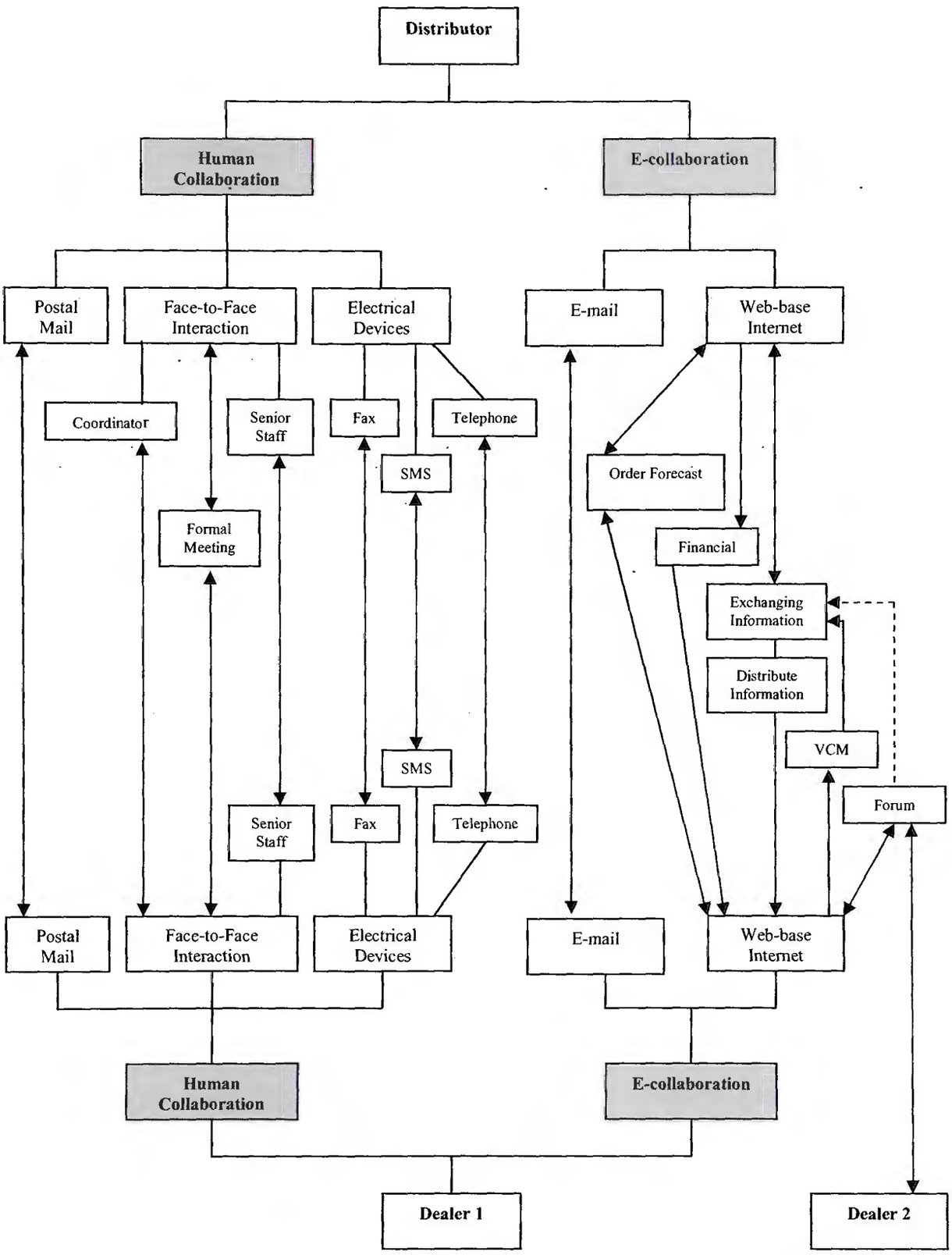
This dealer has Honda motorcycles showrooms in Bangkok. The owner has developed this business from scratch, but now has been authorised to sell motorcycles from several brands. Since he has the dealership for many brands, many people claimed that he probably understands most aspects of motorcycle retailing in Thailand. This is supported by the fact that the Japanese directors from different makers always visited him at the time they started work in Thailand. This study was not conducted at a Honda outlet, but at a Yamaha showroom which is also the headquarters. Apart from the owner, another person involved was his wife who looks after the finance. They both presented valuable viewpoints by comparing the issue of collaboration used by Honda with other brands, and hence provided useful information to address the research questions. Similar to 'V.I.P. Honda', this dealer revealed that other networks always follow the developments from Honda in most aspects. In other words, the collaborative processes from all networks are almost identical. Therefore, focusing on the Honda network provided good insights into the context of this research.

5.4 The Overall Existing Collaborative Process

The use of the qualitative techniques provided information on existing collaborative processes between the relevant parties. The findings revealed that both human collaboration and e-collaboration have been utilised within the business '*community*'*. Figure 5.1 demonstrates the existing collaborative processes between those parties. In the following section, the account from informal interviews and observations have been summarised and expressed here in the present tense.

* For this thesis, 'community' covers only the relationships between the distributor and dealers in the Honda motorcycle network in Thailand.

Figure 5.1: The overall existing collaborative process in the business community



SMS : Short Messaging Service
VCM : Very Critical Message
→ : Information flows directly in the direction indicated by the arrow.
↔ : Information flows directly in both directions between involved parties.
⇢ : Information flows indirectly in the direction indicated by the arrow.

5.4.1 Human Collaboration in the Business Community

Human collaboration is employed by using *(i) postal mail, (ii) electrical devices,* and *(iii) face-to-face interaction.* These subjects are explained below.

Collaboration via Postal Mail

Postal mail is used to convey important messages for retention. It is also used to exchange useful information or items that cannot not transferred by other collaborative methods.

Collaboration via Devices Other than Computer

Collaboration via other devices usually takes place in forms of telephone, facsimile, and *SMS.* The use of these devices always involves unexpected actions based on the day-by-day collaborative process. SMS is also employed by the 'Accounting Department' of the distributor to remind dealers about the payment; it is *sometimes* used for other purposes from different people across the organisation.

Collaboration via Face-to-face Interaction

Face-to-face interaction is mostly achieved by the coordinators employed by the distributor. Each dealer always deals with four different coordinators from various departments: 'Sales Department', 'Service Department', 'Spare Parts Department', and 'Safe Riding Department'. In addition, senior members from both distributor and dealers sometimes arrange informal meetings by visiting each other. Formal meetings among parties are also a part of the collaboration. There are two main types of formal meetings: the '*national meeting*' and the '*regional meeting*'. While the national meeting takes place annually to focus on the main policy of business community, the regional meetings are organised to highlight the course of actions in a particular area. By considering Bangkok as a special region, there are five regions in this community, and each region has its own meeting once a year.

5.4.2 E-collaboration in the Business Community

E-collaboration between the distributor and dealers is achieved by using *(i) e-mail* and *(ii) the Web-based application.* These two practices are explained below.

Collaboration via E-mail

Using e-mail is a form of collaborative effort between parties. It is employed for various purposes across the community. As stated by the distributor, however, most dealers would prefer to use the telephone rather than the e-mail; this is probably because most parties belong to older generations. As such, they are less likely to accept new technologies.

Collaboration via the Web-based Application

The Internet application allows parties to exchange useful information. The system used in the business community is called '*Dealer Online Service System*' (DOSS) where its architecture is based on three main areas: *(1) managing the order forecast, (2) managing financial transactions,* and *(3) exchanging useful information*

Figure 5.1 illustrates the collaborative process in regard to this issue and the following section explains these elements in detail.

1) Managing the Order Forecast

DOSS is employed to manage the order forecast. Considering the motorcycle as the main product, the dealers use DOSS for the following purposes:

- *To report the sales*;
- *To forecast the sales based on their stocks*; and
- *To make orders.*

The distributor needs to work closely with dealers to calculate future order needs. The distributor also uses the data and other information, such as planning for future promotions, to predict market demand, and then requests the manufacturer to produce the products accordingly.

As a stated by the distributor, DOSS is a communication system focusing on sharing point of sale data that enables faster understanding of any changes in buying patterns. The distributor also uses this system to tell the dealers about the expected times of delivery. Nonetheless, if the dealers need to adjust their order, they are not allowed to change it by using DOSS. Instead, they need to fill out a form and fax it to the distributor. For spare parts, the process is slightly different. In this case, the dealers are not required to produce the order forecast, but the distributor still uses recent actual purchases to forecast the demand.

2) Managing Financial Transactions

This principle involves financial transactions where the distributor and dealers exchange information regarding payments and moneys owed.

3) Exchanging Useful Information

DOSS is also employed to exchange useful information between the distributor and dealers. There are three mechanisms integrated within DOSS: *(i) the communication from the distributor to dealers, (ii) the direct communication from a dealer to the distributor,* and *(iii) the communication among dealers.* These mechanisms are explained as follows.

i) The Communication from the Distributor to Dealers

For this kind of discourse, the distributor employs DOSS to distribute useful information to the dealers. For example, this could include the new policy, reports on the competitive environment, business bulletins, information on new models, and so on.

ii) The Direct Communication from a Dealer to the Distributor

DOSS also integrates with a feature called '*Very Critical Message*' (VCM). This enables all dealers to directly contact the senior staff who work for the distributor bypassing the levels of command existing in the distributor organisation. The dealers employ this tool when they suffer from critical exceptions, which are needed to be solved rapidly by the distributor. For example, dealers can use the VCM to report to the distributor if they believed that other dealers break regulations and undermine the collaborative process in the whole community. The difference between e-mail and the VCM is that the first method is always observed by an individual, while the VCM

approach involves many senior staff of the distributor. The first study also revealed that there is no formal or written regulation for using this feature. Therefore, dealers use common sense to decide whether the particular subject is important enough to be reported to those senior staff.

iii) Communication among Dealers

DOSS application also comprises a Web-board forum to provide a discussion board for the dealers. With this practice, the dealers are allowed to exchange information and explain opinions on a particular subject. However, the distributor does not reply to the topics in writing; all concerned issues posted on the Web-board are taken into account and are responded to with particular actions. For example, the distributor recently made a decision to delay its new policy as it was disapproved by most dealers. The distributor realised this from the Web-board forum.

5.5 The Results from Interviews in Relation to the Propositions

The following section describes and discusses the results of interviews relevant to the research propositions. As mentioned in Section 4.3.1, the data from the interviews was analysed by content analysis.

Several tables are also presented in this section. For each table, the first column on the left always indicates particular variables which influenced the phenomena being studied. The column before the last column on the right indicates the frequency of outcomes based on seven participants. The column on the extreme right identifies the degree of effect with which those variables influence the phenomena in the proposition. The meaning of the last column is clarified as follows.

- *'Weak'*: the variable was favoured by 0-2 participants.
- *'Moderate'*: the variable was favoured by 3-5 participants
- *'Strong'*: the variable was favoured by 6-7 participants

Note that this section only highlights the appropriate issues that address the research propositions. Less relevant data is ignored in this section, but is presented in Appendix 1.3. Note also that the third number in these side sub-headings matches the proposition list in Table 3.1.

For some parts of the following section, a strong attempt was made to translate the Thai language reply into accurate English in all direct quotations. This sometimes means that the English expression is not the best possible.

5.5.1 Non-coercive Power for Achieving Collaboration

Generally, participants revealed their belief that most aspects of non-coercive power can enhance the collaborative efforts between the distributor and dealers. However, there were still some slightly differing viewpoints for each type of non-coercive power. Table 5.1 summarises the data from the interviews. These issues are explored in greater detail after the table.

Table 5.1: Interview data for proposition 1

Non-coercive Power	Frequency (N=7)	Degree of Effect
Tangible reward	7	Strong
Intangible reward	7	Strong
Legitimate reciprocity	7	Strong
Legitimate equity	3	Moderate
Legitimate dependence	n/a	n/a
Legitimate position	2	Weak
Referent power	0	Weak
Expert power	7	Strong
Information power	7	Strong

n/a = not applicable

Reward Power

In this community, rewards can be both *(i) tangible* and *(ii) intangible.* As explained by the distributor, tangible rewards could be the prize given to dealers who achieve the target, gifts on special occasions, a supporting budget for undertaking special activities and so forth. On the other hand, intangible rewards could be compliments which express the admiration to/from other parties.

The distributor confirmed that those rewards tend to improve the level of collaboration between partners. However, this might not apply to tangible rewards. It was explained that money remunerations can sometimes be seen as *"the bribe"* which could produce negative results for collaboration. The distributor claimed that intangible rewards, in particular the expression of admiration from other parties, always produces a good feeling which may perhaps increase the level of collaboration.

In terms of dealers' perspective, the answers were quite mixed. All interviewees revealed that the major characteristic of intangible rewards is anything making them proud. Although all dealers claimed that rewards may inspire them to produce collaborative tasks, 'V.I.P. Honda' still gave a different perspective in this regard by claiming as follows.

> "*We feel it is discrimination when the distributor gives rewards (tangible) to those selling only the Honda product more than those selling many brands. The practice in which the distributor offers rewards by ignoring the ability of the dealers could reduce the level of collaboration*".

Legitimate Power

From the distributor's perspective, legitimate reciprocity was seen as the most important matter influencing the collaborative relationship. The collaborative sense would be augmented when the involved parties help each other to achieve the goal. The distributor tended to assist dealers who work hard; this provided an insight that legitimate equity would encourage the collaborative efforts between the parties. The distributor also used the legitimate right by compelling all dealers to perform a particular course of action. In this case, the interviewee described this issue as follows.

> *"It is quite impossible to make everyone happy. Some dealers may gain some advantages while others may lose. However, the whole business community would get benefits from such collaborative actions".*

Similarly, all dealers were willing to produce collaborative tasks once the distributor provided them with some assistance. This was because it makes them feel obliged. Thus, there could be a direct correlation between legitimate reciprocity and the level

of collaboration. On legitimate equity, 'Prince Motorcycle', and 'H.T. Honda' asserted that they are more likely to feel obliged, and to obey the distributor once they realise that the distributor has worked hard to develop the whole community. On legitimate dependence, all dealers said that they *sometimes* comply with the distributor to produce collaborative work due to the feeling of social responsibility. In terms of legitimate positions, only 'Fresh Honda' accepted this issue by asserting as follows.

> *"We obey the distributor as the distributor has the legitimate right to ask the dealers to do so".*

Referent Power

Referent power was not seen an important factor encouraging the involved party to achieve collaborative relationship. The distributor addressed this issue as the following.

> *"This issue is quite sensitive for this community. Yet, we believe that some dealers may comply with us to gain approval. However, we believe that most dealers do not care about this. It is less likely that they desire to gain approval from us without their own benefit. In fact, if they do not have any benefit, they will disagree and refuse to produce collaborative work".*

In terms of the dealers' perspective, all interviewees revealed that referent power is not a very important inducement to work collaboratively with the distributor.

Expert Power

In this community, the meaning of expertness varies across from one discipline to another. It ranges from operational aspects to management matters. All participants declared that the expertness held by other parties tends to encourage them to produce high quality collaborative work.

Information Power

All participants stated that the required information held by other parties tends to influence parties to produce collaborative works. For example, this could be information regarding competitors, technical issues about engines, marketing campaigns, new policy, and so on.

5.5.2 Non-coercive Power for Enhancing Trust

Only some dimensions of non-coercive power are believed to enhance the level of trust in the relationship between the distributor and dealers. The summarised data for these issues are presented in Table 5.2. Varieties of opinion about this issue are also explained below.

Table 5.2: Interview data for proposition 2

Non-coercive Power	Frequency (N=7)	Result from the First Study
Tangible reward	2 (conditions apply)	Weak
Intangible reward	7	Strong
Legitimate reciprocity	7	Strong
Legitimate equity	3	Moderate
Legitimate dependence	1	Weak
Legitimate position	2	Weak
Referent power	0	Weak
Expert power	7	Strong
Information power	7	Strong

n/a = not applicable

Reward Power

According to the distributor, intangible reward was thought to be a mechanism to raise the level of trust between the involved parties via the sense of friendliness. On tangible rewards, the distributor provided the following viewpoint.

> *"Only less valued entities could positively impact on the level of trust. On the other hand, more valuable rewards are more likely to produce negative results as these rewards may be considered as a bribe in a corruption system which reduces the sense of honesty".*

All dealers stated that intangible rewards could increase the sense of buyer/seller orientation, and friendliness; this then possibly increases the level of trust. In addition,

'V.I.P. Honda' suggested that tangible rewards should be "*given to all dealers without discrimination*". This then could raise the sense of fairness (honesty). However, 'Ping Motor', 'Fresh Honda', 'Prince Motorcycle', and 'H.T. Honda' were unsure whether tangible rewards can increase the level of trust. In contrast, 'J.R. Honda' argued that "*tangible rewards would not increase the level of trust*".

Legitimate Power

From the distributor's perspective, the sense of expertness (competence), buyer/seller orientation, and friendliness towards dealers would be generated when it receives assistance from dealers. The distributor further claimed as the following.

> "*Those senses (competence, buyer/seller orientation, and friendliness) always belong to the hardworking parties as well. If dealers comply with us as a result of social responsibility, the sense of friendliness, and altruism (buyer/seller orientation) towards such dealers would increase. In addition, some community regulations sometimes enhance the sense of fairness (honesty) and confidence (dependability/reliability) among parties*".

For dealers, the answers were quite mixed. 'Ping Motor', 'J.R. Honda', 'Fresh Honda', 'V.I.P Honda', and 'Prince Motorcycle' claimed that legitimate reciprocity would play a leading role for improving the sense of competence, and buyer/seller orientation. These interviewees claimed that the assistance from the distributor represents its expertise (competence), and business sense (buyer/seller orientation); this then possibly results in higher levels of trust towards the distributor. Similarly, 'H.T. Honda' asserted that some assistance from the distributor could create only the "*altruism sense*" (buyer/seller orientation), whereas 'V.I.P. Honda' and 'Prince Motorcycle' suggested that such actions could enhance the sense of friendliness. For legitimate equity, it might also increase trust between the parties. For example, 'Prince Motorcycle' and 'H.T. Honda' pointed out that the sense of buyer/seller orientation could be created when the distributor compensates for their hard work or sufferance. Although most dealers were not sure about legitimate position, 'Fresh Honda' still claimed that "*the sense of fairness*" (honesty) may be enhanced once the distributor forces

all parties to produce particular actions. Finally, all dealers stated that trust towards the distributor may not relate to social responsibility.

Referent Power

All participants claimed that referent power does not relate to the level of trust in the relationship between the distributor and dealers.

Expert Power

For all participants, expert power tended to increase the level of trust. In most cases, participants expressed two words, "*ability*" and "*confidence*", to identify their feelings towards the expertness held by their partners. This is consistent with theory where expert power may create the level of trust via the sense of competence and dependability among parties.

Information Power

All participants stated that useful information from partners could improve the level of trust among parties via the concept of competence and dependability/reliability. As stated by most participants, this information is similar that indicated in Section 5.5.1.

5.5.3 Non-coercive Power for Handling Exceptions

All in all, most aspects of non-coercive power would assist all involved parties to handle their exceptions. However, there were slightly different viewpoints about this in the context of the proposition. The data from the interviews is shown in Table 5.3 and discussed below.

Table 5.3: Interview data for proposition 3

Non-coercive Power	Frequency (N=7)	Result from the First Study
Tangible reward	7	Strong
Intangible reward	7	Strong
Legitimate reciprocity	7	Strong
Legitimate equity	7	Strong
Legitimate dependence	2	Weak
Legitimate position	2	Weak
Referent power	n/a	n/a
Expert power	7	Strong
Information power	7	Strong

n/a = not applicable

Reward Power

As far as the distributor was concerned, both types of reward (tangible and intangible) could motivate people to perform superior work, and then the exceptions in the collaborative process would be reduced. Similarly, all dealers asserted that those rewards could be considered as superior mechanisms to handle exceptions. This was because rewards could encourage parties to avoid mistakes.

Legitimate Power

As confirmed by the distributor, legitimate reciprocity and equity would be the most important dimensions producing effective exception handling in the business community. In these cases, the distributor claimed the following.

"It makes sense that if we help dealers, then they are keen to solve exceptions as the way to return our favour. In terms of legitimate position, there is sometimes a requirement to use formal regulations to force the whole community so that particular exceptions could be handled effectively".

As revealed by all dealers, the assistance from the distributor would enhance the level of confidence; this then would inspire them to handle exceptions more effectively. Hence, legitimate reciprocity might assist the parties to handle exceptions. Regarding the legitimate equity, all dealers addressed this issue in the same direction. They tended to perform better work if they realised that the distributor has worked hard to develop the business community. Only 'J.R. Honda' and 'Fresh Honda' stated that they also work together with the distributor to solve exceptions due to their feelings of social responsibility. As a result, legitimate dependence may not improve the effectiveness of exception handling between the parties. In terms of legitimate position, the answers were mixed. 'J.R. Honda' and 'V.I.P Honda' identified that the distributor has the legitimate right to request dealers to perform any exception handling processes. It was claimed that some regulations proposed by the distributor may initially produce negative feelings, but they would solve exceptions in the long-term period. However, other dealers claimed those regulations are more likely to create some difficulties; and hence legitimate position sometimes tends to produce a negative result for this matter.

Referent Power

The distributor argued that there would be no correlation between referent power and exception handling in the relationship between the involved parties. The distributor stated the following.

"There might be some dealers who comply with us for gaining approval, but we would not treat them as special cases. If we did so, other dealers would not be happy. Therefore, it is not the case that the dealers could get special actions (in terms of solving exceptions) from us".

On the dealers' point of view, it was noticed that these parties did not want to talk about this issue. As explored during the interviews, all dealers *sometimes* comply with the distributor for handling exceptions as they want to gain approval from the distributor.

Expert Power

All participants claimed that the expertise held by other parties would assist them to handle exceptions more effectively. It was claimed that the knowledge from others could allow them to diagnose the problems precisely; therefore, exceptions would be handled appropriately.

Information Power

All participants considered that useful information held by others would assist them to handle exceptions. As disclosed from the interviews, useful information would provide the clue on how to handle exceptions more precisely. Again, this information is similar to some examples indicated in Section 5.5.1.

5.5.4 The Importance of Trust

Trust was seen to improve the collaborative relationship between the distributor and dealers by *(i) reducing complexity in the relationship, (ii) increasing the communication* and, *(iii) increasing the willingness to cooperate.* Table 5.4 summarises the findings from the interviews. These findings are also explained below.

Table 5.4: Interview data for proposition 4

Importance of Trust	Frequency (N=7)	Result from the First Study
Complexity reduction	6	Strong
Increasing communication	4	Moderate
Increasing the willingness to cooperate	7	Strong

As stated by the distributor, trust is an important issue between trading partners. The interviewee explained this issue as follows.

> *"Once trust is established, all involved parties tend to work closely which leads to exchanging useful information. As a result, the problems tend to be reduced".*

All dealers claimed that trust would create the willingness to cooperate between parties. Besides, five dealers that are 'J.R. Honda', 'Fresh Honda', 'V.I.P. Honda', 'Prince Motorcycle', and 'H.T. Honda' observed that trust would reduce the complexity in relationships. 'J.R. Honda', 'H.T. Honda' and 'Fresh Honda' claimed that trust produces an increased level of communication between the parties.

5.5.5 Existing Types of Trust in the Relationship

By analysing interview data against theory, there are four types of trust that can be found in the relationship between the distributor and dealers. The findings in this regard are shown in Table 5.5. The following section explains the results from the interviews.

Table 5.5: Interview data for proposition 5

Types of Trust	Frequency (N=7)	Result from the First Study
Personality	0	Weak
Affect	0	Weak
Cognition	7	Strong
Calculative	0	Weak
Familiarity	7	Strong
Knowledge	4	Moderate
Deterrence	0	Weak
Institutional	0	Weak
Integrated	7	Strong

The distributor stated that trust could be integrated for many reasons. The distributor provided some information about the question as follows.

> *"We trust dealers when they have achieved the goal (dependability/reliability), received some respect from the social aspect (dependability/reliability), worked hard to develop their own business (competence), worked hard to develop the whole community (buyer/seller*

orientation), conducted a superior financial system (honesty and competence), told the truth (honesty), and provided friendly relationships (friendliness)".

As stated by the distributor, information and experiences would influence the feeling towards each dealer. Consequently, trust was seen as 'familiarity-based' and 'cognition-based'.

In regard to dealers, trust between the parties would be 'integrated trust' as it was built up for many reasons. Apart from 'J.R. Honda', other dealers identified that trust would be established once they realise that the distributor has worked hard to develop the whole community (buyer/seller orientation and dependability/reliability), and provide friendly relationships (friendliness). Furthermore, 'Ping Motor', 'J.R. Honda', 'V.I.P Honda', 'Prince Motorcycle', and 'H.T. Honda' claimed that useful information provided by the distributor tends to enhance trust via the sense of buyer/seller orientation. The same five dealers pointed out that the distributor must keep its promise in order to maintain *honesty*. Three dealers including 'Ping Motor', 'Fresh Honda', and 'Prince Motorcycle', claimed that trust in this context would be established once the distributor understands the nature of their business. In this way, trust would be achieved via the concept of buyer/seller orientation. Only 'J.R. Honda' noted that trust could be recognised if parties work together for a long time period.

Most dealers claimed that they trust the distributor when perceiving information from the public media (cognition-based trust), from other dealers (cognition-based trust), from the recognition when conducting business with the party for a long time (familiarity-based trust), and from the recognition of agreement between parties (knowledge-based trust). Hence, the existing type of trust between the distributor and dealers would be an integrated trust grounded on the above-mentioned issues.

5.5.6 Human Collaboration for Enhancing Trust

This study explored four practices of human collaborations which could be used to enhance trust between the parties. The following section explains these practices along with their suggestions.

Formal Meetings for Enhancing Trust

Most participants asserted that the formal meeting could be an important system for enhancing the level of trust between the parties. The distributor claimed that face-to-face interactions may increase the level of trust in many ways; it could generate the sense of dependability/reliability, honesty, competence, buyer/seller orientation, and friendliness. The distributor also considered increasing the frequency of formal meeting. The summary of findings for both national and regional meetings is shown in Table 5.6.

Table 5.6: Interview data for proposition 6 on the issue of formal meetings

Types of Meeting	Frequency (N=7)	Result from the First Study
National Meeting	3	Moderate
Regional Meeting	7	Strong

'Ping Motor', 'J.R. Honda' and, 'Prince Motorcycle' suggested that the frequency of regional meetings should be increased. In contrast, 'V.I.P. Honda' and 'H.T. Honda' claimed that both types of meetings need to be arranged more frequently. As explained by these dealers, face-to-face meetings could allow the parties to create the sense of buyer/seller orientation, and friendliness.

Informal Meetings for Enhancing Trust

This research found that informal meetings within this business community are generally achieved by means of *(i) informal meetings via coordinators from distributor,* and *(ii) informal meetings between senior members.* Table 5.7 summarises the findings in regard to this issue. The following section discusses this issue.

Table 5.7: Interview data for proposition 6 on the issue of informal meetings

Roles of People Involved	Frequency (N=7)	Result from the First Study
Coordinators:		
Visit dealers regularly		
-Sales	3	Moderate
-Service	6	Strong
-Spare Parts	6	Strong
-Safe Riding	6	Strong
Provide information on their responsibilities		
-Sales	3	Moderate
-Service	2	Weak
-Spare Parts	2	Weak
-Safe Riding	2	Weak
Provide information beyond their responsibilities		
-Sales	3	Moderate
-Service	2	Weak
-Spare Parts	2	Weak
-Safe Riding	2	Weak
Senior staff from both distributor and dealer visit Each Other	2	Weak

i) Informal Meetings via Coordinators

Coordinators could play a useful role to increase trust between the involved parties. The distributor pointed out the important role of its coordinators as follows.

> *"Coordinators are employed to produce collaborative relationships. They are usually the first people seeing the problems for us. If the problems are recognised and solved rapidly, a sense of competence and buyer/seller orientation towards the distributor would be generated. In addition, useful information sometimes is exchanged via them too. Still, there is a requirement to increase the number of coordinators".*

Most dealers also claimed that trust could be augmented by the informal meetings with the coordinators. 'Ping Motor' and 'V.I.P Honda' focused on the importance of increasing the number of coordinators from the 'Service Department', 'Spare Parts Department', and 'Safe Riding Department'. In this case, 'Ping Motor' provided insightful information as follows.

> *"Coordinators must have varieties of knowledge which may involve information regarding their duties. Also, the knowledge could involve other useful information which may not relate to their duties".*

It was summarised that trust towards the distributor would be created via the sense of competence, buyer/seller orientation, and friendliness. Additionally, 'V.I.P Honda' addressed the issue as follows.

> *"Coordinators from the 'Sales Department' should be able to provide useful information particularly regarding competitors, the local business environment, and government policy".*

'Prince Motorcycle' required an increased number of coordinators from the 'Service Department', 'Spare Parts Department', and 'Safe Riding Department'. A reason given was that the sense of competence and buyer/seller orientation towards the distributor could increase. In contrast, 'Fresh Honda' suggested that interactions with these coordinators could increase *only* the sense of friendliness. 'H.T. Honda' claimed that all coordinators play a key role in increasing the feeling of "*confidence*" (dependability/reliability) and the sense of buyer/seller orientation.

ii) Informal Meetings between Senior Members

A few dealers suggested that the informal meetings between senior staff from both parties could increase trust in their relationships. 'J.R. Honda' suggested that senior members from the distributor should visit dealers *"on a regular basis"*. This dealer asserted that senior staff from the distributor always demonstrated their skills. Thus, the sense of competence of the distributor would increase, and "*the feeling of unity*" (buyer/seller orientation) in this community could be improved. 'Fresh Honda' stated that the informal meetings between senior members could be an important issue. The discussions between these people could provide the sense of friendliness. Generally, it was suggested that these people should visit each other regularly.

Communication via Telephone for Enhancing Trust

As shown in Table 5.8, all participants claimed that the use of telephone could generate trust between the parties. When parties call each other, the sense of buyer/seller orientation, and friendliness could be generated. Further, all participants claimed that all parties should phone each other on a regular basis.

Table 5.8: Interview data for proposition 6 on 'other practices'

Other Practices	Frequency (N=7)	Result from the First Study
Telephone	7	Strong
SMS	1	Weak
Facsimile	0	Weak
Postal mail	0	Weak

The Use of Short Messaging Service for Enhancing Trust

Although the distributor has already employed SMS to conduct collaborative work, it has been used mainly for work-related topics. However, 'H.T. Honda' suggested that this practice could enhance trust via the idea of friendliness. It was suggested that trust could be augmented *"if the distributor sends SMS greetings on special occasions"*.

Facsimile and Postal Mail

The result of interviews clearly identified that the use of facsimile and postal mail are not relevant to any increase of trust between the parties.

5.5.7 E-collaboration for Enhancing Trust

Trust in the relationships between the parties could be improved by many practices of e-collaboration. Several suggestions on this topic emerged from the discussions. The summary of findings from the interviews is shown in Table 5.9. The following section also discusses these matters.

Table 5.9: Interview data for proposition 7

E-collaboration	Frequency (N=7)	Result from the First Study
The role of DOSS		
-Clear and fast information	3	Moderate
-Forum	7	Strong
Business topics only	3	Moderate
Distributor reply topic	1	Weak
Forum confidentiality	1	Weak
-Very Critical Message	3	Moderate
The role of e-mail		
-Business	2	Weak
-Non-business	1	Weak
The role of new e-practices		
-Video conference	2	Weak
-Text-based chat program	2	Weak
-Web-camera	1	Weak

Issues Involved with DOSS for Enhancing Trust

Various suggestions on how DOSS could be employed to enhance trust were proposed. They covered: *(i) clear and fast information on DOSS, (ii) the use of the Web-board forum,* and *(iii) the use of the VCM.*

i) Clear and Fast Information on DOSS

This practice is based on the frame of distribution. The distributor claimed the benefit of DOSS in this context as follows.

> "*Information provided on DOSS must be clear by focusing on the way to support the community. As a matter of fact, clear information generates good*

confidence (dependability/reliability), makes others recognise our ability and creates an intention and motivation (buyer/seller orientation) among the parties".

From the dealers' perspective, 'Fresh Honda' pointed out that useful information from DOSS could be a formal policy proposed by the distributor, the knowledge for conducting business in a particular area, and so on. This dealer clarified the role of DOSS for enhancing trust as follows.

"The useful information shows the level of expertness (competence) from distributor which could motivate dealers to conduct the business (buyer/seller orientation)".

'V.I.P. Honda' expanded on this issue as follows.

"The distributor needs to provide information via DOSS faster than before. This would increase the level of intention (buyer/seller orientation) within the community".

ii) The Use of the Web-board Forum

As disclosed by the distributor, the forum has been seen as a tool to increase trust. Since the distributor always inspected the entire topics almost everyday, the interviewee reviewed the benefit of the forum as follows.

"Reviewing topics posted on the forum allows us to know what happens in our community; and hence would create our business sense by increasing intention and motivation (buyer/seller orientation). Therefore, it is important to encourage dealers to use the Web-board forum; we do this by giving them permission to discuss any kind of topic without a limitation to only the business issues".

When the distributor integrated the forum into DOSS, most dealers expressed their feelings towards the distributor as *"fairness, openness of management, and altruism".* It was understood that this system could increase trust via the sense of competence, and seller/buyer orientation. However, some different opinions were presented regarding the types of topic in the forum. 'Ping Motor', 'H.T. Honda', and 'J.R. Honda' suggested that they should not be limited to only business subjects. This way could encourage the dealers to use the forum more frequently. In contrast, others claimed that the topics should relate only to business matters; this could reduce the amount of less useful information. In addition, 'Ping Motor' suggested that the

distributor should reply to the topics; this would be the way to create the sense of friendliness and buyer/seller orientations between the parties. This dealer also asserted that the 'IP address' should not be shown in the system. This was because it could be a barrier to express opinions. The reason was explained as follows.

> *"Some dealers may want to give some opinions without the ability of the distributor to identify them. If the distributor could not identify us (dealers) on the forum, the sense of openness (honesty) towards the distributor would increase".*

iii) The Use of the Very Critical Message

In this regard, 'V.I.P Honda', 'Prince Motorcycle', and 'H.T. Honda' asserted that the VCM should be employed in this community. They considered that this practice showed that the distributor is concerned about others (buyer/seller orientation). In fact, when the VCM was introduced, unselfishness and altruism (buyer/seller orientation) were the most common feelings from dealers towards the distributor. 'H.T. Honda' pointed to the implication that the VCM could show the ability (competence) of the distributor in some situations. This dealer clarified this issue as follows.

> *"Whenever a problem reported via the VCM was successfully solved, the sense of competence towards the distributor would increase".*

In addition, 'V.I.P. Honda' made another interesting point as follows.

> *"The VCM possibly will reflect the openness of management (honesty) from the distributor by allowing all dealers to contact senior members of the distributor without discrimination. Indeed, big or small dealers can make a complaint to the distributor".*

Communication via E-mail for Enhancing Trust

As stated by the distributor, e-mail is not widely used within this industry; it is important to encourage the involved parties to use this kind of communication more regularly. It was noticed that non-business e-mail could be used for the purpose of increasing trust. As claimed by the distributor, e-greeting cards could increase the sense of friendliness between the parties. Business e-mail could also be used to enhance trust by raising the level of awareness of each other's ability and expertness (competence).

From the dealers' perspective, 'Fresh Honda' suggested that useful information regarding businesses should be sent to dealers via e-mail. This would make dealers feel that the distributor is still concerned about them (buyer/seller orientation). It was revealed that new information via e-mail would show the ability (competence) of the parties when it was used to solved some problems. Consequently, it was interpreted that the sense of buy/seller orientation and competence could increase by these practices. However, this dealer also claimed that non-business e-mail may not increase trust.

New E-practices for Community for Enhancing Trust

New electronic practices (E-practices) to enhance trust were also proposed during the interviews. These practices included the use of *(i) video conferences, (ii) text-based chat programs,* and *(iii) Web-cameras.*

i) The Use of Video Conferences

'Ping Motor' and 'Fresh Honda' stated that it allows dealers to contact senior staff of distributor more easily. It was claimed that this practice also shows the altruism (buyer/seller orientation) of the distributor. It was also suggested that the sense of friendliness between partners could increase if video conferencing were employed.

ii) The Use of Text–based Chat Programs

If there are only two people involved, it is a technically mediated interpersonal communication. In contrast, if there are more than two people involved, it is the frame of public discourse. Two participants including the distributor and 'Ping Motor' suggested that a text-based chat program could be used to increase trust between the parties. As stated by the distributor, this practice should be adopted for the purpose of exchanging information. It had never been used in the community, but the distributor stated that it could increase some *"intention and motivation"* (buyer/seller orientation) to do business since everyone could be interested in a new tool. Hence, the sense of buyer/seller orientation and friendliness would be developed if this practice were integrated into the collaborative processes.

iii) The Use of Web-Cameras

Only 'Ping Motor' mentioned that the Web-camera should be adopted into the community. The interviewee outlined the benefit of this form of communication as follows.

> *"A Web-camera could increase the sense of friendliness by allowing each party to see the emotion of each other. Moreover, if it was employed to solve exceptions particularly in the technical problems in the 'Service and/or Spare Parts Departments'; and such problems were successfully fixed by the distributor, the sense of expertness (competence) towards the distributor would also increase".*

5.5.8 The Importance of an Effective Exception Handling

All participants asserted that an effective exception handling in the relationship between involved parties is an important factor for achieving a collaborative relationship. Most participants addressed this issue in the same way by confirming that exceptions in their relationship tend to produce a negative result for their collaborative efforts. In fact, most indicated that effective exception handling can *'reduce the difficulties'* when they need to work closely to achieve collaborative relationships. 'Ping Motor' also made the interesting point that an effective exception handling can reduce 'stresses', and this can ultimately improve on collaborative efforts between parties. In this case, the participant expanded on this issue as follows.

> *"Exceptions make stress when we are doing business. We can't work collaboratively when we are stressed. The stress sometimes reduces our creative thinking, and even makes other or more serious exceptions. In fact, one exception may cause another exception due to the stress. When we suffer from one exception, there is a possibility that we will make another exception. It is a psychological issue rather than the direct issue involved in the business process".*

5.5.9 Existing Exceptions

Exceptions in the relationship between the distributor and dealers could result from several sources. The summary of exceptions obtained during the interview is presented in Table 5.10. All these exceptions are also explained in greater detail as follows.

Table 5.10: Interview data for proposition 9

Exceptions	Perspective on Source	Frequency (N=7)	Effect from the First Study
Products:			
-Fail to receive products (Uncontrolled)	Random	1	Weak
-Fail to receive products (Production)	Dynamic	7	Strong
-Unmatched accessories	Operation	1	Weak
-Receive other products	Operation	1	Weak
Lost documents:			Strong
-Outside the network	Random	7	Strong
-Inside the network	Operation/Design	7	Strong
Lack of knowledge:	Operation	3	Moderate
Mismatched goals:	Political	0	Weak
DOSS:			
-Unable to access	Random	1	Weak
-Unclear information	Design	1	Weak
-Lack of useful information	Design	1	Weak
-Confusion for ordering spare parts	Design	4	Moderate
-Confusion on rebate codes	Design	2	Weak

Exceptions Involved with the Process of Delivering Products

As stated by the distributor, *"the most common exception"* in this business is the inability to deliver products including motorcycles and spare parts to dealers; back-orders tend to happen due to the dynamic of the market. In fact, it was very difficult to adjust a production line according to a changed situation. In some situations such as a natural disaster, the failure of transportation could also cause this problem. Thus, the inability to deliver products to partners would be seen as an exception from the 'dynamic organisation' and 'random-event' perspectives.

From the dealers' perspectives, all participants claimed that the major problem is also the inability to receive the required products on time. The dynamic of the market makes them adjust the orders resulting in back-order problem. In linking this issue to the theory, this exception can be analysed from the 'dynamic of organisation' perspective.

'V.I.P Honda' further elaborated on the problem of the delivery process as follows.

> *"Sometimes, we receive others' products whilst other dealers receive our's. Also, the bikes sometimes come with unmatched accessories which normally are mirrors and baskets. More troubles would arise if the there is a need to return unwanted products back to the distributor and wait for the required products or accessories"*

According to the 'V.I.P Honda', this was a result of human failure; and hence could be analysed according to the 'operation error' perspective.

Exceptions Due to Lost Documents

The inability to receive and/or send documents could also negatively impact on the collaborative process between the distributor and dealers. The distributor provided some examples as follows:

> *"Some documents, such as copies of register plates certified by authorised people, may be required to conduct a promotion campaign with dealers. Furthermore, a special form may be needed when the dealers need to cancel their order. Thus, if such items are not presented to us, it would negatively impact on the whole process of collaboration".*

As stated by the distributor, these exceptions may happen from the loss of documents inside and outside the network. As a consequence, this could be analysed as exceptions according to the 'random-event' and 'operation error' perspectives.

All dealers further asserted that the distributor *sometimes* does not receive documents that were already sent by postal mail and facsimile. In most cases, dealers focused on the loss of the forms for adjusting and cancelling orders. If this exception is out of control, it is an exception analysable from the 'random-event' perspective. However, if this problem happens inside the business community, 'operating error' is the

relevant perspective. Note that this problem was also seen as exceptions from the 'design error' perspective. In fact, some dealers suggested that some traditional practices of exchanging information could be replaced with e-practices which could remove this exception.

Exceptions Due to Unskilled Staff from Dealers

The distributor pointed out that dealers sometimes do not have enough knowledge to solve the problems. This especially applies to problems of technical issues about the engine or mechanism of motorcycles. This requires dealers to consult the distributor, and hence could be another kind of inter-organisational exception. The distributor provided an example to clarify this point as follows.

> *"Spare parts which have some technical problems may need to be sent back to the distributor. However, this situation would not happen if the dealers know how to solve the problems by themselves."*

In ways similar to the distributor, 'Ping Motor' claimed that exceptions could be generated due to the unskilled staff from 'Service Department' and 'Spare Parts Department'. In contrast, 'V.I.P. Honda' focused only on the lack of knowledge of its staff from 'Spare Parts Department'. For this reason, these exceptions could be analysed due to the 'operation errors' perspective.

Exceptions Involved with DOSS

'Ping Motor' claimed that it sometimes cannot access DOSS. This tended to produce a difficulty during the collaborative processes. This is an uncontrollable exception. Hence, this could be analysed according to the 'random-event' perspective.

'J.R. Honda' claimed that a difficulty in understanding the language of DOSS could generate some exceptions. As stated by this dealer, *"misunderstanding"* the context may lead to unexpected actions which ultimately generate more serious exceptions. It is obvious that this exception is analysable from the 'design error' perspective. Because DOSS also failed to provide enough information regarding competitors, this dealer pointed out that it could not adjust precisely and timely to a changed situation. The interviewee clarified this point as follows.

"If we cannot adjust ourselves precisely and timely, it would impact on our sales result; this would lead to the requirement to adjust orders and may negatively impact on the whole community".

'Ping Motor', 'J.R. Honda', 'Prince Motorcycle', and 'H.T. Honda' asserted that the process of purchasing spare parts via DOSS always seemed to create confusions. This was probably because there are a large number of spare parts to deal with. Confusion would increase if a particular part has a variety of colours. To make a purchase, the dealers needed to use the code system combined with a lot of alphabets and numbers. As a result, the dealers would be confused, and would then end up with ordering a wrong item. As a result, they had to send such items back to the distributor thus producing another exception. According to these dealers, this problem arose since there was no image and colour of spare parts available on DOSS. Consequently, this problem belongs to the 'design error' perspective.

Furthermore, 'Fresh Honda', 'H.T. Honda' found that their confusions in dealing with the rebate transaction system could also produce exceptions. Typically, when the distributor required the dealers to conduct some market activities, it normally promised the dealers that some supporting budget would be given in form of a rebate transaction. In other words, all dealers needed to spend the money in advance, and then the distributor would reduce their liability when they next purchased the products. In this case, the distributor employed a complicated number-alphabet coding system for different type of activities; the dealers used this coding to request the discount. However, these two dealers claimed that the coding system being employed tend to generate a difficulty. In fact, if the dealer conducted many activities, many different codes would be required. This built up confusions which then caused more exceptions. This problem occurred because such codes were inconsistent with the system being used by dealers. Consequently, this exception belongs to the 'design error' perspective.

5.5.10 Human Collaboration for Handling Exceptions

Various suggestions were proposed that exceptions could be handled effectively by means of human collaboration. The suggestions are explained in greater detail below.

Formal Meetings for Handling Exceptions

Table 5.11 summarises the findings in regard to the importance of formal meetings. Apart from 'J.R. Honda', other dealers suggested that the regional meetings should be organised more frequently. They claimed these meetings would allow all parties to synchronise the own policies with the main policy of the business community. As such, it would reduce exceptions between parties because dealers in the same area always share similar problems. 'Prince Motorcycle', and 'V.I.P. Honda', and 'H.T. Honda' further claimed that the national meeting is also important; its role in the context of the proposition was the same as for the regional meetings.

Table 5.11: Interview data for proposition 10 on the issue of formal meetings

Types of Meeting	Frequency (N=7)	Result from the First Study
National Meeting	3	Moderate
Regional Meeting	5	Strong

Informal Meetings for Handling Exceptions

As stated in Section 5.5.6, informal meetings within this community are generally achieved by means of *(i) informal meetings via coordinators from distributor,* and *(ii) informal meetings between senior members.* Table 5.12 summarises the findings of interviews in this regard. The following section also discusses how these issues were important for exception handling process.

Table 5.12: Interview data for proposition 10 on the issue of informal meetings

Roles of People Involved	Frequency (N=7)	Result from the First Study
Coordinators:		
Visit dealers regularly		
-Sales	1	Weak
-Service	2	Weak
-Spare Parts	2	Weak
-Safe Riding	1	Weak
Provide information on their responsibilities		
-Sales	4	Moderate
-Service	4	Moderate
-Spare Parts	4	Moderate
-Safe Riding	4	Moderate
Provide information beyond their responsibilities		
-Sales	2	Weak
-Service	2	Weak
-Spare Parts	2	Weak
-Safe Riding	2	Weak
Senior staff from both distributor and dealers visit each other	3	Moderate

i) Informal Meetings via Coordinators

The distributor pointed out that employing more coordinators particularly in the 'Service Department' and 'Spare Parts Department' would solve existing exceptions.

From the dealers' perspective, 'Ping Motor' claimed that there is a requirement to increase the number of coordinators particularly those from the 'Service Department', 'Spare Parts Department', and 'Safe Riding Department', whilst 'V.I.P. Honda' focused on more coordinators from the 'Sales Department'. Moreover, 'Ping Motor' recommended that all coordinators must have as much *"universal knowledge"* as possible. Likewise, 'V.I.P. Honda' concentrated on useful information beyond the duties. 'Fresh Honda', 'J.R. Honda', 'Prince Motorcycle', and 'H.T. Honda'

suggested that the coordinators must have a variety of information regarding their duties. In particular, this could be information on the subject of the competitors, and information on local and national economics. This practice would assist all involved parties to handle exceptions more rapidly and precisely.

ii) Informal Meetings between Senior Members

'J.R. Honda', 'Fresh Honda', and 'Prince Motorcycle' stated that the informal meetings with senior members of the distributor could be another way to handle exceptions. Those who have policy-based knowledge could provide beneficial information on how exceptions should be handled. The interviewees claimed that these people need to visit each other on a regular basis.

Communication via Telephone for Handling Exceptions

As shown in Table 5.13, all participants claimed that communication via the telephone can be used to handle exceptions. It is normally used to solve the day-to-day exceptions. The telephone also can be used to exchange useful information which may benefit the exception handling processes between the parties.

Table 5.13: Interview data for proposition 10 on 'other practices'

Other Practices	Frequency (N=7)	Result from the First Study
Telephone	7	Strong
SMS	1	Weak
Facsimile	0	Weak
Postal mail	0	Weak

The Use of Short Messaging Service for Handling Exceptions

'V.I.P. Honda' and 'H.T. Honda' revealed that SMS can be employed to remind other parties. As a result, exceptions due to the forgetfulness of other parties are less likely to occur.

Facsimile and Postal Mail

Facsimile and postal mail would not benefit the parties for handling their exceptions. All dealers claimed that these two practices created exceptions rather than assisted their resolution.

5.5.11 E-collaboration for Handling Exceptions

Exception handling in the relationship between the distributor and dealers tended to be improved by many practices of e-collaboration. Table 5.14 summarises the findings from the interviews in this context of proposition. The following section discusses all these issues in greater detail.

Table 5.14: Interview data for proposition 11

E-collaboration	Frequency (N=7)	Result from the First Study
The role of DOSS		
-Clear and fast information	2	Weak
-Forum	3	Moderate
-Very Critical Message	2	Weak
-Video clip	1	Weak
- Order system (Adjusting orders)	6	Strong
-Accounting rebate	2	Weak
-Pictures for ordering spare parts	4	Moderate
The role of e-mail		
-E-mail only	6	Strong
-Pre-information via e-mail (important issues)	1	Weak
The role of new e-practices		
-Video Conference	2	Weak
-Text-based Chat Program	1	Weak
- Web-camera	1	Weak

Issues Involved with DOSS for Handling Exceptions

There were some suggestions about DOSS which could be used to handle exceptions. These suggestion involved: *(i) clear and fast information on DOSS, (ii) the use of the Web-board forum, (iii) the use of the VCM, (iv) the need for video clips, (v) the need*

for a new ordering system (adjusting orders), (vi) the need for a new accounting rebate system, and *(vii) the need for pictures for ordering spare parts.*

i) Clear and Fast Information on DOSS

'J.R. Honda' and 'H.T. Honda' mentioned that the information on DOSS should be clear, and provided with fast operating speed. In this case, 'J.R. Honda' emphasised the need for clear information as follows.

> *"Information on DOSS should be written in plain language; misunderstanding the context could produce more exceptions".*

Furthermore, these dealers claimed DOSS failed to provide useful information about the competitors. In addition, it had not provided enough insights for them to conduct the business; it also failed to publicise with sufficient speed. If these issues were improved, it would reduce some difficulties. Indeed, useful information would actually assist the parties to handle exceptions in their collaboration.

ii) The Use of the Web-board Forum

As stated by the distributor, this communication system could allow the distributor to become aware of exceptions in the community. This would lead the distributor to begin to prevent and handle exceptions.

From the dealers' perspective, 'V.I.P. Honda', and 'Prince Motorcycle' suggested that the forum is an important element in DOSS. They claimed that critical exceptions could be brought into the forum; and hence all parties should be able to realise problems timely; the diagnosis could be better due to many parties being involved.

iii) The Use of the Very Critical Message

Only 'Ping Motor' and 'H.T. Honda' stated that this method should be continued in the community. It allows exceptions to be solved timely. This was because senior staff from the distributor would have more power to control the relevant factors which cause exceptions.

iv) The Need for Video Clips

By considering the distributor's viewpoint, some elements on DOSS may need to be developed. As stated by the distributor, motion picture and sound such as clip videos should be integrated in to DOSS. Specifically, it should demonstrate how to solve the problem of engines or broken spare parts. In this way, the need to send the broken spare part back to the distributor would be reduced; the time spent on the consultation between parties would also be reduced.

v) The Need for a New System for Amending Orders

This suggestion involves two parties, and it is categorised in the frame of technically mediated interpersonal communication. All dealers stated that DOSS should allow dealers to adjust their orders online. Using fax for adjusting orders tended to create more exceptions due to loss of documents.

vi) The Need for a New Accounting Rebate System

'Fresh Honda', 'H.T. Honda', asserted that there is a need to modify the rebate system. As suggested by both, a short sentence along with the codes could solve this problem. With this suggestion, exceptions arising from confusion would be removed.

vii) The Need for Pictures for Ordering Spare Parts

Most dealers suggested it should be integrated with the image and colour, and would help to reduce the confusion. 'V.I.P. Honda' strongly argued that this suggestion can be achieved; in fact, it was already done by the Yamaha network. Moreover, 'Fresh Honda', 'H.T. Honda', suggested that the coding in the rebate system needs to be modified so that their exceptions would be reduced.

Communication via E-mail for Handling Exceptions

All dealers suggested that most information should be exchanged via the Internet. Dealers disagreed about the use of fax which is not a reliable method to exchange information. Fax should be employed only when the information cannot be exchanged via the Internet. Likewise, postal mail should be used only for official letters. Most dealers asserted that using the Internet may prevent exceptions due to document loss, which regularly happens in traditional practices. Also, the Internet would allow them to receive information at real time speed; this would positively impact on exception

management. In this case, 'V.I.P Honda' made the interesting point that postal mail should be used only to carry out a formal confirmation after the information has been already exchanged via the Internet.

New E-practices for Community for Handling Exceptions

New e-practices to handle exceptions were also proposed during the interviews. These practices included the use of *(i) video conferences, (ii) text-based chat programs,* and *(iii) Web-cameras.*

i) The Use of Video Conferences

Video conference should be employed to handle exceptions. 'Ping Motor' and 'Fresh Honda' suggested that this method would promote real-time communication. They claimed that this practice usually involved several parties. If the agenda involved exceptions, this practice would assist parties to diagnose the problems more precisely and rapidly.

ii) The Use of Text-based Chat Programs

According to the distributor and 'Ping Motor', a text-based chat program could be adopted to exchange information instantly. This dealer suggested that the practice would allow partners to solve exceptions more rapidly; it allows parties to send digital file instantly while the parties are in contact. 'Ping Motor' further claimed the following.

> *"This practice would allow us to contact the distributor easier. At the moment, it is very hard to call the coordinators; they 'sometimes' are on the phone with others when we call them. If the chat program was used, it would solve this problem as it allows us to be in contact. We may chat about some issues of exception via this method. Although this tool may not completely solve this problem, it still can be seen as another alternative method of communication".*

iii) The Use of Web-cameras

'Ping Motor' suggested that Web-camera should be adopted into the business community. This dealer described this point as follows.

> *"This tool could be employed to solve exceptions particularly the technical problems about the motorcycles or spare parts. By using the Web-camera, dealers could show the distributor a broken part. As a result, parties can diagnosis the problem together; the distributor could then give advice more precisely. This practice could reduce exceptions between parties by reducing the time in which both parties make a consultation. In some cases, moreover, the dealers may not need to send the broken objects back to the distributor".*

5.6 Summary

This chapter presents the findings from the first qualitative study consisting of participant observation, and semi-structured interviews. It starts by describing the overview of the first study. The participants and how they related to this study are also described. The participant observations in the form of 'observer as participant' were conducted at two organisations consisting of a distributor, and dealer; this was to identify existing collaborations between all parties. To explore the main research questions, semi-structured interviews were conducted by investigating seven organisations in the Honda motorcycle network in Thailand. The focus was on collaboration with reference to non-coercive power, trust, and exception handling. The results show that non-coercive power, trust and exception handling would enhance the collaborative efforts between the distributors and dealers in most aspects. In addition to this, non-coercive power could positively impact on the level of trust and the effectiveness of exception handling in some aspects. The findings also confirm that both human collaboration and e-collaboration can be used to enhance the level of trust, and to handle exceptions in the relationship between the distributor and dealers.

The results from the first study were used to design the questionnaire. The purpose for using the questionnaire survey was to minimise the variation of results occurring during the interviews. The next chapter presents the result of that survey.

Chapter 6

Results from the Second Study

6.1. Introduction

This chapter presents results from the survey which was conducted to obtain the dealers' perspectives in the context of this research. It was grounded in the qualitative study and aimed to minimise the variation of information deriving from the interviews. *The overall objective was not to get exact findings, but to seek evidence for making a decision on qualitative issues.* At this stage, the distributor's perspective was ignored since its opinion obtained from the interview was clear. The second study was based on the assumption that all dealers were relatively skilled and knowledgeable about the phenomena studied, otherwise they could not survive in this industry.

The chapter is divided into three main sections. Section 6.2 outlines the approach for this study by focusing on the statistical tools used to analyse the data, and on how the results are presented. Section 6.3 clarifies the demographics of respondents. Section 6.4 describes how the results align with the main research propositions.

6.2 Overview of the Second Study

Despite employing quantitative methods, this research was still essentially grounded in a qualitative approach. All variables used in the chapter were derived from the literature and from information found in the interviews. A few variables including *the use of fax* and *postal mail* were ignored during this study. Although it was possible to integrate these variables into the questionnaire, the option was rejected due to the following reasons:

- the interviews demonstrated clear and comprehensible results regarding these variables;
- it was also understood from common sense that such variables would not produce any effect on the phenomenon studied;
- it would increase the number of questions perhaps causing the questionnaire to be less interesting, and hence would impact on the response rate.

6.2.1 Statistical Analysis

Descriptive statistics were chosen to describe and classify the data. As mentioned in Section 4.4.7, the entire process yielded 180 (37 %) out of 490 questionnaires sent. The questionnaire format consists of multiple choice, true or false, and a 5-point Likert scale. This study therefore dealt with ordinal data (demographic data), nominal data (1= yes, and 0 = no), and rating scales (1= strongly disagree, 2= disagree, 3= moderate, 4 = agree, and 5= strongly agree). The relevant statistical tools were adopted to analyse the data:

- frequency analysis was used to describe the respondents' characteristics, and phenomena studied;
- cross-tabulation was employed to examine the meanings of the demographic information;
- frequency distributions were engaged to identify the degree of impact in the dichotomous data; and
- measure of central tendency (Mean) was applied to make decisions from the rating scales.

All statistical analyses were carried out by using the SPSS software package (Statistical Package for the Social Sciences).

6.2.2 Tables Used for Propositions

Since several tables are presented along with the results for propositions, it is important to specify how each table represents the meaning of analysis.

Tables Used for Propositions 1-3

These tables show the frequency percentages for the variables of interest. The effects of each variable on the phenomenon being studied are also indicated. Since true or false questions (1= yes, and 0 = no) were used for these propositions, the degree of effect for each variable is shown consistently for these questions as 'strong' and 'weak'. The thresholds of the effects are defined as follows;

- *'Weak'* : the percentage of observation is less than 50%
- *'Strong'* :the percentage of observation is 50% or more

Tables Used for propositions 4-11

These tables show the values of mean for the rating scales (1= strongly disagree, 2= disagree, 3= moderate, 4= agree, and 5= strongly agree). To be consistent with the questions, the degree of effect can be indicated as 'very weak', 'weak', 'moderate', 'strong', or 'very strong'. The thresholds for these effects are defined as follows;

- *'Very weak'*: the mean value is less than 1.5
- *'Weak'*: the mean value is in the range of 1.5-2.49
- *'Moderate'*: the mean value is in the range of 2.5-3.49
- *'Strong'*: the mean value is in the range of 3.5-4.49
- *'Very strong'*: the mean value is more than 4.5

Note that the analysis for some propositions shows very strong agreement. The reasons why the results show strong outcomes are examined in the next chapter.

6.3 Demographic Data

The respondents' characteristics are described according to the duration of being dealers, the annual sales target, the duration since adopting the computer into business, and the duration of Internet experience. The general data is shown in Table 6.1, whereas the cross-tabulation on this data can be found in Appendix 2.2. *To simplify the presentation, the results of analysis were rounded to the nearest whole number.*

Table 6.1: Survey data on the relevant demographic of dealers

Characteristics	Group	Cases	Percentages
Dealer Period	1-5 years	63	35%
	6-10 years	57	32%
	11-15 years	42	23%
	16-20 years	14	8%
	More than 20 years	4	2%
Total		180	100%
Annual Sales Target	1-1,000 units	103	57%
	1,001-2,000 units	64	35%
	2,001-3,000 units	7	4%
	More than 3,000 units	5	3%
	Missing data	1	1%
Total		180	100%
Computer Experience	1-5 years	36	20%
	6-10 years	24	13%
	11-15 years	33	18%
	16-20 years	16	9%
	More than 20 years	70	39%
	Missing data	1	1%
Total		180	100%
Internet Experience	1-3 years	35	19%
	4-6 years	50	28%
	7-9 years	31	17%
	10-12 years	61	34%
	Missing data	3	2%
Total		180	100%

At the time of the survey, the majority of respondents had established the dealership with the Honda distributor for less than 20 years. The highest frequency of being dealers was 1-5 years (35%), compared to 6-10 years (32%), 11-15 years (23%), 16-20 years (8%), and more than 20 years (2%). Respondents varied widely in terms of their annual sales targets, which were in the range of 1-1,000 units (57%), followed by 1,001-2,000 units (36%), 2,001-3,000 units (4%), and more than 3,000 units (3%).

The cross-tabulation shows that those who have been dealers for 1-5 years had their sales target in the range of 1-1,000 units (90%), while others conducting business for more than five years had been required to achieve target in the range of 1,001 - 2,000 units. Nearly half (48%) had used computer for more than 15 years. Generally, the cross-tabulation clarified that most dealers started using the Internet by the time they adopted computers to conduct businesses. Nevertheless, those who had used computer for more than 20 years only had experience with the Internet in the range of 10-12 years. The numbers overlap since the Internet just became popular in Thailand in 1996 (Kripanont 2007).

6.4 The Survey Results for the Propositions

This section establishes an understanding of dealers' perspectives according to the values of frequency percentage and mean. In this way, it was expected to provide well-organised and clear reporting on the phenomena studied. The reasons why this approach was adopted were already discussed in Section 4.3.2. *Although some parts of this section refer to the percentages of responses, it should be noted that the details of such values are presented in Appendix 2.3.*

6.4.1 Non-coercive Power to Achieve Collaboration

Most aspects of non-coercive power were seen as relevant by most respondents for the collaborative relationships. The findings are highlighted below.

Table 6.2 : Survey data on non-coercive power to achieve collaboration

Non-coercive Power	Percent of Cases (N=180)	Degree of Effect
Tangible Reward	79%	Strong
Intangible Reward	91%	Strong
Legitimate Reciprocity	98%	Strong
Legitimate Equity	61%	Strong
Legitimate Dependence	91%	Strong
Legitimate Position	47%	Weak
Referent Power	77%	Strong
Expert Power	80%	Strong
Information Power	84%	Strong

Note: the results come from Yes/No questions

From the survey, legitimate reciprocity (98%) was the most important factor that impacted on the collaborative efforts. In contrast, legitimate position appeared to be the least important variable for the collaborative efforts between the parties; the result showed the lowest frequency (47%).

The survey data about these propositions seemed to show strong results. However, the questions used to obtain this data were in a true or false format; and hence, there was more chance for the response to produce a positive outcome, compared to a rating scale question. The reason why a true or false format was used was already discussed in Section 4.4.6.

6.4.2 Non-coercive Power to Enhance Trust

Table 6.3 shows that, excluding tangible reward and legitimate position, most aspects of non-coercive power were more likely to enhance the level of trust between the parties.

Table 6.3: Survey data on non-coercive power to enhance trust

Non-coercive Power	Percent of Cases (N=180)	Degree of Effect
Tangible Reward	43%	Weak
Intangible Reward	86%	Strong
Legitimate Reciprocity	87%	Strong
Legitimate Equity	91%	Strong
Legitimate Dependence	81%	Strong
Legitimate Position	17%	Weak
Referent Power	74%	Strong
Expert Power	87%	Strong
Information Power	72%	Strong

Note: the results come from Yes/No questions

In the survey, legitimate equity (91%) was the most important variable in the context of this proposition. On the other hand, tangible reward (43%) was less likely to increase the level of trust. Similar remarks hold for legitimate position. Of the 180 participants, only 30 claimed that it was important for this issue, with the lowest a frequency of 17 percent.

6.4.3 Non-coercive Power to Handle Exceptions

Most aspects of non-coercive power were seen as relevant by most respondents for handling exceptions.

Table 6.4: Survey data on non-coercive power to handle exceptions

Non-coercive Power	Percent of Cases (N=180)	Degree of Effect
Tangible Reward	63%	Strong
Intangible Reward	76%	Strong
Legitimate Reciprocity	86%	Strong
Legitimate Equity	70%	Strong
Legitimate Dependence	86%	Strong
Legitimate Position	45%	Weak
Referent Power	71%	Strong
Expert Power	71%	Strong
Information Power	71%	Strong

Note: the results come from Yes/No questions

According to the survey, legitimate reciprocity (86%) and legitimate dependence (86%) appeared to be the most important matters for encouraging the parties to handle exceptions. In contrast, legitimate position (45%) was unlikely to be important in those terms. Again, most aspects of non-coercive power seemed to produce strong results due to the same reasons as indicated in Section 6.4.1.

6.4.4 The Importance of Trust

With regard to the relationship between the distributor and dealers, the respondents *strongly agreed* with statements that trust can *(i) reduce complexity, (ii) increase communication,* and *(iii) increase willingness to cooperate* (see Table 6.5).

Table 6.5: Survey data on the importance of trust

Importance of Trust	Mean (5 Highest)	Std. Deviation	Degree of Effect *(Based on mean value)*
Complexity reduction	4.4	.60	Strong
Increasing communication	4.4	.59	Strong
Increasing the willingness to cooperate	4.4	.60	Strong

They addressed the above three issues in exactly the same manner (see Table 6.5). It was assumed that the identical results occurred because the questions on this issue are positioned near the others in the questionnaire (see Appendix 2.1). Because these questions are related to each other, there was a tendency for all respondents to answer in the same direction. The strength of their agreement is underlined by the high values of mean. It is worth nothing that no one strongly disagreed.

6.4.5 Existing Types of Trust

The respondents agreed generally with the statements on the existence of all the relevant types of trust in this community. These included: *(i) personality-based trust, (ii) affect-based trust, (iii) cognition-based trust, (iv) calculative-based trust,(v) familiarity-based trust, (vi) knowledge-based trust, (vii) deterrence-based trust, (viii) institutional-based trust,* and *(ix) integrated trust* (see Table 6.6). The findings are highlighted below.

Table 6.6: Survey data on existing types of trust

Types of Trust	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Personality	4.4	.81	Strong
Affect	4.4	.63	Strong
Cognition	3.7	.83	Strong
Calculative	3.0	.99	Moderate
Familiarity	4.0	1.16	Strong
Knowledge	3.5	.95	Moderate
Deterrence	2.6	1.08	Moderate
Institutional	3.8	.64	Strong
Integrated	4.4	.76	Strong

As shown in Table 6.6, it was clear that the majority of respondents emphasised personality-based trust (Mean= 4.4), affect-based trust (Mean= 4.4), cognition based trust (Mean= 3.7), familiarity-based trust (Mean= 4.0), institutional-based trust (Mean= 3.8), and integrated trust (Mean= 4.4). As a result, these types of trust should usually be found in the relationships between the parties. It was assumed that trust can be also based on calculative issues because of its moderate values of mean (3.0). Some types of trust such as knowledge-based (Mean= 3.5) also received a moderate degree of agreement. Also, deterrence-based trust was likely to be found in this business community; the majority of respondents (37%) indicated 'moderate' for this issue. The mean value of 2.6 was also in the range of moderate agreement.

6.4.6 Human Collaboration to Enhance Trust

There was moderate to strong agreement that trust between parties will be enhanced by several practices of human collaboration including *(i) formal meetings, (ii) informal meetings via coordinators, (iii) informal meetings between senior members, (iv) communication via telephone,* and *(v) the use of SMS.*

Formal Meetings to Enhance Trust

Most respondents felt that both the national and regional meetings may improve the level of trust between the parties. The two types of meetings did not differ in terms of enhancing trust. Table 6.7 shows that the mean values of both were also very similar.

Table 6.7: Survey data on the roles of formal meetings to enhance trust

Formal Meetings	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
National meeting	3.7	.99	Strong
Regional meeting	3.9	.96	Strong

Informal Meetings to Enhance Trust

There was a similar pattern of agreement that *(i) informal meetings via coordinators from distributor,* and *(ii) informal meetings between senior staff* will enhance the level of trust between the parties (see Table 6.8). The following section discusses this issue in greater detail.

Table 6.8: Survey data on the informal meetings to enhance trust

Roles of People Involved	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Coordinators:			
Visit dealers regularly			
-Sales	4.0	.94	Strong
-Service	4.0	.91	Strong
-Spare Parts	3.8	.99	Strong
-Safe Riding	3.3	1.05	Moderate
Provide information on their responsibilities			
-Sales	3.8	.97	Strong
-Service	3.9	.95	Strong
-Spare Parts	3.7	1.03	Strong
-Safe Riding	3.2	1.06	Moderate
Provide information beyond their responsibilities			
-Sales	4.6	.66	Very Strong
-Service	3.9	.95	Strong
-Spare Parts	3.7	1.03	Strong
-Safe Riding	3.2	1.06	Moderate
Senior staff from both distributor and dealer visit each other	4.0	0.95	Strong

i) Informal Meetings via Coordinators

As shown in Table 6.8, the respondents believed that trust between the parties will be augmented when all coordinators visit dealers regularly, provide clear and prompt information regarding their responsibilities, and provide extra information beyond their responsibilities (e.g., government policies). Although the results showed similar values of mean, there were some different viewpoints concerning coordinators.

On the matter of enhancing the level of trust, there were higher level of agreement for the role of coordinators from the 'Sales', 'Service', and 'Spare Parts' departments than for those from the 'Safe Riding' department. Regarding the coordinators providing information based on their responsibilities, most respondents supported the idea of those from the 'Service Department' (Mean =3.9), compared to those from the

'Sales Department' (Mean = 3.8), 'Spare Parts Department' (Mean= 3.7), and 'Safe Riding Department' (Mean =3.2). There was a dramatic increase in agreement for the claim that trust will be enhanced when 'Sales' coordinators provide extra information beyond their responsibility. Approximately two-thirds (68%) of respondents *strongly agreed* with this issue; this then resulted in high values of the mean (4.6).

ii) Informal Meetings between Senior Staff

There was moderate to strong agreement that trust between parties will be augmented when all senior staff members visit each other. As shown in Table 6.8, the mean has a relatively high value (4.0). In fact, most respondents (37%) answered 'strongly agree' that this practice generates trust in the relationships.

Communication via Telephone to Enhance Trust

Table 6.9 shows that trust between parties will be improved when the telephone was employed. Most respondents (40%) strongly supported the practice, and this was consistent with relatively high values of mean (4.0).

Table 6.9: Survey data on other human practices to enhance trust

Other Human Practices	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Telephone	4.0	.98	Strong
SMS	3.6	.98	Strong

The Use of Short Messaging Service to Enhance Trust

Table 6.9 also demonstrates the extent of agreement for this practice. Employing SMS could boost the level of trust in the relationship between the distributor and dealers. The largest proportion (41%) indicated 'moderate' on this question, but the decision was based on the mean value (3.6) which is in the range of a strong effect.

6.4.7 E-collaboration to Enhance Trust

This topic examines the extent to which trust between the distributor and dealers is thought to be improved by many practices of e-collaboration. The suggestions included: *(i) the role of DOSS, (ii) the role of communication via e-mail,* and *(iii) the roles of new e-practices for the community* (see Table 6.10). The following section clarifies the findings in regard to this proposition.

Table 6.10: Survey data on e-collaboration to enhance trust

E-practices	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
The role of DOSS			
-Clear and fast information	4.6	.59	Very Strong
-Forum	4.3	.86	Strong
Business topics only	3.3	1.35	Strong
Distributor reply topic	4.4	.76	Strong
Forum confidentiality	4.1	1.06	Strong
-Very Critical Message	4.1	.91	Strong
The role of e-mail			
-Business	3.5	.94	Strong
-Non-business	3.6	1.0	Strong
The role of new e-practices			
-Video Conference	3.5	1.09	Moderate
-Text-based Chat Program	3.7	1.07	Strong
-Web-camera	3.4	1.11	Moderate

Issues Involved with DOSS to Enhance Trust

By and large, most dealers agreed that communication via DOSS will improve the level of trust between the distributor and dealers. Specifically, this will be achieved when DOSS provides clear and fast information, allows parties to exchange opinions in the forum, and enables parties to contact distributor directly using the VCM. Table 6.10 clarifies that all these subjects show relatively high values of mean (4.1-4.6). Additionally, the topics posted on the forum should be limited to only business matters. On this point, there were relatively high values of mean (3.3). The majority

of dealers (54%) also *agreed* that trust will be enhanced if the distributor replies to topics on the forum. The strong agreement here is consistent with the high value of mean (4.4). Almost half (46%) of respondents also *strongly agreed* that the forum should be used without the distributor being able to identify them. Indeed, if the 'IP addresses' are not shown in the forum, trust between parties will be extremely enhanced. This assertion was also supported by high values of mean (4.1).

Communication via E-mail to Enhance Trust

Trust between parties will increase when both business and non-business e-mail were used. As shown in Table 6.10, the levels of support for both are almost identical.

New E-practices for Community to Enhance Trust

Trust between parties would increase if text-based chat programs, video conferences, and Web-cameras were adopted into this industry. Table 6.10 shows the extent of agreement about these issues. In this case, values of mean were used to make a decision on the degree of effect.

6.4.8 The Importance of an Effective Exception Handling

Table 6.11 suggests that an effective handling of exceptions would encourage collaborative efforts between the distributor and dealers. From the survey, almost all respondents (93%) *strongly agreed* on this issue. There was only one dealer (1%) indicating 'moderate', whereas ten dealers (6%) indicated 'agree'. The mean value (4.9) indicated a very high degree of effect.

Table 6.11: Survey data on the importance of exception handling

Importance of Exception Handling	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Improve collaboration	4.9	.27	Very Strong

6.4.9 Existing Exceptions

As explored during the interviews, possible exceptions included: *(i) exceptions involved with the process of delivering products, (ii) exceptions due to lost documents, (iii) exceptions due to unskilled staff from dealers,* and *(iv) exceptions involved with DOSS.* In addition, the literature also identifies that exceptions could be created due to *(v) the mismatch of organisational goals.* As the survey was conducted by integrating all above variables together, the results are presented in relation to all these possibilities (see Table 6.12). The following section discusses this issue in detail. Note that these exceptions and their perspective sources of exception were already discussed in Section 5.5.9.

Table 6.12: Survey data on existing exceptions in the community

Exceptions	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Products:			
-Fail to receive products (uncontrolled)	1.8	1.0	Weak
-Fail to receive products (production)	3.4	1.12	Moderate
-Unmatched Accessories	3.2	1.18	Moderate
-Receive other products	1.9	.95	Weak
Lost Documents:			
-Outside the network	1.9	.93	Weak
-Inside the network	2.7	1.19	Moderate
Lack of knowledge:	2.8	1.01	Moderate
Mismatched goals:	1.4	.67	Very Weak
DOSS:			
-Unable to access	2.6	1.08	Moderate
-Unclear information	2.7	1.06	Moderate
-Lack of useful information	2.9	.91	Moderate
-Confusion for ordering spare-part	3.6	1.20	Strong
-Confusion on rebate code	3.6	1.20	Strong

Exceptions Involved with the Process of Delivering Products

As shown in Table 6.12, the failure to receive products due to uncontrolled variables, and exceptions due to receiving other products might not be the major problems for this business community. Most respondents claimed that these problems are less likely to happen. For example, about half respondents (51% and 44%) claimed that these problems were very rare.

However, the failure to receive products due to production problems was seen to produce exceptions between parties. Also, the survey suggested that exceptions could arise due to the delivery of unmatched accessories (e.g., baskets and mirrors). On average, respondents felt both issues could produce some sorts of exceptions. The mean value was moderate.

Exceptions Due to Lost Documents

On average, exceptions due to loss of documents (both inside and outside the network) did not seem to be a major problem in this business community. For external loss, most respondents (43%) affirmed that this problem is very rare, with relatively low values of mean (1.9). In contrast, although some dealers were concerned about exceptions due to lost documents occurring inside the network, the mean value seemed to be moderate (2.7).

Exceptions Due to Unskilled Staff from Dealers

Exceptions between parties were seen to arise due to low-skilled staff from dealers, especially those involved with operational matters (e.g., mechanics). This was supported by a moderate value of mean (2.8).

The Mismatch of Organisational Goals

Most respondents (68%) *strongly disagreed* that exceptions can arise due to the mismatch of goals between the distributor and dealers. Furthermore, no one at all *strongly agreed* that mismatched goals between parties will cause exceptions, and hence this produced the lowest value of mean (1.4).

Exceptions Involved with DOSS

Most respondents claimed that the inability to access DOSS could cause exceptions between parties. This was confirmed by moderate values of central tendency.

Unclear information provided by DOSS could also produce exceptions in the community. Most respondents felt 'moderate' (46%) in this regard, and this provided the moderate value of mean (2.7).

Exceptions between parties were seen to increase with the confusion of ordering spare parts and the lack of clear information regarding the rebate system. A majority of respondents seemed to suffer from such confusions (Agree = 29%, and Strongly Agree = 26%). There were also relatively high values of mean.

6.4.10 Human Collaboration to Handle Exceptions

There was moderate to strong agreement that exceptions between parties will be handled effectively by all practices of human collaboration raised during the interviews. These practices were the use of: *(i) formal meetings, (ii) informal meetings via coordinators, (iii) informal meetings via senior members, (iv) telephone,* and *(v) SMS.* However, different opinions were presented on some practices. With slight departures from the above outline, the following section discusses the issues of human collaboration for handling exceptions.

Formal Meetings to Handle Exceptions

Both the national and regional meetings were seen to promote the effectiveness of exception handling in this community (see Table 6.13). However, most dealers still focused on the important role of regional meetings. The mean value for the regional meetings showed slightly higher values, compared to those for the national meetings.

Table 6.13: Survey data on the roles of formal meetings to handle exceptions

Formal Meetings	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
National meeting	3.6	1.00	Strong
Regional meeting.	3.9	.93	Strong

Informal Meetings to Handle Exceptions

For this community, the survey data show that the informal meetings comprise *(i) the informal meetings via coordinators from distributor,* and *(ii) the informal meetings between senior staff.*

1) Informal Meetings via Coordinators

The respondents generally agreed that exceptions between parties will be handled effectively when coordinators from all distributor departments visit dealers regularly, provide clear and prompt information regarding their responsibility, and provide extra information beyond their responsibilities. The overall results show moderate and strong values of mean (see Table 6.14). However, there were some different perspectives. This point is discussed below.

Table 6.14: Survey data on the roles of coordinators to handle exceptions

Roles of People Involved	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Coordinators:			
Visit dealers regularly			
-Sales	3.4	.99	Moderate
-Service	3.7	.95	Strong
-Spare Parts	3.6	1.02	Strong
-Safe Riding	3.2	.97	Moderate
Provide information on their responsibilities			
-Sales	4.3	.99	Strong
-Service	4.2	.80	Strong
-Spare Parts	4.2	.83	Strong
-Safe Riding	3.5	.95	Strong
Provide information beyond their responsibilities			
-Sales	4.3	.78	Strong
-Service	3.9	.91	Strong
-Spare Parts	3.8	.92	Strong
-Safe Riding	3.3	.98	Moderate
Senior staff from both distributor and dealer visit each other	3.8	.90	Strong

In essence, most respondents emphasised the role of coordinators from the 'Sales Department', 'Service Department', and 'Spare Parts Department', whereas those from the 'Safe Riding Department' seemed be overlooked. Specifically, most respondents had merely 'moderate' feelings regarding the roles of the 'Safe Riding' coordinators (Mean = 3.2, 3.5, and 3.3). Regarding the role of providing information based on their responsibilities, most respondents emphasised the importance of coordinators from the 'Sales Department' (Mean = 4.3), compared to those from all the others. Furthermore, exceptions between the parties would be handled in effective ways when the coordinators provide extra information beyond their responsibility. This applied especially to the 'Sales' coordinators (Mean = 4.3).

2) Informal Meetings between Senior Staff

In regard to the role of senior staff, many respondents (39%) *agreed* that senior members from all organisations need to visit each other regularly. Table 6.14 summarises the survey result in this context. The mean value was also relatively high (3.8).

Communication via the Telephone to Handle Exceptions

Some respondents (40%) *agreed* that the telephone can be used to handle exceptions. Table 6.15 shows moderate to high values of mean.

Table 6.15: Other human practices to handle exceptions

Other Practices	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
Telephone	3.8	.89	Strong
SMS	3.8	.92	Strong

The Use of Short Messaging Service to Handle Exceptions

Similarly, respondents supported the idea that SMS could be used to handle exceptions between parties. This assertion was also supported by the strong value of mean as shown in Table 6.15.

6.4.11 E-collaboration to handle Exceptions

According to the interviews (see Section 5.5.11), exception handling in the relationship between the distributor and dealers could be improved by many practices of E-collaboration. The suggestions included the use of: *(i) clear and fast information on DOSS, (ii) the Web-board forum, (iii) video conferences, (iv) text-based chat programs, (v) the VCM, (vi) e-mail,* and *(vii) Web-cameras.*

Table 6.16: Survey data on e-collaboration to handle exceptions

E-collaboration	Mean (5 Highest)	Standard Deviation	Degree of Effect *(Based on mean value)*
The role of DOSS			
-Clear and fast information	4.3	.73	Strong
- Forum	4.0	.87	Strong
-Very Critical Message	4.0	.91	Strong
-Video Clips	4.3	.78	Strong
- Order System (Adjusting orders)	3.8	1.08	Strong
-Accounting Rebate	4.6	.68	Very Strong
-Pictures for ordering spare parts	4.6	.68	Very Strong
The role of e-mail			
-E-mail only	3.9	1.14	Strong
-Pre-information via e-mail (important issues)	4.2	.73	Strong
The role of other e-practices			
-Text-based Chat Program	3.7	1.05	Strong
-Video Conference	3.7	1.04	Strong
- Web-camera	3.8	1.02	Strong

Practices Involved with DOSS to handle Exceptions

There was general agreement that exceptions could be handled effectively by many practices involved with DOSS. These related to the following specific requirements:

- Clear and fast information,
- communications via the forum,
- communications via the VCM,
- the need for video clips,

- the need to adjust the order amending process,
- the need to clarify the rebate system, and
- the need to modify the spare parts ordering system.

As listed in Table 6.16, most respondents tended to support the view that all the suggested practices would assist parties to handle exception more effectively. The high percentages for strong agreement suggested that two systems in DOSS especially need to be modified: the rebate-code system, and the system for ordering spare parts.

Communication via E-mail to Handle Exceptions

As shown in Table 6.16, most dealers asserted that e-mail could be employed to handle exceptions. Almost half (44%) of respondents claimed that softcopy of important information should be initially sent to dealers before the hardcopy (Mean = 4.2). Some respondents (36%) indicated strong agreement that information should be exchanged only via the Internet (Mean =3.9).

New E-practices for Community to Handle Exceptions

Exceptions between parties would be handled in an effective way if a text-based chat program, video conference, and a Web-camera were adopted into this community. Although almost a majority indicated 'moderate' on the questions of this context, Table 6.15 also shows some positive agreement with the issues supported by strong to very strong values of mean (3.7, 3.7, & 3.8).

6.5 Summary

This chapter presents the results from the survey conducted to obtain the dealers' perspectives to minimise the variation of information obtained during the interviews. It describes the demographic data by highlighting that most dealers established the relationship with the distributors for less than 20 years; their sales targets also varied, but were mostly in the range of 1,000-2,000 units. The data also show that most respondents started to use the Internet at the time they introduced the computer into the business.

On the relevance of the assessing in the propositions, collaboration between the parties was regarded as achievable by all aspects of non-coercive power except for legitimate position. In addition, tangible rewards and legitimate position were seen to be the least important factors for enhancing the level of trust between parties. Further, the data shows that legitimate position also may not help parties to handle exceptions in effective ways from multiple sources. The results show that all types of trust outlined in the literature could be found in this business community. Trust between trading partners tends to be integrated. Trust between the parties tends to be enhanced by various practices of human collaboration, which were all indicated during the interviews. It was also observed that e-collaboration could increase the level of trust even though there were different viewpoints in some respects. In general, most of exceptions were seen to be handled more effectively by both human collaboration and e-collaboration.

The results in this chapter are not the final findings, but will be used in the next stage: the merging of the findings from the first and second studies into a single conclusion. This is the task of the next chapter.

Chapter 7

Findings and Discussion

7.1 Introduction

This chapter aims to address the research propositions which derive from the main research questions. The findings from this research were made by integrating the findings from the interviews and the survey into a single set of conclusions.

The chapter is divided into five main parts. Section 7.2 describes how this research obtained information to address the propositions; it also explains the way in which all summarised data is presented in this chapter. Section 7.3 clarifies the extent of support for propositions from the interviews and survey. In essence, these propositions were identified in Section 3.6.1. Section 7.4 summarises all the key findings based on the main factors of the conceptual framework. Section 7.5 clarifies the issues on whether the findings on human collaboration and e-collaboration can be used in reality. Section 7.6 highlights the contribution to extant knowledge based on the basic approach as proposed by Nøkkentved and Hedaa (2000).

7.2 Extent of Support for Propositions from Interviews and Survey

This chapter examines information to determine whether each of the propositions is accepted or denied. Most information was derived from the interviews (Chapter 5) and the survey (Chapter 6). To address each proposition, the results from both studies were merged into a single set of conclusions. In some cases where the interviews failed to provide enough information to justify the findings, more evidence from the literature was used.

Several tables also augment the discussions of findings. In most cases, the left column of each table indicates variables of interest in the proposition. The last two columns from the right summarise the outcomes from the first and second studies, and identify the degree of effect with which those variables influence on the phenomena in the proposition. The column indicated as the *'result from the first study'* summarises the results from the interviews as presented in Chapter 5. The column indicated as the *'result from the second study'* shows the results from the survey as illustrated in Chapter 6.

7.2.1 Extent of Support for Proposition 1

P1: A collaborative relationship between the distributor and dealers can be achieved by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

This proposition aims to address the first research question: "*how important is non-coercive power in the relationship between a distributor and dealers for achieving a collaborative relationship?*". The information used to address the proposition was derived from Section 5.5.1 and Section 6.4.1. The final outcomes from both studies are summarised in Table 7.1. The relations of finding to this proposition are discussed in greater detail below.

Table 7.1: Data used for proposition 1

Non-coercive Power	Result from the First Study (N=7)	Result from the Second Study (N=180)
Tangible reward	Strong	Strong
Intangible reward	Strong	Strong
Legitimate reciprocity	Strong	Strong
Legitimate equity	Moderate	Strong
Legitimate dependence	n/a	Strong
Legitimate position	Weak	Weak
Referent power	Weak	Strong
Expert power	Strong	Strong
Information power	Strong	Strong

n/a = 'not applicable'

For reward power, both *(i) tangible* and *(ii) intangible* rewards were seen as important mechanisms for collaboration. This was evidenced by the result of the survey which supports the outcome from the interviews. However, there were some exceptions for reward power in the context of this proposition. In particular, money remuneration could be seen as *'the bribe'*; and this could produce negative result in their collaborative relationship. It was found that tangible rewards should be given to dealers without any discrimination. Therefore, it was understood that discriminated rewards may work against collaboration.

Several sets of outcomes were found regarding legitimate power. First, *(i) legitimate reciprocity* would be an essential matter in their collaborative relationship. The data from the survey supported the finding from interviews. This indicates that collaboration between the parties would be improved when they assist each other. Second, *(ii) legitimate equity* would encourage their collaborative relationship. Despite the moderate outcome from the first study, the second study still provided insight for examining this issue. It was concluded that the parties tend to produce collaborative works once they realise that others have worked hard to develop the business community. When they did things that caused pain or difficulty to others,

they would also try to compensate by producing collaborative works. Third, the measures from both studies were inconsistent in terms of *(iii) legitimate dependence*. From the interviews alone, legitimate dependence might not be an important factor. However, information from the survey showed a different outcome. In fact, all interviewees claimed that legitimate dependence *sometimes* positively influences their collaborative efforts. It was concluded that the feeling of social responsibility would increase their collaborative relationship only in *some* situations. Fourth, *(iv) legitimate position* might not enhance their collaborative relationships. Both studies illustrated the weak outcomes which could not support this issue. Generally, it could be understood that collaboration between the parties is not improved when the distributor applied legitimate right to compel the whole community. However, the interview data provided an exception. In fact, a few interviewees still claimed that legitimate right used by the distributor still can benefit the collaborative process for the whole community.

Referent power was seen to improve collaboration between these trading partners. Although nobody explored how referent power impacts on their relationships during the first study, this factor was still integrated into the questionnaire. When conducting the survey, it was interesting to find that referent power also positively influenced their collaborative relationships. Hence, it is believed that these parties work collaboratively as they want to gain approval from others.

Expert and information power improved collaborative efforts between the parties. This is demonstrated by the strong outcomes from both studies. Therefore, all expert advice and required information held by others can assist all involved parties to perform collaborative works.

Overall, most aspects of non-coercive power showed consistently strong outcomes for this proposition. The literature has already demonstrated that non-coercive power positively influences collaborative efforts between parties (Bretherton & Carswell 2002; Doney & Cannon 1997; Frazier & Summers 1986; Hunt & Nevin 1974; Pole & Haskell 2002). Therefore, this research argued that by combining the results and the literature it is likely that non-coercive power will produce strong effects in the phenomena being studied.

7.2.2 Extent of Support for Proposition 2

P2: Trust in the relationship between the distributor and dealers can be enhanced by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

This proposition answers the second research question: *"how does non-coercive power impact on trust in the relationship between a distributor and dealers?"*. To address this proposition, the information was derived from Section 5.5.2 and Section 6.4.2. Table 7.2 summarises the results from both studies. The findings in the context of this proposition are discussed below.

Table 7.2: Data used for proposition 2

Non-coercive Power	Result from the First Study (N=7)	Result from the Second Study (N=180)
Tangible reward	Weak	Weak
Intangible reward	Strong	Strong
Legitimate reciprocity	Strong	Strong
Legitimate equity	Moderate	Strong
Legitimate dependence	Weak	Strong
Legitimate position	Weak	Weak
Referent power	Weak	Strong
Expert power	Strong	Strong
Information power	Strong	Strong

In this regard, *(i) tangible rewards* could improve trust between the parties. Although both studies presented weak results, some exceptions were found during the interviews. In some cases, more valuable entities seemed to produce a negative effect on trust between parties, while less valued entities might produce a positive outcome in this context. In addition, it was clear that *(ii) intangible rewards* are important mechanisms for the parties in terms of improving their trust. The survey results were also corroborated by the interview information.

There were four aspects of findings regarding legitimate power. First, both studies confirmed that *(i) legitimate reciprocity* increased trust between the parties. Hence, trust between them would be augmented once they provide assistance to each other. Second, the results from both measures were inconsistent for *(ii) legitimate equity*. The second study showed that the parties would trust each other once they realised that others have worked hard to develop businesses. Third, *(iii) legitimate dependence* was overlooked during the interviews. However, the outcome from the survey indicated that trust between parties would be improved by the feeling of social responsibility. Fourth, both measures showed weak outcomes for *(iv) legitimate position*. It could be said that trust between these parties may not improve when the distributor uses a legitimate right to control the whole community. However, the interviews still provided an exception. It was noticed that legitimate position *sometimes* enhanced the level of trust.

In the case of referent power, it was possible that the interviewees did not want to talk about the matter. The rationale behind this issue is similar to one indicated in Section 7.2.1 regarding this sort of power. However, the survey showed that referent power also produce positive effects on trust between trading partners. In other words, these partners trusted each other because they wanted to gain approval from others. Nevertheless, it was unclear how each dimension of trust (dependability/reliability, honesty, competence, buyer/seller orientation, and friendliness) was influenced by referent power. This is due to lack of information from the interviews.

Expert power and information power also improved trust between the parties. This was confirmed by the corroborated results from both studies. It was interpreted that trust between these parties would be augmented when all involved parties provide expert advices and/or useful information to each other.

Overall, the findings confirmed that most aspects of non-coercive power strongly impact on the level of trust, and this supported the proposition. Although studies examining the relationship between non-coercive aspects and trust are rare, some other pieces of evidence (e.g., a study by Ratnasingam 2000) also indicate that trust can be established from non-coercive power.

7.2.3 Extent of Support for Proposition 3

P3: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of non-coercive power, which includes reward power, legitimate power, referent power, expert power, and information power.

This proposition aims to examine the third research question: *"how does non-coercive power impact on exception handling in the relationship between a distributor and dealers?"*. Section 5.5.3 and Section 6.4.3 provided information to address this proposition. The summary of data from both measures is illustrated in Table 7.3. The following section explores the findings in the context of this proposition.

Table 7.3: Data used for proposition 3

Non-coercive Power	Result from the First Study (N=7)	Result from the Second Study (N=180)
Tangible reward	Strong	Strong
Intangible reward	Strong	Strong
Legitimate reciprocity	Strong	Strong
Legitimate equity	Strong	Strong
Legitimate dependence	Weak	Strong
Legitimate position	Weak	Weak
Referent power	n/a	Strong
Expert power	Strong	Strong
Information power	Strong	Strong

n/a = 'not applicable'

For reward power, both *(i) tangible rewards* and *(ii) intangible rewards* supported these parties for handling their exceptions. This was confirmed by both studies. Each type of reward would motivate the parties to perform superior works, and/or to avoid mistakes; this then would reduce exceptions in their collaborative efforts.

In terms of legitimate power, there are four sets of conclusions. First, *(i) legitimate reciprocity* would encourage trading partners to handle their exceptions. This statement is supported by strong outcomes from both studies. It was interpreted that these parties would be keen to handle cross-organisational exceptions once they provided assistance to each other. Second, *(ii) legitimate equity* would also be important in the process of exception handling; the data from the survey was consistent with the interview information. Therefore, the majority of parties would handle the exceptions when they recognise that others have worked hard to improve the businesses. When they did things that caused exceptions in the community, they would also compensate by performing superior exception handling processes. Third, in terms of *(iii) legitimate dependence*, the results from both studies were inconsistent. Although the issue was overlooked during the first study, the result from the survey still showed a high-frequency outcome. It was concluded that exceptions in the relationship tend to be handled appropriately because of the feeling of social responsibility. Fourth, *(iv) legitimate position* produced lesser effect in encouraging parties to handle exceptions. This assertion follows from the weak outcomes from both measures. However, the first study provided an exception in this regard; most interviewees claimed that legitimate position could be also important in this context, but only in some situations. In other words, when the distributor uses its legitimate right by forcing the whole community to perform a particular task, this could *sometimes* solve cross-organisational exceptions.

For referent power, the result from the interviews was not clear. The reason why all interviewees indicated 'unsure' about this is also similar to the one indicated for this kind of power in Section 7.2.1. However, the survey data claimed that referent power also influenced the process of exception handling between parties. It was understood that the parties tend to comply with others to handle inter-organisational exceptions since they wanted to gain approval from each other.

For expert and information power, the outcome from the second study confirmed the finding from interviews. Consequently, knowledge and useful information held by others would provide insights into the parties on how to handle cross-organisational exceptions.

Hence, the findings indicated support for the proposition. This was probably because the issue of non-coercive power was already established as the foundation of business relationships enabling multiple parties to work closely via the principle of coordination (Bretherton & Carswell 2002; Doney & Cannon 1997; Frazier & Summers 1986; Hunt & Nevin 1974; Pole & Haskell 2002). Cross-organisational exception handling is similarly based on the principle of coordination (Luo 2001; Luo et al. 2002; Luo et al. 1998). Consequently, non-coercive power tended to highly influence exception handling processes between the parties.

7.2.4 Extent of Support for Proposition 4

P4: Trust in the relationship between the distributor and dealers can reduce the complexity, increase the level of communication, and increase the willingness to cooperate.

This proposition aims at answering the fourth research question: *"how important is trust in the relationship between a distributor and dealers for achieving a collaborative relationship?"*. The information from Section 5.5.4 and Section 6.4.4 was applied in this section. The comparison of outcomes from both studies is shown in Table 7.4. The following paragraphs discuss the findings in greater detail.

Table 7.4: Data used for proposition 4

Importance of Trust	Result from the First Study (N=7)	Result from the Second Study (N=180)
Complexity reduction	Strong	Strong
Increasing communication	Moderate	Strong
Increasing the willingness to cooperate	Strong	Strong

According to the first study, trust between the parties tended to improve their collaborative relationship in several ways. All these findings are consistent with the literature. The survey result was almost consistent with findings from the interviews. The results were theoretically significant because these three issues were already confirmed as crucial in other contexts (Lane 2000; Osborn & Hagedorn 1997;

Schaffer 2004). For this research, generally, it can be said that trust between the parties would *(i) reduce complexity in the relationship, (ii) increase the communication* and, *(iii) increase the willingness to cooperate.*

However, considering the interviews information carefully, all participants seemed to focus on the role of trust for *increasing the willingness to cooperate*. The findings on this proposition were then proposed by merging the results of both studies. Overall, there was a tendency in which trust would *(a) increase the willingness to cooperate* at the outset, followed by other roles of trust such as *(b) reducing complexity* and *(c) increasing communications*. In this community, however, the finding went against the statement proposed by Schaffer (2004); he claimed that trust initially *(a) decreases complexity* and *(b) increases the level of communication*; this then *(c) produces the willingness to cooperate*. It is not known why the result from this Thai motorcycle community is different from his study.

7.2.5 Extent of Support for Proposition 5

P5: Existing types of trust in the relationship between the distributor and dealers are based on personality-based trust, affect-based trust, cognition-based trust, calculative-based trust, familiarity-based trust, knowledge-based trust, deterrence-based trust, institutional-based trust, and integrated trust.

This proposition seeks evidence to answer the fifth research question: *"what are the existing types of trust in the relationship between a distributor and dealers?"*. The information from Section 5.5.5 and Section 6.4.5 is useful to clarify the findings. Table 7.5 summarises the data used for addressing this proposition. The following findings regarding existing types of trust between these parties are discussed as follows.

Table 7.5: Data used for proposition 5

Types of Trust	Result from the First Study (N=7)	Result from the Second Study (N=180)
Personality	Weak	Strong
Affect	Weak	Strong
Cognition	Strong	Strong
Calculative	Weak	Moderate
Familiarity	Strong	Strong
Knowledge	Moderate	Moderate
Deterrence	Weak	Moderate
Institutional	Weak	Strong
Integrated	Strong	Strong

During the interviews, only four types of trust were identified. They included: *(i) cognition-based trust, (ii) familiarity-based trust, (iii) knowledge-based trust,* and *(iv) integrated trust.* However, the second study is partly inconsistent with the first; it claims that all types of trust exist in the community. In essence, analysis of the survey indicated strong outcomes for *(i) personality-based trust, (ii) affect-based trust, (iii) cognition-based trust, (iv) familiarity-based trust, (v) institutional-based trust,* and *(vi) integrated trust.* In contrast, it indicated a moderate outcome of effect for *(i) calculative-based trust, (ii) knowledge-based trust* and *(iii) deterrence-based trust.* There is a possible reason for the lack of agreement. Because opened-end questions were used during the interviews, it was assumed that the interviewees may feel difficulty in explaining this topic, and hence could miss some important points. In the second study, on the other hand, respondents might find it easier to respond to the issues because all possible choices were outlined in the questionnaire.

The interviews clearly identified how trust has been created by means of cognition-based trust, familiarity-based trust, knowledge-based trust, and integrated trust. Most interviewees claimed that trust tends to be enhanced when they receive information about others from the public media (cognition-based trust) or from other parties (cognition-based trust). Trust also tended to be improved after they had conducted

business together for a long time (familiarity-based trust), or when they had recognised the agreements such as the dealership contract (knowledge-based trust). The survey data further indicated that personality-based trust, affect-based trust, and institutional-based trust would also exist in this community. However, it was unclear how these types of trust were established due to lack of information from the interviews. Applying the literature, it was interpreted that trust between the parties might be obtained from those willing to help. Trust between these parties could involve the emotions that tie parties together regardless of egocentric profit motives; it could be also established due to the norms and rules of the surrounding institution.

The data from the survey indicated the moderate outcomes of effect for calculative-based trust and deterrence-based trust, showing that these two types of trust also tend to exist in this community. Based on the literature, trust between these parties might arise from the outcome of rational calculation by comparing costs against benefits. Trust between parties might be also established because the parties may fear to lose relationships if they do not comply with others.

In brief, the finding supported this proposition. It was concluded that trust between these parties was integrated trust. This type of trust is created from various reasons and includes all above-mentioned issues. This final conclusion was also proved by the strong outcomes from both studies.

7.2.6 Extent of Support for Proposition 6

P6: Trust in the relationship between the distributor and dealers can be enhanced by means of human collaboration, which relates to the use of a formal meeting, an informal meeting, a facsimile, a telephone, an SMS, and the postal mail.

This proposition derives from the sixth research question: *"what are the factors leading to the use of human collaboration to increase the level of trust in the relationship between a distributor and dealers?"*. To address this proposition, the information was derived from Section 5.5.6 and Section 6.4.6. The extent of support for the proposition is discussed as follows.

Formal Meetings for Enhancing Trust

Both the *(i) national meeting* and the *(ii) regional meetings* were seen as important systems to enhance trust between these parties. Table 7.6 summarises the data from both studies in the context of this proposition. The final results suggested that both national and regional meetings would be important mechanisms which improve their level of trust. However, it was noticed that most interviewees concentrated more on the role of regional meetings. Bearing this in mind, the regional meetings seemed to be more important than the national meeting by only a slightly different degree.

Table 7.6: Data used for proposition 6 on the issue of formal meetings

Types of Meeting	Result from the First Study (N=7)	Result from the Second Study (N=180)
National meeting	Moderate	Strong
Regional meetings	Strong	Strong

Informal Meetings for Enhancing Trust

According to the first study, generally, the informal meetings within this community had proceeded by means of *(i) informal meetings via coordinators from distributor,* and *(ii) informal meetings between senior members.* Based on both studies, these two practices would enhance the level of trust between the parties. The following section discusses this issue in greater detail.

i) Informal Meetings via Coordinators

As shown in Table 7.7, a requirement to increase the number of coordinators from the 'Service Department', 'Spare Parts Department', and 'Safe Riding Department' was proposed during the interviews. This was because most participants needed these coordinators to visit them regularly. However, the survey illustrated the result differently by focusing on the requirement to increase the number of coordinators from the 'Sales Department', 'Service Department', and 'Spare Parts Department'. There should be some reasons behind the differences of these outcomes. It was in doubt whether the coordinators visit each dealer on the same frequency basis. In particular, it is believed that the coordinators from the 'Sales Department' visit the interviewees more frequently. If this is the case, the interviewees could pay less

attention to the role of coordinators from the 'Sales Department' during the interviews. Nonetheless, the outcome decision was still based on the survey result due to more participants being involved. Hence, trust between these parties would increase once the coordinators from the 'Sales Department', 'Service Department', and 'Spare Parts Department' visit dealers more regularly; and this could be achieved by increasing the number of these coordinators. Table 7.7 shows that the informal meetings with coordinators from the 'Safe Riding Department' could also enhance the level of trust, but not as much as those from other departments.

Table 7.7: Data used for proposition 6 on the issue of informal meetings

Roles of People Involved	Result from the First Study (N=7)	Result from the Second Study (N=180)
Coordinators:		
Visit dealers regularly		
-Sales	Moderate	Strong
-Service	Strong	Strong
-Spare Parts	Strong	Strong
-Safe Riding	Strong	Moderate
Provide information on their responsibilities		
-Sales	Moderate	Strong
-Service	Weak	Strong
-Spare Parts	Weak	Strong
-Safe Riding	Weak	Moderate
Provide information beyond their responsibilities		
-Sales	Moderate	Very Strong
-Service	Weak	Strong
-Spare Parts	Weak	Strong
-Safe Riding	Weak	Moderate
Senior staff from both distributor and dealer visit each other	Weak	Strong

During the first study, the connection between trust and the role of coordinators in providing information seemed to be overlooked. Almost all interviewees failed to notice that the coordinators should provide clear information regarding their duties. It was also unclear whether the way in which the coordinators provided extra information (e.g., government policy) beyond their responsibilities can enhance their level of trust. However, the survey result provided new insights into the way to address this issue. It was proposed that trust between the parties would be improved once all coordinators provide clear information regarding their duties. In this regard, the coordinators from the 'Safe Riding Department' would only produce moderate outcomes of effect, while other coordinators would generate a better result in this regard. In addition, trust would be augmented when most coordinators provided extra information beyond their responsibility. With this practice, it was also noticed that trust would be dramatically improved by the role of coordinators from the 'Sales Department', whereas the role of coordinators from the 'Safe Riding Department' would produce moderate satisfaction for the parties.

It was also generally found that the role of coordinators from the 'Safe Riding Department' in terms of enhancing trust seemed to be overlooked. This was probably because their responsibilities are limited to a small area. Hence, they would not have a chance to contribute their knowledge and information regarding their duties, and this could influence the dimension of trust. In other words, other coordinators were more likely to produce a better result because they dealt with dealers on broader issues. However, it was unclear why dealers required coordinators from the 'Sales Department' to provide extra-information beyond their responsibilities. It was inferred that the informal meetings via the coordinators of distributor tend to enhance trust.

ii) Informal Meetings between Senior Members

The results from both studies can be seen in Table 7.7. The second study confirmed that the informal meetings between senior members (from the distributor and dealers) would enhance the level of trust between the parties, but the first study showed only weak evidence to support this suggestion. This research concluded that trust would increase when those senior members visit each other regularly.

Communication via Telephone for Enhancing Trust

During the interviews, the result clearly indicated that trust was increased by the use of the telephone between the parties. The survey result also supported the findings from interviews. The results of both studies are summarised in Table 7.8. Based on both studies, trust between the parties would be improved when the involved parties call each other on a regular basis.

Table 7.8: Data used for proposition 6 on 'other practices'

Other practices	Result from the First Study (N=7)	Result from the Second Study (N=180)
Telephone	Strong	Strong
SMS	Weak	Strong

The Use of Short Messaging Service for Enhancing Trust

The comparison of results from both studies is shown in Table 7.8. Only one interviewee indicated the benefit of SMS in terms of increasing trust. When conducting the survey, however, the outcome indicated that the use of SMS would also enhance trust between the parties. It was suggested that a *'greeting SMS'* should be used more frequently to enhance trust between the parties.

Note that it was clearly found during the first study that trust was not improved by the use of facsimile and postal mail. While these two practices had been used in their collaborative processes, they did not enhance trust in any aspect. Although there was a possibility to include these two practices in the second study, it was rejected since it makes sense that these two practices cannot enhance trust.

To sum up, four practices of human collaboration can be employed to enhance trust. These practices involve the use of *(i) formal meetings, (ii) informal meetings between senior members, (iii) telephone,* and *(iv) SMS.*

7.2.7 Extent of Support for Proposition 7

P7: Trust in the relationship between the distributor and dealers can be enhanced by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'.

This proposition aims to answer the seventh research question: *"what are the factors leading to the use of electronic collaboration to increase the level of trust in the relationship between a distributor and dealers?"*. The information from Section 5.5.7 and Section 6.4.7 was engaged to address this proposition. Generally, several e-practices tend to enhance trust between the parties. These practices relate to *(i) the frame of distribution, (ii) the frame of public discourse,* and *(iii) the frame of technically mediated interpersonal communication.* The summarised data from both studies are shown in Table 7.9. The following section discusses these practices in greater detail.

Table 7.9: Data used for proposition 7

E-collaboration	Result from the First Study (N=7)	Result from the Second Study (N=180)
The role of DOSS		
-Clear and fast information	Moderate	Very Strong
-Forum	Strong	Strong
Business topics only	Moderate	Strong
Distributor reply topic	Weak	Strong
Forum confidentiality	Weak	Strong
-Very Critical Message	Moderate	Strong
The role of e-mail		
-Business	Weak	Strong
-Non-business	Weak	Strong
The role of new e-practices		
-Video conference	Weak	Moderate
-Text-based chat program	Weak	Strong
-Web-camera	Weak	Moderate

Issues Involved with DOSS for enhancing Trust

Some suggestions on how DOSS should be used to enhance trust were explored. These suggestions included: *(1) clear and fast information on DOSS, (2) the use of the Web-board forum,* and *(3) the use of the VCM.*

1) Clear and Fast Information on DOSS

This suggestion is based on the frame of distribution. According to the interviews, this practice might not improve the level of trust between the parties. However, the result of the survey showed a very strong outcome which supports this suggestion. It was interpreted that the ways in which DOSS provides clear and fast information would enhance trust between these parties.

2) The Use of the Web-board Forum

This communication system is categorised in the frame of public discourse. Basically, the results from both studies claimed that this method would enhance the level of trust when these parties use the forum more frequently. On the issue of encouraging the parties to use it more frequently, the information from the first study was unclear. In particular, there was a variation on the types of topics that should be posted in the forum. In contrast, the survey result demonstrated that the topics in the forum should be limited to business matters. In other words, the non-business topics should not be posted in the forum. A restriction to business topics only would encourage the parties to use the forum more frequently; and then trust between the parties would increase. It was surprising that this finding totally contradicted the distributor's perspective. In fact, the distributor believed that the dealers would have used the forum more frequently if any topics were allowed to be posted. In addition, most dealers required the distributor to reply to the topics in text on the forum. They also preferred to use the forum without the distributor being able to identify them; therefore, the 'IP address' shown in the forum should be removed. It could be argued that this suggestion could show lack of trust between the parties; in other words, this anonymity would not be needed if the parties trust each other. However, this research argues that the suggestion would also enhance the level of trust between parties via the sense of openness (honesty).

3) The Use of the Very Critical Message

This practice is based on the frame of technically mediated interpersonal communication. During the first study, the advantage of the VCM in the context of this proposition was almost overlooked. The survey, however, showed that this communication system would generate higher levels of trust between the parties. For this community, it was proposed that this practice should be carried out because it could increase trust between trading partners.

Communication via E-mail for Enhancing Trust

The use of e-mail is based on the frame of technically mediated interpersonal communication. During the interviews, it was quite clear that this practice would develop the level of trust between the parties. However, there was confusion over which types of e-mail generate more trust among the parties. Based on the survey, there was no difference between business and non-business e-mail. Any types of e-mail could augment the level of trust between the parties.

New E-practices for Community for Enhancing Trust

From the interviews, other practices of e-collaboration for enhancing trust were also suggested. These practices included the use of *(i) video conferences, (ii) text-based chat programs,* and *(3) Web-cameras.* Based on theory, the use of video conferences can be categorised in the frame of public discourse. The use of a text-based chat program is analysed by either the frame of public discourse or technically mediated interpersonal communication; it depends on how many people are involved. The use of a Web-camera is categorised in the frame of technically mediated interpersonal communication. Although most interviewees overlooked the importance of these practices in the context of this proposition, the survey result still provided insightful information. It claimed that these practices should be adopted into the community. The ways in which these practices would enhance the level of trust are explained below.

1) The Use of Video Conferences

As this practice would make it easier the dealers to contact the senior staff from the distributor, it could enhance trust via the sense of buyer/seller orientation and friendliness.

2) The Use of Text-based chat Programs

This method would allow all involved parties to be in contact, and hence could increase the level of trust via the sense of buyer/seller orientation and friendliness.

3) The Use of Web-Cameras

This type of communication would enable the involved parties to see each other; hence, trust could be augmented via the sense of friendliness. Moreover, if this practice is used to solve exceptions, then trust via the sense of competence would also be increased.

7.2.8 Extent of Support for Proposition 8

P8: Effective exception handling between the distributor and dealers can assist them to achieve a collaborative relationship.

This section aims to respond the eighth research question: *"how important is effective exception handling in the relationship between a distributor and dealers for achieving a collaborative relationship?"*. The information used in this section was derived from Section 5.5.8 and Section 6.4.8.

According to the interviews, all participants claimed that an effective exception handling is an important factor assisting them to achieve a collaborative relationship. Although the first study showed a positive result, there was some doubt as to whether this truly represented the reality. The issue was further examined in the survey, where the result supported the findings from the interviews. This confirmation of the importance of effective handling of exceptions was in line with the expected results as outlined by Nøkkentved and Hedaa (2000). Therefore, it can be assumed that effective exception handling would reduce some *difficulties* when the parties worked together. This also seemed to manifest at the psychological level by reducing *the degree of*

stress. When stress is reduced, new exceptions tend to decrease, and hence this may *indirectly* improve the collaborative efforts between the parties.

7.2.9 Extent of Support for Proposition 9

P9: Existing types of exceptions in the relationship between the distributor and dealers can be analysed by the perspectives taken on sources of exception, which are random-event, operation errors, design error, dynamic organisation, and political system perspectives.

This section focuses on answering the ninth research question: "*what are the existing exceptions in the relationship between a distributor and dealers?*". To address this proposition, the data was obtained from Section 5.5.9 and Section 6.4.9. Table 7.10 summarises the findings from both studies. The following section discusses these exceptions in greater detail.

Table 7.10: Data used for proposition 9

Exceptions	Perspective on Source	Result from the First Study (N=7)	Result from the Second Study (N=180)
Products:			
-Fail to receive products (uncontrolled)	Random	Weak	Weak
-Fail to receive products (production)	Dynamic	Strong	Moderate
-Unmatched accessories	Operation	Weak	Moderate
-Receive other products	Operation	Weak	Weak
Lost documents:		Strong	n/a
-outside the network	Random	Strong	Weak
-inside the network	Operation/Design	Strong	Moderate
Lack of knowledge:	Operation	Moderate	Moderate
Mismatched goals:	Political	Weak	Very Weak
DOSS:			
-Unable to access	Random	Weak	Moderate
-Unclear information	Design	Weak	Moderate
-Lack of useful information	Design	Weak	Moderate
-Confusion for ordering spare parts	Design	Moderate	Strong
-Confusion on rebate codes	Design	Weak	Strong

For the both studies, the proposition was addressed to: *(i) exceptions involved with the process of delivering products, (ii) exceptions due to lost documents, (iii) exceptions due to unskilled staff from dealers,* and *(iv) exceptions involved with DOSS.* The following section discusses these exceptions in the context of the proposition.

Exceptions Involved with the Process of Delivering Products

The failure to receive or deliver products due to uncontrolled variables (e.g., natural disaster) was not seen as a cross-organisational exception. This conclusion was confirmed by the weak outcomes from both studies. Although there was a chance that some problems due to uncontrolled variables could occur, this was not a major factor which may impact on the collaborative efforts between the parties.

During the interviews, it was disclosed that the failure to receive or deliver products due to production problems tends to cause exceptions between the parties. The data from interviews suggested that the changes in the market caused a mismatch between production and demand, and this generated exceptions (e.g., cancelling products) across the community. Hence, this type of exception was compatible with the 'dynamic of organisation' perspective. The results were also consistent with those of first study.

There was a tendency for the delivery of unmatched accessories to become an exception between the parties. Although most interviewees failed to notice the issue in the first study, the survey results demonstrated a moderate outcome of effect. Specifically, if a motorcycle is delivered with unmatched accessories (e.g., baskets and mirrors), the dealers need to return them to the distributor. At the same time, the distributor also needs to provide them with new accessories. As a result, this was seen as an exception between the parties, and the problem could then undermine their collaboration. According to the first study, this difficulty occurred because of human failure; therefore, it was analysable from the 'operation error' perspective.

According to the first study, dealers sometimes received different products from the ones they ordered. The difficulty between these parties stemmed from the process of swapping the products, and this could be seen as an exception. However, the survey

result claimed that this problem was unlikely to occur. Hence, this was not regarded as a major source of exception between the parties.

Exceptions Due to Lost Documents

The loss of important documents from both inside and outside the community might cause exceptions between the parties. The survey result claimed that it was less likely that a document would be lost outside the network, and therefore this was not a cross-organisational exception. Within the network, in contrast, the survey result indicated that this problem occurred more frequently, and then produced exceptions between the parties. For example, a form for adjusting the orders might need to be faxed again due to the original being lost at the distributor site. According to the first study, these exceptions were analysable from the 'random-event' perspective, the 'operation error' perspective, and/or the 'design error' perspectives.

Exceptions Due to Unskilled Staff from Dealers

Some interviewees claimed that exceptions could be caused by unskilled staff from dealers, and this was supported by the survey data. The unskilled staff members, in particular those involved with the 'Service Department' and 'Spare Parts Department', would generate some cross-organisational exceptions for the community. For instance, an exception could be a delayed period for a consultation between parties on a technical problem regarding engines. Exceptions due to this problem are analysable from the 'operation errors' perspective.

The Mismatch of Organisational Goals

According to both the interviews and the survey, exceptions between the parties were not due to a mismatch of organisational goals.

Note that this finding for the proposition is different from the literature, which asserts that the mismatch of organisational goals is "a normal part of organisational process" (Kammer et al. 2000, p. 271). It is unclear why the final outcome is inconsistent with the literature, but there are some possible explanations. It could be because the distributor has the ability to manipulate the goals of the dealers. This also follows from the imbalance of power between the distributor and dealers; the issue is very

important in Thai culture because the less powerful parties usually follow developments from more the more powerful (see Section 1.10). Another possibility is that all dealers might well understand the goals of community once they signed the dealership contract with the distributor.

Exceptions Involved with DOSS

The first study revealed that *(i) the inability to access DOSS* might produce exceptions in the relationship between the parties, but only to a limited extent. On this point, the survey result showed a stronger but still moderate degree of effect. On balance, the conclusion was that this difficulty tends to cause exceptions between the parties. As the problem is uncontrollable, it is analysable from the 'random-event' perspective.

A few interviewees disclosed that exceptions between parties could be generated from *(ii) unclear information* and *(iii) lack of useful information on DOSS.* Similarly, according to the survey, DOSS failed to provide clear and useful information, and this again tended to produce exceptions between the parties. In particular, according to the interviews, unclear information on DOSS may create a misunderstanding of context, which may in turn cause more serious exceptions. Lack of useful information on DOSS could also impact on the ability of dealers to adjust for changed situations, especially in the market. If the dealers cannot adjust appropriately, then cross-organisational exceptions could be generated (e.g., cancelling orders). Note that there was a tendency in which DOSS failed to provide enough information about competitors; this issue was also explored in depth during an interview session. Exceptions of this type are analysable according to the 'design-error' perspective.

Several interviewees claimed that the *(iv) confusion for purchasing spare parts* would cause exceptions between the parties. This was confirmed by the survey results. It was understood that the dealers are confused when ordering spare parts through a system which is not integrated with the images and colours of spare parts. The dealers might order a wrong item, and would then have to send it back to the distributor. According to the survey, this was seen as a cross-organisational exception with their collaborative efforts. It was also found that this problem came from mistakes in

designing and implementing the system. In other words, it is analysable from the 'design error' perspective.

The interviews showed that *(v) the confusion in using the rebate system* also tends to produce cross-organisational exceptions. Although only a few interviewees claimed knowledge of this problem, the survey result confirmed that the confusion would also cause exceptions. Hence, the complicated number-alphabet coding system integrated in the rebate system would generate difficulties for dealers, thus producing cross-organisational exceptions. This was because the system used by dealers was incompatible with the system integrated in DOSS. According to theory, this exception is analysable from the 'design error' perspective.

To sum up, exceptions between these parties were based on *(i) random-event, (ii) operation error perspective, (iii) design error,* and *(iv) organisation dynamic.* The most common exceptions seemed to be the confusions for ordering spare parts and the confusions regarding the rebate system. This statement is supported by strong outcomes of effect from the second study.

7.2.10 Extent of Support for Proposition 10

P10: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of human collaboration, which relates to the use of a formal meeting, an informal meeting, a facsimile, a telephone, an SMS, and the postal mail.

This proposition derives the tenth research question: "*what are the factors leading to the use of human collaboration to handle exceptions between a distributor and dealers?*". The information from Section 5.5.10 and Section 6.4.10 was used to address this proposition. The findings in the context of this proposition are discussed and explained below.

Formal Meetings for Handling Exceptions

Both the *(i) national meeting* and *(ii) regional meetings* were the important systems which assist all parties to handle exceptions. Table 7.11 shows that most interviewees concentrated on the important role of regional meetings for generating a better result in terms of exception handling.

Table 7.11: Data used for proposition 10 on the issue of formal meetings

Types of Meeting	Result from the First Study (N=7)	Result from the Second Study (N=180)
National meeting	Moderate	Strong
Regional meeting	Strong	Strong

However, the survey result demonstrated that both types of formal meetings would be important mechanisms for coping with cross-organisational exceptions. It was found that the formal meetings would enable dealers to synchronise their own policies with the main policy of the community, and this would provide guidelines to handle exceptions. In this regard, it was believed that the regional meetings tend to be slightly more important than the national meeting. Most participants focused on the importance of regional meetings during the first study. The main reason was that those who are located in the same area always have similar problems; and hence all the exceptions would be handled more precisely.

Informal Meetings for Handling Exceptions

As mentioned earlier, informal meetings within this community generally take the form of *(1) informal meetings via coordinators from the distributor,* and *(2) informal meetings between senior members.* The survey indicated that both these practices would be important in the process of exception handling across the community. The results from both studies are summarised in Table 7.12. The findings for these topics are discussed below in greater detail.

Table 7.12: Data used for proposition 10 on the issue of informal meetings

Roles of People Involved	Result from the First Study (N=7)	Result from the Second Study (N=180)
Coordinators:		
Visit dealers regularly		
-Sales	Weak	Moderate
-Service	Weak	Strong
-Spare Parts	Weak	Strong
-Safe Riding	Weak	Moderate
Provide information on their responsibilities		
-Sales	Moderate	Strong
-Service	Moderate	Strong
-Spare Parts	Moderate	Strong
-Safe Riding	Moderate	Strong
Provide information beyond their responsibilities		
-Sales	Weak	Strong
-Service	Weak	Strong
-Spare Parts	Weak	Strong
-Safe Riding	Weak	Moderate
Senior staff from both distributor and dealer visit each other	Moderate	Strong

1) Informal Meetings via Coordinators

Only a few interviewees claimed that exceptions would be handled appropriately if the coordinators from the distributor visit them regularly. However, the survey results basically showed that the informal meetings via coordinators tend to assist all parties to handle exceptions. While coordinators from the 'Sales Department' and 'Safe Riding Department' tended to produce only moderate outcomes of effect, those who came from the 'Service Department' and 'Spare Parts Department' played a better role for tackling cross-organisational exceptions. The respondents focused on the role of coordinators from the 'Service Department' and 'Spare Parts Department' because exceptions usually involved these two departments. As claimed in Section 7.2.9, exceptions tended to occur due to unskilled staff from the dealers. In particular, these

people were usually responsible for the duties involved with the 'Service Department' and 'Spare Parts Department'. In summary, the informal meetings via coordinators would allow all parties to exchange useful information, which can assist them in handling exceptions.

Both studies claimed that the ways in which all coordinators provide information regarding their responsibilities would assist dealers to handle exceptions. The reason why this practice supports the parties was also similar to one indicated above. The only difference was that this practice seemed to initially benefit the dealers, and then ultimately reduced exceptions for the whole community. In other words, once the exceptions for dealers were removed, the exceptions for the distributor were also eliminated.

Exceptions tended to be handled effectively when the coordinators provided information beyond their responsibilities (e.g., government policy). The questionnaire result further claimed that exceptions would be handled more appropriately when the coordinators from the 'Sales Department', 'Service Department', and 'Spare Parts Department' provided such information to dealers. For the coordinators from the 'Safe Riding Department', the survey suggested that exceptions could be handled with a moderate degree of effect. The reason why this practice would be important is similar to the reason given above.

It seemed that the role of coordinators from the 'Safe Riding Department' was overlooked in the context of this proposition. The reason behind this was probably similar to why they were overlooked in the context of enhancing trust (see Section 7.2.6).

2) Informal Meetings between Senior Staff

This issue was raised during the first study by only a few dealers. However, the survey result indicated that informal meetings between senior staff of these parties would benefit their exception handling processes. The outcomes from both studies are illustrated in Table 7.12. The informal meetings were seen as the way to exchange useful information which then assisted the parties in this regard. It deals with exceptions at a strategic level rather than an operational level, and the practice would assist parties to cope with exceptions in long term processes.

Communication via Telephone for Handling Exceptions

As shown in Table 7.13, the results from both studies indicated that the telephone is used to handle exceptions. In most cases, this communication system usually needed to cope with day-to-day exceptions. In summary, the use of telephone would be another way to exchange insightful information on how to solve exceptions between trading partners.

Table 7.13: Data used for proposition 10 on 'other practices'

Other Practices	Result from the First Study (N=7)	Result from the Second Study (N=180)
Telephone	Strong	Strong
SMS	Weak	Strong

The Use of Short Messaging Service for Handling Exceptions

Although this method was almost overlooked during the interviews, the survey result still indicated its value in handling cross-organisational exceptions. The comparison of outcomes from both studies can be seen in Table 7.13. At the time of conducting this research, SMS was used to remind the dealers of the due date of payment. Bearing this in mind, an interviewee suggested that it should be also used for other subjects as well. Hence, it was concluded that SMS could be used as a reminder; it would prevent exceptions from the neglect of important duties among the parties.

Note that the use of facsimile and postal mail would not promote the effectiveness of exception handling. Therefore, they were rejected from the proposition, and were not integrated into the second study. The first study clearly identified that these two practices actually create exceptions instead of assisting the parties to handle the problems. Other reasons were also indicated in Section 6.2.

In summary, four types of human collaboration were important for handling cross-organisational exceptions. They involved *(i) formal meetings, (ii) informal meetings, (iii) communication via telephone,* and *(iv) the use of SMS.*

7.2.11 Extent of Support for Proposition 11

P11: Exceptions in the relationship between the distributor and dealers can be handled effectively by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'.

This proposition seeks evidence to answer the eleventh research question: *"what are the factors leading to the use of electronic collaboration to handle exceptions between a distributor and dealers?"*. The information from Section 5.5.10 and Section 6.4.10 was engaged to address this proposition. In general, communication via the Internet should be used to handle their exceptions. These communication practices relate to the frames in the proposition. The outcomes from both studies are summarised in Table 7.14, and discussed below.

Table 7.14: Data used for proposition 11

E-collaboration	Result from the First Study (N=7)	Result from the Second Study (N=180)
The role of DOSS		
-Clear and fast information	Weak	Strong
- Forum	Moderate	Strong
-Very Critical Message	Weak	Strong
-Video clip	Weak	Strong
- Order system (Adjusting orders)	Strong	Strong
-Accounting rebate	Weak	Very Strong
-Picture for ordering spare parts	Moderate	Very Strong
The role of e-mail		
-E-mail only	Strong	Strong
-Pre-information via e-mail (important issues)	Weak	Strong
The role of new e-practices		
-Text-based Chat Program	Weak	Strong
-Video Conference	Weak	Strong
- Web-camera	Weak	Strong

Issues Involved with DOSS for Handling Exceptions

Some recommendations about DOSS were suggested for the purpose of handling exceptions. The following section discusses about these subjects in greater detail.

1) Clear and Fast Information on DOSS

This suggestion is categorised in the frame of public discourse. In contrast to the weak outcome from interviews, the survey result provided insights to address the issue. For example, information should be written in plain language, and variety of material (e.g., data on competitors) should be included in DOSS. In other words, clear, fast, and relevant information would help dealers to handle cross-organisational exceptions.

2) The Use of the Web-board Forum

This practice is also categorised in the frame of public discourse. Although the result from interviews was weak, the strong outcome from the survey supported the practice. The use of a forum would benefit all involved parties for the following reasons. First, the dealers could bring the issues involved with exceptions into the forum; several parties may then provide their opinions on how to tackle these matters, and hence the diagnosis would be more helpful due to many parties providing the ideas. Second, other parties would also recognise exceptions via the forum; and hence other possible problems could be avoided or tackled.

3) The Use of the Very Critical Message

This practice is based on the frame of technically mediated interpersonal communication. Only a few interviewees saw the role of the VCM in terms of handling exceptions. However, the survey result claimed that this system was benefiting dealers. Exceptions seemed be solved quickly when dealers require the distributor to help them via the use of the VCM. This was because the senior members from the distributor are always involved with exceptions raised by this method, and they have the power to control the relevant factors. Once the problems of each dealer are removed, then exceptions between trading partners would also decrease.

4) The Need for Video Clips

This practice is based on in the frame of public discourse. In contrast to the weak outcome from the first study, the second study showed the strong outcome that contributed to the final decision. Therefore, this practice would probably generate some advantages in terms of exception handling. As the practice had never been used, it should be adopted into the community. According to the interviews, video clips should be integrated into DOSS. In particular, they should demonstrate how to solve the problems of engines or broken spare parts. This would reduce exceptions caused by unskilled staff from dealers (see Section 7.2.9). In other words, it would handle exceptions by reducing the need to send the broken items back to the distributor. In most cases, the problems can be fixed at the dealers' site, but the dealers do not know how to do this. The practice would also handle exceptions by reducing the time spent on consultations between the parties regarding these matters.

5) The Need for a New System for Amending Orders

As this practice involves the process of exchanging information between two parties, it is seen as the frame of technically mediated interpersonal communication. Most interviewees claimed that the procedure for adjusting orders should be modified. The distributor should allow the dealers to adjust and/or cancel their orders via DOSS, instead of via fax. The survey result also confirmed the finding from the interviews. Hence, if DOSS allowed the dealers to adjust their orders, exceptions due to lost documents would be reduced, and this would generate a better collaborative practice between the parties.

6) The Need for a New Accounting Rebate System

This suggestion is based on the frame of technically mediated interpersonal communication. Although this issue seemed to be overlooked during the interviews, the survey result strongly indicated that exceptions would be eliminated if the distributor modified its accounting rebate system. This is because the confusions which may cause exceptions would be removed.

7) The Need for Pictures for Ordering Spare Parts

This practice is based on in the frame of public discourse. This suggestion was seen to be important for handling exceptions between the parties, and was supported with strong outcomes from both studies. It was concluded that exceptions between parties would be reduced if DOSS provide images and colours for each spare part. This would reduce confusions in ordering spare parts, and would also remove the problems of ordering the wrong items.

Communication via E-mail for Handling Exceptions

This practice is based on the frame of technically mediated interpersonal communication. Generally, e-mail could be used to handle exceptions between the parties. Some extra suggestions in this regard were also proposed during the interviews. However, there were some variations here which referred to *(1) the use of e-mail,* and *(2) pre-information via e-mail for important issues.*

1) The Use of E-mail

During the interviews, all dealers claimed that most information should be exchanged via e-mail. They disagreed with the use of fax; they felt it should be employed only when the information cannot be exchanged via the Internet. The survey result confirmed the outcome from the first study. Further, the interviews indicated that the parties were concerned about exceptions caused by document loss. They also required faster information which could solve the exceptions due to the dynamic of the market. With the use of e-mail, the above concerns would be removed.

2) Pre-information via E-mail for Important Issues.

This issue was important for the parties for handling exceptions. The combined results of both studies supported this issue. As explored during the interviews, the hard copies sent via the postal system are still needed to convey important messages for retention (e.g., official letters). However, it was suggested that such documents should be initially sent via e-mail; the hard copies should then be sent afterwards. The reasons given for this were also similar to the advantages of the use of e-mail as indicated above.

New E-practices for Community for Handling Exceptions

Other practices to handle exceptions were also proposed during the interviews. These practices included the use of *(i) video conferences, (ii) text-based chat programs,* and *(iii) Web-cameras.* The frame of internet use for all these practices is the same as indicated in Section 7.2.7. Although these practices seemed to be overlooked during the first study, the second study confirmed their importance in the context of the proposition. As these practices had never been used, they should be adopted for the following reasons.

1) The Use of Video Conferences

This practice would allow parties to diagnose the exceptions together, and problems would be tackled more precisely due to several parties being involved. It would also help the parties to handle exceptions because information could be exchanged immediately.

2) The Use of Text-based Chat Programs

Apart from allowing the parties to exchange information instantly, this practice would enable the parties to perform other duties simultaneously. In essence, one party could have communication with another even if both parties are on the phone with others.

3) The use of Web-cameras

This practice could also be used to solve exceptions between the parties. It should be employed to solve technical problems about the motorcycles or spare parts. The dealers can actually show the distributor the broken spare parts; and hence they then can diagnose the problem together. Since these problems can usually be fixed on the dealers' site, the broken items may not need to be sent back to the distributor.

In summary, cross-organisational exceptions would be handled by practices of e-collaboration. These practices covered *(i) issues involved with DOSS, (ii) issues involved with communication via e-mail,* and *(iii) new e-practices for the community.*

7.4 Findings and the Conceptual Framework

Although most variables in the propositions were supported by the findings, some were refuted. In particular, *(i) the use of fax,* and *(ii) the use of postal mail* were rejected from propositions 6 and 10. Although these variables were denied, the relations among the elements of the conceptual framework were still able to be studied, and this provided new insights into the way to address the research problem. In addition, some variables were not completely accepted due to some exceptions found from the first study. The following section summarises the findings in line with the propositions, which can bridge to the research questions (see Table 3.1).

7.4.1 Findings Regarding Non-coercive Power (Propositions 1-3)

Generally, all aspects of non-coercive power were seen to assist the distributor and dealers to achieve a collaborative relationship. It was also understood that these elements tend to enhance trust in the relationship between the parties. The interviewees further claimed that cross-organisational exceptions can be handled effectively by means of such aspects of non-coercive power. Table 7.15 summarises the findings regarding these propositions.

Table 7.15 : Summary of findings regarding non-coercive power in relation to variables of interest

Non-coercive Power	Does such non-coercive power provide beneficial effect on the following elements?		
	Collaboration (P: 1)	Trust (P:2)	Exception Handing (P:3)
Tangible Reward	Yes Conditions Apply	Yes Conditions Apply	Yes
Intangible Reward	Yes	Yes	Yes
Legitimate Reciprocity	Yes	Yes	Yes
Legitimate Equity	Yes	Yes	Yes
Legitimate Dependence	Yes Conditions Apply	Yes	Yes
Legitimate Position	Yes Conditions Apply	Yes Conditions Apply	Yes Conditions Apply
Referent Power	Yes	Yes	Yes
Expert Power	Yes	Yes	Yes
Information Power	Yes	Yes	Yes

This research found that *(i) intangible rewards, (ii) legitimate reciprocity, (iii) legitimate equity, (iv) referent power, (v) expert power,* and *(vi) information power* are the most important aspects for collaboration, trust, and exception handling. It was understand that *(vii) tangible rewards* and *(viii) legitimate dependence* also positively influence the context of these propositions, but only in some situations. In contrast, *(ix) legitimate position* was believed to be the less important for this context.

7.4.2 Findings Regarding Trust (Propositions 4-7)

This research found that trust between the distributor and dealers was seen to reduce the complexity, increase communication, and increase the willingness to cooperate. Existing types of trust between them were seen to be integrated from many factors. Trust between the parties would be enhanced by several types of human collaboration, including the use of *(i) formal meetings, (ii) informal meetings, (iii) telephone,* and *(iv) SMS.*

Trust was also believed to be enhanced by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'. It was found that several e-practices needed to be taken into account so that trust can be enhanced. In essence, they involved the use of *(i) Web-based application, (ii) e-mail, (iii) text-based chat programs, (iv) video conferences,* and *(v) Web-cameras.*

The findings regarding the practices of human collaboration and e-collaboration along with some specific recommendations will be discussed again in Section 7.5.1 and 7.5.2.

7.4.3 Findings Regarding Exception Handling (Propositions 8-11)

In this business community, effective exception handling was thought to assist the parities to achieve a collaborative relationship. It was found that existing types of exceptions between the parties could be classified according to their sources as random-events, operating errors, design errors, and organisational dynamics. It was found that exceptions tend be handled effectively by means of human collaboration, relating to the use of *(i) formal meetings, (ii) informal meetings, (iii) telephone,* and *(iv) SMS.*

Respondents believed that exceptions between the parties would be handled effectively by means of electronic collaboration, which relates to 'the frame of distribution', 'the frame of public discourse', and 'the frame of technically mediated interpersonal communication'. It was believed that the use of *(i) Web-based*

application, (ii) e-mail, (iii) text-based chat programs, (iv) video conferences, and *(v) Web-cameras* would assist the parties to handle exceptions.

The specific recommendations regarding the practices of human collaboration will be clarified again in Section 7.5.1 and 7.5.2 below.

7.5 Findings Regarding Human Collaboration and E-collaboration

This section discusses the likelihood that the relevant parties would accept the findings regarding human collaboration and e-collaboration.

7.5.1 Findings Regarding Human Collaboration

Based on the findings, several types of human collaboration were needed for enhancing trust and for handling exceptions. These practices include the use of *(i) formal meetings, (ii) informal meetings, (iii) telephone,* and *(iv) SMS.* The specific recommendations regarding these practices are summarised in Table 7.16 below. The following section explores how the suggestions can be implemented in the community.

Table 7.16: Summary of findings regarding human collaboration

Human Collaboration	Recommendations for Enhancing Trust	Implications for handling Exceptions
Formal meeting	Employ both regional and national meetings. (regional meetings seem to be slightly more important)	Focus on regional meetings
Informal meeting via coordinators	Focus on the role of coordinators from the following departments : -'Sales Department' -'Service Department' -'Spare Parts Department' (Focus on exchanging variety of information with this practice)	Focus on the coordinators from the following departments. -'Service Department', -'Spare Parts Department'
Informal meeting between senior members	Visit each other more often.	Visit each other more often
Telephone	Call each other on regular basis	Call each other on regular basis
SMS	Send 'greeting SMS'	Use SMS as reminder

For the formal meetings, it could be argued that increasing the frequency of both meetings may be difficult in practice. This is probably because the distributor could have a limited budget to arrange meeting venues. Although the distributor stated that it has already considered increasing the frequency of the formal meetings, this does not mean that both types of meeting will be arranged more often. When it is possible, the distributor may need to consider the regional meetings as the priority. This is mainly because the regional meetings are considered to produce a better outcome in terms of enhancing trust and handling exceptions.

The issue of increasing the number of coordinators could generate some difficulty for the distributor. Although the distributor required the number of coordinators to be increased, it is more likely that the distributor will not employ more coordinators for all departments. This is mainly due to the limited budget for employing more staff. If this is the case, the distributor may need to consider increasing the number of coordinators for only some departments. In particular, the coordinators from the 'Service Department' and 'Spare Parts Department' need to be the focus since exceptions tend to involve these departments.

In terms of informal meetings between senior staff, one could claim that the numbers of senior staff in both parties are not balanced. This task could be difficult for the distributor. However, this research argues that this practice could be achieved in reality. As explored during the interviews, visiting each other a few times a year should be enough to generate a better outcome in the context of this research.

The use of SMS could generate some difficulties for the distributor in practice. However it is believed that its coordinators can handle this task, both for sending greeting SMS and reminding SMS. Hence, there is a possibility that this practice can be achieved in reality.

7.5.2 Findings Regarding E-collaboration

It was found that the use of *(i) Web-based application, (ii) e-mail, (iii) text-based chat programs, (iv) video conferences,* and *(v) Web-cameras* would enhance trust and handle exceptions between the parties. Table 7.17 summarises the findings regarding this issue. The following section highlights *some* issues to clarify the possibility that the suggestions can be achieved in the reality.

Table 7.17 : Summary of findings regarding e-collaboration

E-collaboration	Recommendations for Enhancing Trust	Implications for handling Exceptions
Web-based application	-Provide clear and fast information -Limit the topic on the forum to only business matters -Reply to the topic on the forum by the distributor -Provide confidentiality for the users.	-Provide clear and fast information -Employ the Web-forum for industry -Employ urgent messages from dealers to distributor -Integrate with video clips -Allow all processes involved with ordering system to be completely done online -Provide clear information regarding other systems integrated in the application (e.g., rebate system) -Provide images and colours for ordering spare parts
E-mail	- Use both business and non-business e-mail	-Focus on exchanging information online -Hard copy of important documents are still needed, but they should initially be sent via the e-mail
Text-based chat programs	- Could be adopted	- Could be adopted
Video conferences	- Could be adopted	- Could be adopted
Web cameras	- Should be adopted	- Should be adopted

It is possible that the distributor can introduce a new system for amending orders online. In fact, the use of fax for adjusting orders was designed to help the dealers when DOSS was first introduced into the community. At that time, no one understood the new system. However, the dealers now understand more about DOSS, and would handle this process by themselves.

The distributor can also change the rebate system. Although there are many possibilities for modifying the system, the interviews revealed that the easiest way is to provide a short sentence along with the codes. This practice would be compatible with all procedures used by dealers and can be achieved in reality.

In terms of providing images and colours for ordering spare parts, this practice can also be achieved. As mentioned in Section 5.5.11, the Yamaha network has already implemented this. Honda, however, may need a long time to integrate all pictures and colours of spare parts into the system. This is because there are large numbers of spare parts for Honda.

The practice of text-based chat programs may not be fully adopted by the whole community. This is mainly because the people in this community seem to belong to an older generation, and lack typing skills. In fact, typing in Thai seems to be more difficult, compared to English; there are 76 characters in the Thai language. It is believed that only some dealers can adopt this practice by using it to communicate with the younger staff of the distributor (e.g., coordinators). Hence, this practice could only be an option for communication.

Video conferencing is not likely to be a general practice in the community. It is believed that it will be used only for important issues such as policy-based matters. Also, it is more likely to be used only in situations involving more than two parties. If the issue involve two parties, using the telephone seems to be more convenient.

7.6 Findings and the Fundamental Approach

Since the conceptual framework was developed from the approach suggested by Nøkkentved and Hedaa (2000), it was also important to refer the findings to their proposal. The original framework is given in Figure 3.1. The present research findings show that non-coercive power not only influences the collaborative efforts between parties, but also affects the other factors on the model, including trust and exception handling. Good practices of collaboration are not only influenced by higher levels of trust and the effectiveness of handling exceptions; the role of collaboration also

positively influences these two factors. In other words, the relations here are two-way and reciprocal.

7.7 Summary

This chapter presents the findings of this research about the formulated propositions derived from the main research questions. For each proposition the findings from the interviews and the survey were integrated into a single conclusion. Most data used in this chapter derived from Chapter 5 and Chapter 6, and the literature was engaged to improve the meaning.

All aspects of non-coercive power were seen as important factors for achieving collaborative relationships; they also positively impacted on the level of trust, and on the exception handling processes between the involved parties. The research disclosed that trust would increase the willingness to cooperate, help reduce complexity, and increase communication in the relationship between the parties. Trust between these parties was seen as integrated trust since it was created from various factors. Several factors leading to the use of human collaboration for enhancing trust were also identified. They included the use of formal meetings, informal meetings, telephone, and SMS. The suggestion on how e-collaboration should be employed to enhance trust include the use of Web-based application, e-mail, video conferences, text-based chat programs, and Web-cameras. This research found that an effective exception handling between parties would assist all involved parties to achieve a collaborative relationship. Several types of exceptions were also identified; they were analysable according to the 'random-event' perspective, the 'operation-error' perspective, the 'design error' perspective, and the 'dynamic organisation' perspective. For this community, the confusions regarding the ordering of spare parts and the rebate system seemed to be the most common exceptions. For human collaboration to handle exceptions, it was revealed that formal meetings, informal meetings, a telephone, and an SMS would be beneficial practices in this regard. There were several recommendations for the use of e-collaboration to handle exceptions. These involved the use of Web-based applications, e-mail, video conferences, text-based chat programs, and Web-cameras.

These findings fulfil the aims of this research, and this will be discussed in the next chapter.

Chapter 8

Conclusions and Further Research

8.1 Introduction

This research was developed to address concerns about collaboration in the Thai motorcycle industry. In particular, this problem was raised when a distributor and its dealers used the Internet for conducting business. The basic problem was whether their current collaborative efforts were suitable for all involved parties, and how they could be improved. As collaboration is the focus for tackling this problem, the research was developed around three important factors for achieving collaboration in e-supply networks as proposed by Nøkkentved and Hedaa (2000). These factors are power, trust, and exception handling. The distinction between human collaboration and e-collaboration was also added to their work. This resulted in the building of a conceptual framework (see Figure 3.5) which addresses the issues of (a) how non-coercive power, trust, and exceptions handling impact on the collaborative efforts between a distributor and dealers, (b) how non-coercive power acts on trust and exception handling, (c) the types of trust, and exceptions that exist in the relationships between parties, (d) how human collaboration can be used to promote trust and handle exceptions, and (e) how e-collaboration can enhance the level of trust and handle exceptions. Eleven propositions were then created based on the conceptual framework.

This study used a triangulation approach to obtain the relevant information and consisted of two main studies. The first study involved interviews together with the *'observer as participant'*. While the process of observation was designed to derive the business context, the interviews were engaged to obtained information on the problems of interest. Since there was a great deal of variation from the response of interviews, a second study was carried out in order to get better information in regard

to the dealers' perspectives. The results of both studies were then integrated into a single set of conclusions, which contribute to knowledge and to practical implications.

8.2 Key Findings

This research found that non-coercive power, trust, and effective exceptions handling positively impact on the collaborative efforts between a distributor and dealers. Non-coercive power was also seen as the important issue influencing the level of trust, and the effectiveness of exception handling. In this context, trust between parties is integrated from various factors, whilst the exceptions are analysable from the 'random-event' perspective, the 'operation error' perspective, the 'design error' perspective, and the 'dynamic organisation' perspective. In terms of human collaboration and e-collaboration, several implications helping to enhance trust and to handle exceptions were found. Such human collaboration is improved by the use of formal meetings, informal meetings, telephones, and SMS. On the other hand, practices of e-collaboration are enhanced by the use of Web-based applications, e-mail, text based chat programs, video conferences, and Web-cameras.

8.3 Theoretical Contributions

This empirical research adds to the limited number of prior studies conducted in an e-distribution context. The contribution to knowledge builds on and adds to the basic framework proposed by Nøkkentved and Hedaa (2000). The following pages review the contribution regarding *(1) non-coercive power, (2) trust, (3) exception handling,* and *(4) the basic framework.*

8.3.1 Contributions Regarding Non-coercive Power

This research found that non-coercive power tends to produce positive outcomes in a collaborative relationship between a distributor and dealers conducting business via the Internet. While *(i) intangible reward, (ii) legitimate reciprocity, (iii) legitimate equity, (iv) referent power, (v) expert power,* and *(vi) information power* produce notable effects, *(vii) tangible reward* and *(viii) legitimate dependence* seem to generate moderate outcomes. In contrast, *(ix) legitimate position* produces a lesser desired effect.

Since the study of how non-coercive power impacts on trust and exception handling is rare in the literature, this research also extends the knowledge in this area. The current research concludes that the above-mentioned aspects of non-coercive power will also positively influence the level of trust, and the effectiveness of exception handling for the motorcycle industry in Thailand.

8.3.2 Contributions Regarding Trust

It is revealed that trust between parties is important for enhancing the collaborative relationship in e-distribution networks. The current research argues that trust tends to initially create the willingness to cooperate between all involved parties, which then results in increasing the level of communication and reducing complexity. Simultaneously, trust between parties is also enhanced by good practices of human collaboration and e-collaboration. Specifically, human collaboration between parties is still very important even when parties conduct their businesses by the Internet environment. Bearing this in mind, this research extends the understanding of how e-collaboration can be used in conjunction with human collaboration to enhance the level of trust. Several practices of human collaboration have been identified as important mechanisms to enrich inter-organisational trust. Specifically, these practices involve *(i) formal meetings, (ii) informal meetings, (iii) communication via telephone,* and *(iv) the use of SMS.* Novel ideas were put forward on how e-collaboration can be applied to develop the level of trust. This study claims that that trust between parties can be augmented when parties adopt good practices of e-collaboration. In essence, trust would be improved via the use of *(i) Web-based application, (ii) e-mail, (iii) video conferences, (iv) text-based chat programs,* and *(v) Web-cameras.*

8.3.3 Contributions Regarding Exception Handling

It was confirmed that effective exception handling is also important for achieving collaboration in the outbound side of distribution in e-supply networks. The finding was also consistent with the theory as proposed by Nøkkentved and Hedaa (2000). As the knowledge of cross-organisational exception handling is still limited, the research findings add to the literature.

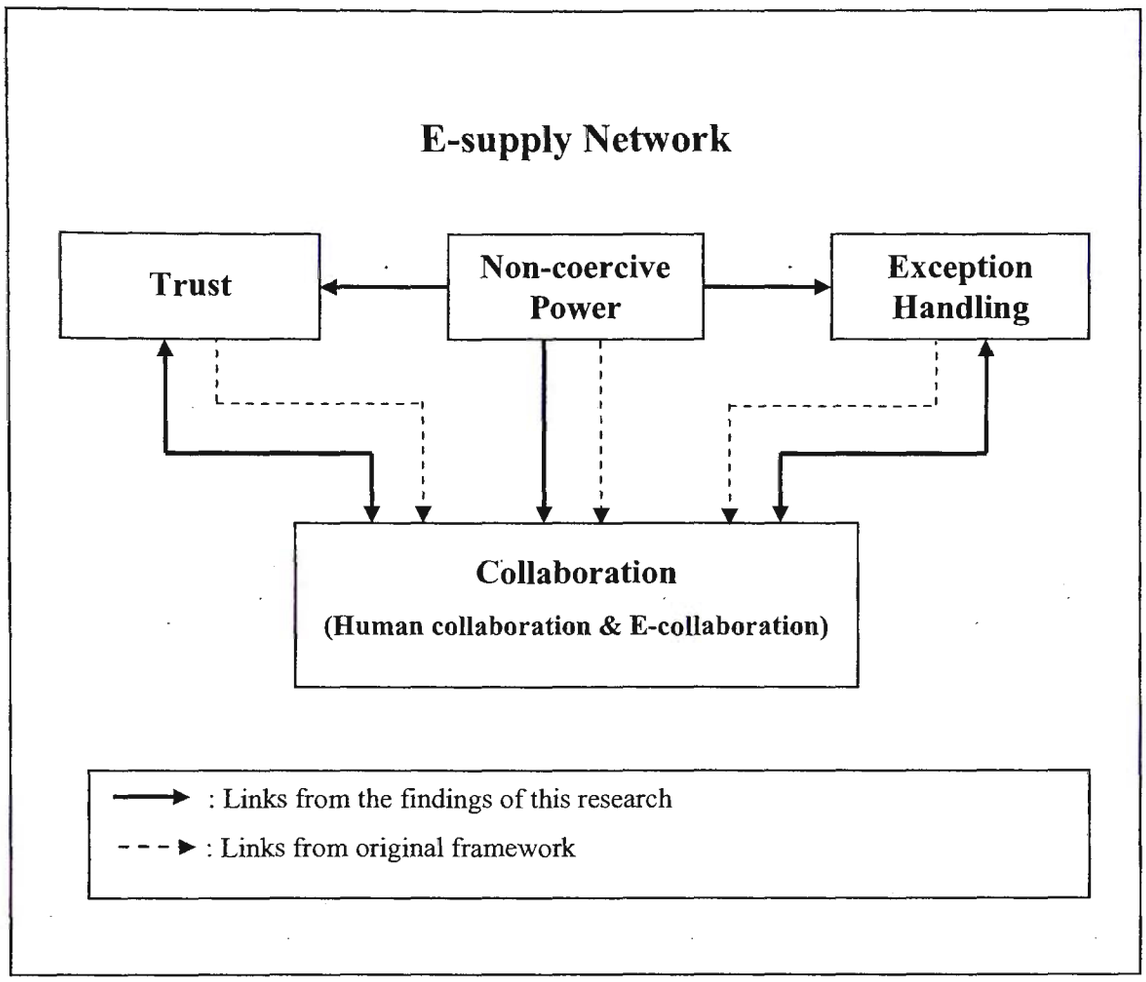
Good practices of collaboration also generate an effective handling of inter-organisational exceptions. It was concluded that the integration of human collaboration and e-collaboration is necessary for handling exceptions once parties conduct business via the Internet. In this regard, several practices of human collaboration need to be taken into account; they include the use of *(i) formal meetings, (ii) informal meetings, (iii) telephones,* and *(iv) SMS.* In terms of e-collaboration, it was found that good practices of such collaborative efforts can help the involved parties to handle cross-organisational exceptions; all these practices relate to the use of *(i) Web-based applications, (ii) e-mail, (iii) video conferences, (iv) text-based chat programs,* and *(v) Web-cameras.*

8.3.4. Contributions Regarding the Basic Framework

This research concludes that all aspects of the three factors are important for achieving collaboration in the outbound side of distribution in e-supply networks. Further, non-coercive power not only influences collaboration; it also affects trust and exception handling between parties. In addition, higher levels of trust and the effectiveness of exception handling not only act on collaboration in a one-way direction; collaboration also positively enhances trust and effective exception handling. Here, the relations are two-way or reciprocal, and this demonstrates a change to the initial framework.

To offer a better understanding on this issue, the conceptual framework was modified to *simplify* the empirical findings. Figure 8.1 shows the revision of concepts found from this study.

Figure 8.1: Findings illustrated by modifying the conceptual framework



Note that non-coercive power works only under the conditions discussed in this thesis. Note also that the framework revision is primarily limited to the motorcycle industry in Thailand, but it is believed to have wider application in countries with a similar culture.

8.4 Practical Implications

This set of implications is relevant for the benefit of the motorcycle industry in Thailand as a whole, not only for the Honda motorcycle network. In particular, the finding in question 6, 7, 10 and 11 (respectively regarding human collaboration and e-collaboration for trust, and both forms of collaboration for exception handling) have clear messages which can be put into practice by their industry members. The scope of this research focuses on non-coercive power in the relationship between all involved parties, but does not propose its possible improvement. For this reason, practical implications regarding non-coercive power are ignored in this section. Only

by understanding the importance of non-coercive power will parties be able to understand the appropriate ways in which they can achieve collaboration.

This research proposes that collaboration between partners in the outbound side of distribution in e-supply networks can add more value beyond simply delivering the products, and this offsets any rationale for disintermediation. Based on this study, human collaboration between partners is still required even when parties conduct their business with the Internet. Once the practices of human collaboration and e-collaboration are integrated, the relationships between all involved parties will be enriched.

8.4.1 Implications of Human Collaboration

Four main practices of human collaboration need to be taken into account when partners conducting the business in the Internet environment. They cover the use of *(i) formal meetings, (ii) informal meetings, (iii) telephones,* and *(iv) SMS.*

Formal meetings should be organised by focusing on the ways in which all partners can share knowledge across the industry. In particular, policy-based knowledge, and a variety of failure scenarios need to be shared during these meeting. Informal meetings via coordinators and senior members are also important. The distributors need to encourage their coordinators to exchange all useful data. Apart from information regarding their duties, these coordinators also need to provide other relevant information. The telephone and SMS must be employed on a regular basis for the purpose of sharing useful information. Although the benefit of these practices for increasing the level of communication is obvious, they can also enhance the level of trust between trading partners.

8.4.2 Implications of E-collaboration

Five main practices regarding e-collaboration need to be considered by parties conducting business via the Internet. These practices are *(i) the use of Web-based applications, (ii) communication via e-mail, (iii) the use of text based chat programs, (iv) the use of video conferences,* and *(v) the use of Web-cameras.*

Communication via the Internet needs to be encouraged within the industry, and good practices of Web-based application are also essential for all parties. The ordering system should allow dealers to completely manage their orders via the application. Information should be also clear in all aspects particularly when it involves a complicated coding system. For the process of ordering spare parts, the images and colours of each item may need to be integrated into the Web-based application. Extra information, which benefits their collaborative efforts, should also be added into such systems. In particular, information regarding the competitors should be more focused. Also, a forum needs to be added into this system; this practice would guarantee that all useful knowledge and opinions can be shared and exchanged among involved parties. The Web-based application must allow dealers to contact the senior staff of the distributor directly; this feature will positively influence the collaborative relationship. Apart from encouraging parties to use e-mail, other practices including the use of text based chat programs, video conferences, and Web-cameras should all be adopted into each network. In brief, the above recommendations can assist all involved parties to handle their exceptions as well as to enhance the level of trust.

8.5 Limitations of the Study

This research faces a number of limitations which should be noted when considering the conclusions.

One limitation of this research is the use of the Honda motorcycle network as the subject for the study. This raises the question of whether this network could adequately present the phenomena of interest. Although this research could have been broadened across the entire motorcycle industry, the time constraint in studying each player was a practical limitation. The research minimised this problem by using the industry market leader as the sample frame, because other players had always followed the developments from Honda in almost every aspect (see Section 5.3.5 and 5.3.7).

Secondly, since the relationships between parties in the context of this research are imbalanced, the results are applicable only for a business community where the degree of power between parties is spread disproportionately. In fact, the findings of

this research apply only to the societies where the power distance between parties are similar to those in Thailand (see Section 1.10). Specifically, the findings can be applied to societies where the less powerful parties accept and expect the power from powerful parties in ways that are similar to Thailand. These societies will be identified in the next section.

8.6 Future Research

The finding of this research provides opportunities for future studies as follows.

First, further research conducted with all players in the industry is required to fully validate the issues regarding a collaborative relationship between a distributor and dealers across the Thai motorcycle industry. Despite the similarity of the collaborative processes among players, it is still worthwhile to compare the collaborative processes of each network against each of the others. It is believed that there are still some differing issues that have not been explored by this study. It is also considered valuable to conduct further research by using dealers who sell more than one brand of product.

Second, since the issue of power has not been completely explored in this study, more work is needed on the issue of *coercive* power in the relationship between the involved parties. Although it is hard to change power regimes in the Thai context, more understanding of coercive power is still required. This will allow parties to consider suitable ways in which they can achieve collaboration. To gain insight into coercive power, other methodologies such as participant observation would be more appropriate. This is because the issue is quite sensitive for this industry.

Third, to gain insight into the issue of collaboration in e-distribution networks, the conceptual framework could be applied to other industries. This would help validate the findings in other e-distribution networks falling under different classification categories. If the results are consistent with these findings, it will strongly validate this conceptual model. This research recommends that the conceptual framework should be applied in the countries where less powerful parties accept and expect the power from more powerful parties in ways that are comparable to Thailand. These

countries include China, Hong Kong, Indonesia, Japan, Malaysia, South Korea, and Taiwan (Hofstede, G.H. & Hofstede 2005).

8.7 Summary

This chapter summarises the key findings of this study. It establishes new knowledge, and suggests possible improvements which all relate to non-coercive power, trust, and exception handling in the relationship between a single distributor and multiple dealers regarding the collaborative process augmented by means of human collaboration and e-collaboration. It puts forward that the above-mentioned factors positively impact on the collaborative process between a distributor and dealers employing the Internet. It also validates that non-coercive power produces positive outcomes towards trust and exception handling in the relationship between parties. In this research, trust between parties was shown to be multi-dimensional; it was built up from various sources. In addition, exceptions between parties were analysable from different perspectives.

This research also establishes new knowledge of how human collaboration can be used to promote trust and to handle exceptions within a collaborative process between a distributor and dealers using the Internet. This requires the use of formal meetings, informal meetings, telephones, and SMS. In addition, the research provides recommendation on how the Internet can enhance trust and handle exceptions when a distributor and dealers conduct their business. In particular, these practices are the use of Web-based applications, communications via e-mail, text-based chat programs, video conferences, and Web-cameras.

The central question in the conceptual framework (see Figure 3.2) asks 'how can collaboration between a distributor and dealers be improved?'

> *A **central claim** of this thesis is that collaboration between a distributor and dealers in the Thai motorcycle industry is augmented when relevant parties use non-coercive power; such collaboration would be improved when it is employed to enhance trust and to handle exceptions.*

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Glossary

Terms Used	Meaning	Authors
Business-to-business (B2B)	The business strategy of an enterprise that has to do with its electronic message exchanges with one or more of its trading partners.	Bussler (2003)
Collaboration	The ways in which persons or communities work together to achieve a common goal or purpose	Shafritz, Koeppe & Soper (1988)
Electronic collaboration	Collaborative efforts between relevant parties via the Internet system	Gharavi, Love & Cheng (2004); Kock (2005); Lee-Kelley, Crossman & Canning (2004)
Electronic supply network	The ways in which a supply network utilises the Internet to facilitate coordination and collaboration among relevant parties	Caputo et al. (2004); Nøkkentved & Hedaa 2000
Human collaboration	Collaborative efforts between relevant parities without the involvement of the Internet media	Cheng et al.(2006)
Web-based application	A commercial software information system allowing specific parties to access business information via the Internet from anywhere at anytime.	Archer & Yuan 2000; Elsend (2002); Lankford (2004)

Appendix 1

Invitation Letter
Interview Questions
Background Interview Data

Appendix 1.1: Invitation letter for the first study

VICTORIA UNIVERSITY | A NEW SCHOOL OF THOUGHT

Dear Sir or Madam,

I am writing this letter requesting permission to conduct an interview at your organisation. I am currently a student undertaking a doctoral degree (Doctor of Business Administration) at Victoria University, Melbourne, Australia. This project is under the supervision of Dr. Ian Sadler

Since the program requires each student to conduct a research paper, I would like to invite you to be a part of my study. The title of this research is "Electronic Distribution Augmented by All Types of Collaboration: A Study between a Distributor and Dealers in the Motorcycle Industry in Thailand". The main purpose of this research is to increase the knowledge and suggest possible improvements which all relate to power, trust and exceptions handling in the collaborative process between a single distributor and dealers employing the Internet for conducting their business.

If you agree to be a participant in the study, you will be asked to participate in an interview and discuss the issues related to the topic of this research. An interview should take about one hour.

As this research will culminate in the production of a thesis, the results will not be published in any business press without your permission. Please also note that individual participants will not be identified in this research.

If you would like to check any of these details, you may contact my supervisor. His contact details are as follows:

Supervisor: Dr. Ian Sadler
Ian.Sadler@ vu.edu.au
+61 3 9919 1279

Yours sincerely,

Anuphak Saosaovaphak
DBA Candidate
Victoria Graduate School of Business
Victoria University
300, Flinders Street, Victoria, Australia
Anuphak.saosaovaphak@research.vu.edu.au
Tel:+61 4 226 95567

Appendix 1.2: Interview guide and questions

Interview Guide

Victoria University of Technology

Thank you for your kindness in agreeing to participate in this study. The main purpose of this research is to increase the knowledge and suggest possible improvements which all relate to power, trust and exceptions handling in the collaborative process between a single distributor and dealers employing the Internet for conducting their business. Your information will be extremely useful in conducting this research.

It should be noted that the interview should take about one hour, focusing on the questions attached to this letter. I would like to ask your permission to audiotape the interview so as to ensure the maximum accuracy in transcribing our conversation.

A number of procedures will be undertaken to ensure confidentiality of the provided information. The first procedure requires you to complete a "consent form" attached to this letter. There is no obligation to participate in this study. It should be noted that you are free to stop at any time during the interview if you feel the material covered is too sensitive.

Additionally, your name or your organisation's name will not be recorded, and interview data will be coded in such a way that others cannot be identified. Lastly, the data from the interview will only be analysed by me. If you need further information regarding the interview, please do not hesitate to contact me. I can be reached via +61-4-226-95567.

Yours sincerely,

Anuphak Saosaovaphak
DBA candidate
Victoria University

1.0 General Information

Date of Interview	
Organisation	
Name of Interviewee	
Position of Interviewee	
Period of working with this organisation	
Responsibility	

Power (Non-Coercive)

2.0 The importance of non-coercive power in the relationship between a distributor and dealers for achieving a collaborative relationship.

- *How important is tangible reward power in the relationship between you and your partner(s) for achieving a collaborative relationship?*
- *How important is intangible reward power in the relationship between you and your partner(s) for achieving a collaborative relationship?*
- *How important is legitimate power in the relationship between you and your partner(s) for a achieving collaborative relationship?*
- *How important is referent power in the relationship between you and your partner(s) for achieving a collaborative relationship?*
- *How important is expert power in the relationship between you and your partner(s) for achieving a collaborative relationship?*
- *How important is information power in the relationship between you and your partner(s) for achieving a collaborative relationship?*

3.0 The impact of non-coercive power on trust in the relationship between a distributor and dealers

- *How does tangible reward power impact on trust in the relationship between you and your partner(s)?*
- *How does intangible reward power impact on trust in the relationship between you and your partner(s)?*
- *How does legitimate power impact on trust in the relationship between you and your partner(s)?*
- *How does referent power impact on trust in the relationship between you and your partner(s)?*
- *How does expert power impact on trust in the relationship between you and your partner(s)?*
- *How does information power impact on trust in the relationship between you and your partner(s)?*

4.0 The impact of non-coercive power on exception handling in the relationship between a distributor and dealers.

- *How does tangible reward power impact on exception handling in the relationship between you and your partner(s)?*
- *How does intangible reward power impact on exception handling in the relationship between you and your partner(s)?*
- *How does legitimate power impact on exception handling in the relationship between you and your partner(s)?*
- *How does referent power impact on exception handling in the relationship between you and your partner(s)?*
- *How does expert power impact on exception handling in the relationship between you and your partner(s)?*
- *How does information power impact on exception handling in the relationship between you and your partner(s)?*

Trust

5.0 The importance of trust in the relationship between a distributor and dealers for achieving collaborative relationship
• *How important is trust in the relationship between you and your partner(s) for achieving a collaborative relationship?*

6.0 Existing types of trust between a distributor and dealers
• *Could you please identify the reasons why you trust your partner (s)?*

7.0 Human collaboration for increasing trust in the relationship between a distributor and dealers
• *How can human collaboration (traditional practices) be employed to increase the level of trust in the relationship between you and your partner(s)?*

8.0 E-collaboration for increasing trust in the relationship between a distributor and dealers
• *How can e-collaboration (e-practices) be employed to increase the level of trust in the relationship between you and your partner(s)?*

Exception Handling

9.0 The importance of effective exception handling in the relationship between a distributor and dealers for achieving collaborative relationship
• *How important is effective exception handling in the relationship between you and your partner(s) for achieving collaborative relationship?*

10.0 Existing exceptions between a distributor and dealers
• *What are the existing exceptions between you and your partner(s)?*

11.0 Human collaboration for handling exceptions in the relationship between a distributor and dealers
• *How can human collaboration (traditional practices) be employed to handle exceptions in the relationship between you and your partner(s)?*

12.0 E-collaboration for handling exceptions in the relationship between a distributor and dealers
• *How can e-collaboration (e-practices) be employed to handle exceptions in the relationship between you and your partner(s)?*

Appendix 1.3: Background Interview Data

The importance of non-coercive power for achieving Collaboration

Organisations	Rewards		Legitimate				Referent	Expert	Information
	Tangible	Intangible	Reciprocity	Equity	Dependence	Position			
Honda Distributor	Yes	Yes	Yes	Yes	Not always	Yes	No	Yes	Yes
Ping Motor	Yes	Yes	Yes	Unsure	Not always	Unsure	No	Yes	Yes
J.R. Honda	Yes	Yes	Yes	Unsure	Not always	Unsure	No	Yes	Yes
Fresh Honda	Yes	Yes	Yes	Unsure	Not always	Yes	No	Yes	Yes
V.I.P Honda	Yes	Yes	Yes	Unsure	Not always	Unsure	No	Yes	Yes
Prince Motorcycle	Yes	Yes	Yes	Yes	Not always	Unsure	No	Yes	Yes
H.T. Honda	Yes	Yes	Yes	Yes	Not always	Unsure	No	Yes	Yes

The impact of non-coercive power on trust

Organisations	Rewards		Legitimate				Referent	Expert	Information
	Tangible	Intangible	Reciprocity	Equity	Dependence	Position			
Honda Distributor	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Ping Motor	Unsure	Yes	Yes	Unsure	No	Unsure	No	Yes	Yes
J.R. Honda	No	Yes	Yes	Not Sure	No	Unsure	No	Yes	Yes
Fresh Honda	Unsure	Yes	Yes	Unsure	No	Yes	No	Yes	Yes
V.I.P Honda	Yes	Yes	Yes	Unsure	No	Unsure	No	Yes	Yes
Prince Motorcycle	Unsure	Yes	Yes	Yes	No	Unsure	No	Yes	Yes
H.T. Honda	Unsure	Yes	Yes	Yes	No	Unsure	No	Yes	Yes

The impact of non-coercive power on exception handling

Organisations	Rewards		Legitimate				Referent	Expert	Information
	Tangible	Intangible	Reciprocity	Equity	Dependence	Position			
Honda Distributor	Yes	Yes	Yes	Yes	Yes	Unsure	No	Yes	Yes
Ping Motor	Yes	Yes	Yes	Yes	No	Unsure	Not always	Yes	Yes
J.R. Honda	Yes	Yes	Yes	Yes	No	Yes	Not always	Yes	Yes
Fresh Honda	Yes	Yes	Yes	Yes	No	Yes	Not always	Yes	Yes
V.I.P. Honda	Yes	Yes	Yes	Yes	No	Unsure	Not always	Yes	Yes
Prince Motorcycle	Yes	Yes	Yes	Yes	No	Unsure	Not always	Yes	Yes
H.T. Honda	Yes	Yes	Yes	Yes	No	Unsure	Not always	Yes	Yes

Existing types of trust

Dimensions of Trust	Types of Trust		
	Cognition-based	Familiarity-based	Knowledge-based
Honesty	Distributor Ping Motor, V.I.P. Honda, Prince Motorcycle, H.T. Honda	Distributor Ping Motor, V.I.P Honda, Prince Motorcycle, H.T. Honda	Ping Motor, V.I.P. Honda, Prince Motorcycle, H.T. Honda
Dependability/Reliability	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	-
Competence	Distributor Ping Motor, J.R. Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	Distributor Ping Motor, J.R. Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	-
Buy/seller orientation	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	-
Friendliness	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	Distributor Ping Motor, Fresh Honda, V.I.P. Honda, Prince Motorcycle, H.T. Honda	-

Formal meetings to increase the level of trust

Organisations	Dimensions of Trust	
	Increase the frequency of national Meeting	Increase the frequency of regional meeting
Honda Distributor	C, B, D, F, H	C, B, D, F, H
Ping Motor	-	B,F
J.R. Honda	-	B,F
Fresh Honda	-	B,F
V.I.P. Honda	B,F	B,F
Prince Motorcycle	-	B,F
H.T. Honda	B,F	B,F

B: Buyer/seller Orientation /**C**: Competence/ **D:** Dependability/reliability **F:** Friendliness/ **H:** Honesty

Coordinators from the 'Sales Department' to increase the level of trust

Organisations	Dimensions of Trust		
	Visit dealers regularly	Provide information on their responsibilities	Provide information beyond their responsibilities
Honda Distributor	B,C	B,C	B,C
Ping Motor	-	B,C,F	B,C,F
J.R. Honda	-	-	-
Fresh Honda	F	-	-
V.I.P. Honda	-	B,C,F	B,C,F
Prince Motorcycle	-	-	-
H.T. Honda	B,D	-	-

B: Buyer/seller Orientation /**C**: Competence/ **D:** Dependability/reliability **F:** Friendliness/ **H:** Honesty

Coordinators from 'other departments' to increase the level of trust

Organisations	Dimensions of Trust		
	Visit dealers regularly	Provide information on their responsibilities	Provide information beyond their responsibilities
Honda Distributor	B,C	B,C	B,C
Ping Motor	B,C,F	B,C,F	B,C,F
J.R. Honda	-	-	-
Fresh Honda	F	-	-
V.I.P. Honda	B,C,F	-	-
Prince Motorcycle	B,C	-	-
H.T. Honda	B,D	-	-

B: Buyer/seller Orientation /**C**: Competence/ **D:** Dependability/reliability **F:** Friendliness/ **H:** Honesty

The role of DOSS to increase the level of trust

Organisations	Dimensions of Trust					
	Clear and fast information	Forum				The use of the VCM
		Unlimited topics	Business topics only	Distributor reply topics	Not show IP address	
Honda Distributor	B,D	B	-	-	-	-
Ping Motor	-	B,D	-	F,B	H	-
J.R. Honda	-	B,C	-	-	-	-
Fresh Honda	B,C	-	B,C	-	-	-
V.I.P. Honda	B	-	B,C	-	-	C,B,H
Prince Motorcycle	-	-	-	-	-	B
H.T. Honda	-	B,C	-	-	-	C,B

B: Buyer/seller Orientation /**C**: Competence/ **D:** Dependability/reliability **F:** Friendliness/ **H:** Honesty

Other e-practices to increase trust

Organisations	Dimensions of Trust			
	E-mail	Video conference	Text-based chat program	Web-camera
Honda Distributor	C,F	-	B	-
Ping Motor	-	F	F	F,C
J.R. Honda	-	-	-	-
Fresh Honda	B,C,F	B,F	-	-
V.I.P. Honda	-	-	-	-
Prince Motorcycle	-	-	-	-
H.T. Honda	-	-	-	-

B: Buyer/seller Orientation /**C**: Competence/ **D:** Dependability/reliability **F:** Friendliness/ **H:** Honesty

Appendix 2

Survey Cover Letter
Questionnaire
Reminding Letter
Survey Data Analysis

Appendix 2.1: Survey Cover Letter and Questionnaire

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<Contact Position>
<Title><Contact_Given_Names><Contact_Surname>
<Oganisations_Name>
<Address>

Electronic Distribution Augmented by All Types of Collaboration: A Study between a Distributor and Dealers in the Motorcycle Industry in Thailand

The purpose of this letter is to seek your participation in a questionnaire survey which is part of the research for the degree of Doctor of Business Administration (DBA) through the Victoria Graduate School of Business at Victoria University, Melbourne, Australia. The main purpose of this research is to increase the knowledge and suggest possible improvements which all relate to power, trust and exceptions handling in the collaborative process between a single distributor and dealers employing the Internet for conducting their business.

Your involvement in this study will entail completing the attached questionnaire which should take about 30 to 45 minutes. The data from the survey will be analysed by me and the survey will be interpreted in a way that others cannot identify your details. It should be noted that this questionnaire is not a test and there are no right or wrong answers.

A number of procedures will be taken to ensure confidentiality of your provided information. All your answers will be treated as confidential. Your name and organisation's name are not asked for in the questionnaire which means that no-one will ever know how you responded to the questionnaire.

A completed reply within the next 10 days would be most appreciated. If you need further information regarding the interview, please do not hesitate to contact me. I can be reached via +61 4 226 95567. However, if you have any questions and wish to have these answered by someone other than myself, please feel free to contact my supervisor Dr. Ian Sadler on +61 3 9919 1279 or Ian.Sadler@ vu.edu.au. You also may contact the Secretary, Human Research Ethics Committee of Victoria University on +61 3 9688 4000.

Yours sincerely,

Anuphak Saosaovaphak.
DBA candidate
Victoria University

Questionnaire Guide

Thank you for your kindness in agreeing to participate in this study. The main purpose of this research is to increase the knowledge and suggest possible improvements which all relate to power, trust and exceptions handling in the collaborative process between a single distributor and dealers employing the Internet for conducting their business. Your provided information will be extremely useful in conducting this research.

In order to understand the questionnaire, there is a need to define the meaning of "**trust**". In this study, "**trust**" could be defined as follows:

- Dependability/Reliability
- Honesty
- Competence
- Buyer/seller orientation
- Friendliness

Yours sincerely,

Anuphak Saosaovaphak
DBA candidate
Victoria University

1.0 Participant's Background

Please indicate you background.

1A) How long have you been using the computer for conducting business?

1-5 years	6-10 years	11-15 years	16-20 years	More than 20 years

1B) How long have you been using the Internet?

1-3 years	4-6 years	7-9 years	10-12 years	More than 12 years

1C)How long have you been a Honda motorcycle dealer?

1-5 years	6-10 years	11-15 years	16-20 years	More than 20 years

1D)What is your yearly target?

1-1000 units	1001-2000 units	2001-3000 units	More than 3001 units

2.0 The importance of non-coercive power in the relationship between a distributor and dealers for achieving collaborative relationship

Please indicate "true" or "false" to the following statements.	True	False
2A) Tangible rewards (e.g., competitive remuneration package) can be considered as a tool to enhance collaboration between a distributor and dealers.		
2B) Intangible rewards (e.g., words of admiration) can be used as a tool to enhance collaboration between a distributor and dealers.		
2C) You are more likely to produce a collaborative relationship if you realise that your partner has worked hard towards developing the business community.		
2D) When your partner helps you, you are more likely to produce a collaborative relationship as the way to return the favor.		
2E) You produce a collaborative relationship with your partner since you believe that it is your social responsibility to do so.		
2F) When your partner asks you to produce a collaborative process, you agree to do so because you believe that your partner has a legitimate right in asking you to do so.		
2G) You produce a collaborative relationship with your partner because you want to be accepted by your partner.		
2H) You produce a collaborative relationship with your partner as a consequence of superior knowledge held by your partner.		
2I) You produce a collaborative relationship with your partner as a consequence of required information held by your partner.		

3.0 The impact of non-coercive power on trust in the relationship between a distributor and dealers

Please indicate "true" or "false" to the following statements.	True	False
3A) Tangible rewards (e.g., competitive remuneration package) can be considered as a tool to increase the level of trust between a distributor and dealers.		
3B) Intangible rewards (e.g., words of admiration) can be used as a tool to increase the level of trust between a distributor and dealers.		
3C) Trust towards your partner is more likely to increase if you realise that your partner has worked hard towards developing the business community.		
3D) When your partner helps you, trust towards your partner is more likely to increase.		
3E) You trust you partner because of social responsibility.		
3F)You trust your partner since your partner has a legitimate right.		
3G) You trust your partner because you want to be accepted by your partner.		
3H) You trust your partner as a consequence of superior knowledge held by your partner.		
3I) You trust your partner as a consequence of required information held by your partner.		

4.0 The impact of non-coercive power on exception handling in the relationship between a distributor and dealers

Please indicate "true" or "false" to the following statements.	True	False
4A)Tangible rewards (e.g., competitive remuneration package) can be considered as a tool to handle exceptions between a distributor and dealers.		
4B) Intangible rewards (e.g., words of admiration) can be used as a tool to handle exceptions between a distributor and dealers.		
4C) You are more likely to produce effective exception handling when you realise that your partner has worked hard in developing the business community.		
4D) When your partner helps you, you are more likely to produce an effective exception handling.		
4E) You produce an effective exception handling due to social responsibility.		
4F) You produce an effective exception handling since your partner has a legitimate right in asking you to do so.		
4G) You produce an effective exception handling because you want to be accepted by your partner.		
4H) You produce an effective exception handling as a consequence of superior knowledge held by your partner.		
4I) You produce an effective exception handling as a consequence of required information held by your partner.		

5.0 The importance of trust in the relationship between a distributor and dealers for achieving a collaborative relationship

Please circle a number to identify the extent to which you agree.

5A) Trust can reduce the complexity in the relationship between a distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

5B) Trust can increase the level of communication between a distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

5C) Trust can increase the willingness to co-operate between a distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6.0 Existing types of trust between a distributor and dealers

Please circle a number to identify the extent to which you agree.

6A) Trust is generated from the willingness to help from your partner.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6B) Trust is generated from the emotional bond between you and your partner regardless of egocentric profit motives.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6C) Trust is the consequence of the rational calculation of the cost and benefit.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6D) Trust is generated from past experience between you and your partner.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6E) Trust is the outcome of rational calculation by comparing cost against benefit.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6F) Trust is created from the amount of information passed in the communication.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6G) Trust is created to sustain the relationship or to avoid threats in the relationship.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6H) Trust is generated by the norms and rules of surrounding society.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

6I) Trust is generated for all the reasons indicated above.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7.0 Human collaboration for increasing trust in the relationship between a distributor and dealers

Please circle a number to identify the extent to which you agree.

Formal Meetings

7A) Trust between a distributor and dealers will increase if the frequency of the national meeting between involved parties increases.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7B) Trust between a distributor and dealers will increase if the frequency of the regional meetings between involved parties increases.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Sales Department'

7C) Trust between a distributor and dealers will be enhanced if coordinators from the 'Sale Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7D) Trust between a distributor and dealers can be improved if coordinators from the 'Sales Department' provide useful information regarding their responsibility (e.g., new competitive campaign) to the dealers rapidly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7E) Trust between a distributor and dealers will be enhanced if coordinators from the 'Sales Department' provide extra information beyond their responsibility (e.g., government policy) to the dealers quickly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Service Department'

7F) Trust between a distributor and dealers will be enhanced if coordinators from the 'Service Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7G) Trust between a distributor and dealers can be improved if coordinators from the 'Service Department' provide useful information regarding their responsibility (e.g., technical knowledge about new model) to the dealers rapidly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7H) Trust between a distributor and dealers will be enhanced if coordinators from the 'Service Department' provide extra information beyond their responsibility (e.g., government policy) to the dealers quickly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Spare Parts Department'

7I) Trust between a distributor and dealers will be enhanced if coordinators from the 'Spare Parts Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7J) Trust between a distributor and dealers can be improved if coordinators from the 'Spare Parts Department' provide useful information regarding their responsibility (e.g., new spare parts) to the dealers rapidly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7K) Trust between a distributor and dealers will be enhanced if coordinators from the 'Department' provide extra information beyond their responsibility (e.g., government policy) to the dealers quickly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Safe Riding Department'

7L) Trust between a distributor and dealers will be enhanced if coordinators from the 'Safe Riding Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7M) Trust between a distributor and dealers can be improved if coordinators from the 'Safe Riding Department' provide useful information regarding their responsibility (e.g., safety riding activities) to the dealers rapidly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

7N) Trust between a distributor and dealers will be enhanced if coordinators from the 'Safe Riding Department' provide extra information beyond their responsibility (e.g., government policy) to the dealers quickly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Senior members from both organisations

7O) Trust between a distributor and dealers will be enhanced if senior members visit each other regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Telephone

7P) Trust between a distributor and dealers will be enhanced if parties call each other regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

SMS

7R) Trust between a distributor and dealers will increase if both parties send SMS greeting to each other on special occasions.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8.0 E-collaboration for increasing trust in the relationship between a distributor and dealers

Please circle a number to identify the extent to which you agree.

DOSS

8A) Trust between a distributor and dealers will increase if information on the Web-based system is clear and is provided with faster speed.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8B) The forum on the Web-based system can be considered as a tool to enhance the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8C) To enhance the level of trust between parties, the forum on the Web-based application needs to be limited to business matters.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8D) To enhance the level of trust between parties, the distributor should reply to the topic on forum.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8E) To enhance the level of trust between parties, the forum on the Web-based application should be confidential. This means that the person giving an opinion will not be identified by others.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8F) Very Critical Message (VCM) can be used to increase the level of trust between parties.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

E-mail

8G) Business e-mail can be used as a tool to increase the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8H) Non-business e-mail (e.g., e-greeting cards) can be used as a tool to increase the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

New e-practices for the industry

8I) 'Video conferences' can be used as a tool to increase the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8J) The text-based chat programs (Chat rooms) can be used as a tool to increase the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

8K) A 'Web-camera' can be used as a tool to increase the level of trust between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

9.0 The importance of effective exception handling in the relationship between a distributor and dealers for achieving collaborative relationship

Please circle a number to identify the extent to which you agree.

9A) Effective exception handling can increase the level of collaboration between a distributor and dealers

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10.0 Existing exceptions between a distributor and dealers

Please circle a number to identify the extent to which you agree.

10A) You fail to receive the products regularly due to uncontrollable problems such as natural disaster.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10B) You fail to receive the products regularly due to the problem of production.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10C) Accessories such as mirrors, baskets do not match the motorcycles, and this happens regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10D) You receive others' products (The product is delivered to a wrong dealer)

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10E) Documents are lost outside the business community, and this happens regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10F) Documents are lost inside the business community industry (either within your organisation or your partner's organisation), and this happens regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10G) Operational staff from your organisation do not have enough knowledge to handle their job so that you need to make a consultation with the distributor regarding the issues.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10H) Exceptions between a distributor and dealers are generated by the mismatch between the goals of your organisation and your partners

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10I) You cannot access DOSS due to the Internet failure, and this happens regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10J) Exceptions between a distributor and dealer are generated by unclear information provided on the Web-based system.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10K) Exceptions between a distributor and dealers are generated by the lack of useful information on the Web-based system.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10L) The confusions for ordering spare parts are generated as there are no spare parts' pictures and colours illustrated in the Web-based application.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

10M) The confusions for asking a rebate from distributor are generated since the rebated-code system used by the distributor is not clear.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11.0 Human collaboration for handling exceptions in the relationship between a distributor and dealers

Please circle a number to identify the extent to which you agree.

Formal meetings

11A) Exceptions between a distributor and dealers will be handled more effectively if the frequency of the national meeting between involved parties increases.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11B) Exceptions between a distributor and dealers will be handled more effectively if the frequency of the regional meetings between involved parties increases.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Sales Department'

11C) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Sale Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11D) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Sales Department' provide useful information regarding their responsibility (e.g., a new competitive campaign) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11E) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Sale Department' provide useful information beyond their responsibility (e.g., government policy) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Service Department'

11F) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Service Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11G) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Service Department' provide useful information regarding their responsibility (e.g., technical knowledge about new models) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11H) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Service Department' provide useful information beyond their responsibility (e.g., government policy) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Spare Parts Department'

11I) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Spare Parts Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11J) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Spare Parts Department' provide useful information regarding their responsibility (e.g., new spare parts) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11K) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Spare Parts Department' provide useful information beyond their responsibility (e.g., government policy) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Coordinators from the 'Safety Riding Department'

11L) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Safe Riding Department' visit dealers regularly or more frequently.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11M) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Safe Riding Department' provide useful information regarding their responsibility (e.g., safety riding activities) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11N) Exceptions between a distributor and dealers will be handled more effectively if coordinators from the 'Safe Riding Department' provide useful information beyond their responsibility (e.g., government policy) to the dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Senior members from both organisations

11O) Exceptions between a distributor and dealers will be handled more effectively if senior members visit each other regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

11P) Exceptions between a distributor and dealers will be handled more effectively parties discuss issues on the phone regularly

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Telephone

11Q) Exceptions between a distributor and dealers will be handled more effectively if both parties call each other regularly.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

SMS

11R) Exceptions between a distributor and dealers will be handled more effectively if both parties make use of SMS.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12.0 E-collaboration for handling exceptions in the relationship between a distributor and dealers

Please circle a number to identify the extent to which you agree.

DOSS

12A) Exceptions between a distributor and dealers will be handled more effectively if a variety of information on the Web-based system is clear and provided with faster speed.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12B) The forum on the Web-based system can be considered as a tool to handle exceptions between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12C) Very Critical Message (VCM) can be used to handle exceptions between involved parties.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12D) 'Video Clip' can be used as a tool to handle exceptions between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12E) In order to reduce exceptions, the process for cancelling order should be done via the Internet.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12F) In order to reduce exceptions, the rebate code systems need to be adjusted (e.g., integrated with a short sentence to explain the meaning of codes).

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12G) To reduce the confusion during the process of ordering spare parts, DOSS should be integrated with the pictures and colour of spare parts.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

E-mail

12H) In order to reduce exceptions between a distributor and dealers all documents need to be exchanged via the Internet. Post-mail and fax should be employed only when documents cannot be sent via the Internet.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12I) In order to reduce exceptions between a distributor and dealers, all important documents need to be sent initially via the Internet. The hard copy of documents could be sent afterwards by traditional postal mail.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

New e-practices for the industry

12J) 'Video conferences' can be used as a tool to handle exceptions between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12K) The text-based chat program (Chat room) can be used as a tool to handle exceptions between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

12L) 'Web-cameras' can be used as a tool to handle exceptions between the distributor and dealers.

Strongly Disagree		Neutral		Strongly Agree	Don't know
1	2	3	4	5	x

Appendix 2.2: Reminding Letter

<Contact Position>
<Title><Contact_Given_Names><Contact_Surname>
<Oganisations_Name>
<Address>

Electronic Distribution Augmented by All Types of Collaboration: A Study between a Distributor and Dealers in the Motorcycle Industry in Thailand

Dear <Contact Position>

A fortnight ago a questionnaire seeking your participation about the above-mentioned issue was mailed to you. Your organisation was included in the population of this study.

If you have already completed and returned the questionnaire, please accept my sincere appreciation. If not, I would be grateful if you could do so today. It is crucially important that data about your organisation's perspective be included in the study.

If you did not receive the questionnaire, or it has been lost, please do not hesitate to contact me via anuphak.saosaovaphak@research.vu.edu.au or +61 4 226 95567 and I will send another questionnaire immediately.

Yours sincerely,

Anuphak Saosaovaphak

Appendix 2.3: Cross Tabulation and Percentages of Responses from the survey

(The results of analysis were rounded to the nearest whole number)

Yearly target and dealership period cross-tabulation

Yearly target		Dealership Period					Total
		1-5 years	6-10 years	11-15 years	16-20 years	More than 20 years	
1-1000 units	Count	57	27	16	1	2	103
	Percent within dealership period	90%	47%	38%	8%	50%	57%
1001-2000 units	Count	5	29	19	9	2	64
	Percent within dealership period	8%	51%	45%	69%	50%	36%
2001-3000 units	Count	1	0	5	1	0	7
	Percent within dealership period	2%	0%	12%	8%	0%	4%
More than 3000 units	Count	0	1	2	2	0	5
	Percent within dealership period	0	2%	5%	15%	0%	3%
Total	Count	63	57	42	13	4	179
	Percent within dealership period	100%	100%	100%	100%	100%	100%

Internet experience and computer experience cross-tabulation

Internet Experience		Computer Experience					Total
		1-5 years	6-10 years	11-15 years	16-20 years	More than 20 years	
1-3 years	Count	15	4	6	3	7	35
	Percent within dealership period	43%	17%	18%	19%	10%	20%
4-6 years	Count	15	4	12	3	16	50
	Percent within dealership period	43%	17%	37%	19%	23%	28%
7-9 years	Count	0	7	5	3	16	31
	Percent within dealership period	0%	29%	15%	19%	23%	17%
10-12 years	Count	5	9	10	7	30	61
	Percent within dealership period	14%	37%	30%	43%	44%	35%
Total	Count	35	24	33	16	69	177
	Percent within dealership period	100%	100%	100%	100%	100%	100%

The percentages of responses regarding the importance of trust

Importance of Trust	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Complexity reduction	-	1%	4%	53%	42%
Increasing communication	-	1%	4%	53%	42%
Increasing the willingness to cooperate	-	1%	4%	53%	42%

The percentages of responses regarding types of trust

Types of Trust	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Personality	-	2%	10%	29%	59%
Affect	1%	-	6%	46%	47%
Cognition	-	4%	43%	34%	19%
Calculative	11%	12%	45%	28%	4%
Familiarity	7%	2%	20%	26%	45%
Knowledge	5%	8%	33%	44%	10%
Deterrence	19%	27%	37%	12%	5%
Institutional	-	1%	28%	58%	13%
Integrated	-	-	16%	24%	60%

The percentages of responses regarding formal meetings to enhance trust

Types of Formal meeting	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
National meeting	3%	3%	38%	31%	25%
Regional meeting	3	2	33%	32%	30%

The percentages of responses regarding informal meetings to enhance trust

Roles of People Involved	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Coordinators:					
Visit dealers regularly					
-Sales	2%	2%	29%	30%	37%
-Service	1%	3%	26%	35%	35%
-Spare Parts	3%	3%	34%	31%	29%
-Safe Riding	7%	10%	51%	17%	15%
Provide information on their responsibilities					
-Sales	2%	5%	35%	30%	28%
-Service	2%	2%	33%	30%	33%
-Spare Parts	4%	3%	38%	27%	28%
-Safe Riding	7%	10%	50%	17%	16%
Provide information beyond their responsibilities					
-Sales	-	-	9%	23%	68%
-Service	2%	2%	33%	30%	33%
-Spare Parts	4%	3%	38%	28%	27%
-Safe Riding	7%	10%	50%	17%	16%
Senior staff from both distributor and dealer visit each other	2%	2%	30%	29%	37%

The percentages of responses regarding other practices of human collaboration to enhance trust

Other Practices	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Telephone	2%	4%	25%	29%	40%
SMS	2%	7%	41%	26%	24%

The percentages of responses regarding e-practices to enhance trust

E-practices	Percent of Cases (N = 180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
The role of DOSS					
-Clear and fast information	-	-	6%	27%	67%
-Forum	1%	2%	14%	31%	52%
Business topics only	14%	12%	27%	22%	25%
Distributor reply topic	1%	1%	10%	34%	54%
Forum confidentiality	3%	5%	22%	24%	46%
-Very Critical Message	1%	2%	27%	29%	41%
The role of e-mail					
-Business	2%	6%	51%	22%	19%
-Non-business	3%	7%	41%	28%	21%
The role of new e-practices					
-Video conference	6%	6%	43%	22%	23%
-Text-based chat program	4%	6%	35%	25%	30%
-Web-camera	7%	8%	42%	22%	21%

The percentages of responses regarding e-practices to enhance trust

Importance of Exception Handling	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Improve collaboration	-	-	1%	6%	93%

The percentages of responses regarding existing exceptions

Exceptions	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Products:					
-Fail to receive products (uncontrolled)	51%	25%	17%	6%	1%
- Fail to receive products (production)	6%	13%	39%	22%	20%
-Unmatched accessories	7%	20%	35%	20%	18%
-Receive other products	44%	30%	19%	6%	1%
Lost Documents:					
-Outside the network	43%	30%	22%	4%	1%
-Inside the network	20%	20%	37%	14%	9%
Lack of knowledge:	12%	24%	42%	18%	4%
Mismatched goals:	68%	23%	7%	2%	-
DOSS:					
-Unable to access	15%	32%	32%	16%	5%
-Unclear information	17%	19%	46%	13%	5%
-Lack of useful information	10%	11%	58%	17%	4%
-Confusion for ordering spare parts	7%	11%	27%	29%	26%
-Confusion on rebate codes	7%	11%	27%	29%	26%

The percentages of responses regarding formal meetings to handle exceptions

Types of Meeting	Percent of Cases (N = 180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
National meeting	3%	7%	37%	30%	23%
Regional meeting	1%	6%	25%	36%	32%

The percentages of responses regarding informal meetings to handle exceptions

Roles of People Involved	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Coordinators:					
Visit dealers regularly					
-Sales	3%	10%	47%	23%	17%
-Service	3%	2%	39%	31%	25%
-Spare Parts	5%	5%	39%	29%	22%
-Safe Riding	4%	14%	54%	15%	13%
Provide information on their responsibilities					
-Sales	1%	2%	14%	31%	52%
-Service	1%	-	20%	37%	42%
-Spare Parts	1%	1%	21%	32%	45%
-Safe Riding	2%	8%	47%	23%	20%
Provide information beyond their responsibilities	1%	1%	16%	38%	44%
-Sales	2%	2%	32%	36%	28%
-Service	2%	2%	36%	32%	28%
-Spare Parts	3%	13%	49%	19%	16%
-Safe Riding					
Senior staff from both distributor and dealer visit each other	1%	5%	33%	39%	22%

The percentages of responses regarding other practices of human collaboration to handle exceptions

Other Practices	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
Telephone	1%	5%	32%	40%	22%
SMS	1%	6%	32%	37%	24%

The percentages of responses regarding e-practices to handle exceptions

E-collaboration	Percent of Cases (N=180)				
	Strongly Disagree	Disagree	Moderate	Agree	Strongly Agree
The role of DOSS					
-Clear and fast information	-	1%	15%	41%	43%
- Forum	1%	3%	24%	38%	34%
-Very Critical Message	1%	3%	29%	32%	35%
-Video clip	1%	1%	16%	37%	45%
- Order system (Adjusting orders)	4%	5%	35%	21%	35%
-Accounting rebate	-	-	9%	28%	63%
-Picture for ordering spare parts	-	1%	9%	23%	67%
The role of e-mail					
-E-mail only	6%	5%	23%	30%	36%
-Pre-information via e-mail (important issues)	1%	2%	21%	32%	44%
The role of other e-practices					
-Text-based chat program	4%	7%	33%	32%	42%
-Video conference	4%	5%	36%	29%	26%
- Web-camera	3%	6%	28%	34%	29%