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RELATIONSHIP DEVELOPMENT IMPACTS ON SMALL SUPPLIERS AND THEIR LARGER CUSTOMERS IN THE TAIWANESE ELECTRONICS INDUSTRY

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ABSTRACT

This study sets out to investigate the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry. More precisely, this research's principal goal is to outline a framework for relationship development of small suppliers and their larger customers in the Taiwanese electronics network. Recent research has shown that small suppliers may face a range of problems in their relationship with larger customers (Blomqvist, 2002; Johnsen and Ford, 2002; Johnsen, 2005). This research examines the relationship development impacts of relationship characteristics of small suppliers and their larger customers on the process of development of these relationships in the Taiwanese electronics industry. The chosen study method involves a phenomenological approach using case studies of the relationships of small suppliers and their larger customers in the Taiwanese electronics industry. Individual in-depth interviews in both customer and supplier firms with directors or managers who have been closely involved in the relationship are employed to collect relevant primary data.

Through the literature review, a classification of relationship characteristics of small suppliers and larger customers is developed and a relationship development stage model identified (Ford, 1980). A conceptual model of the relationship development impacts of relationship characteristics of small suppliers and larger customers on their relationship development process is developed, and guides the empirical study. Five sets of small supplier and larger customer relationships are examined. From each supplier organisation five persons are interviewed e.g. president, managing director, and marketing manager. Also five individuals in each of the customer organisations are interviewed e.g. vice-managing director, purchasing manager and others involved in supplier relationships. In total, there are 50 participants in 49 interviews, (since Case B supplier side had two participants interviewed together). The researcher analyses the findings from these five sets of customer and supplier relationships through the use of analysis matrices.

The premise of this research is to provide a better assessment of the relationship development impacts on the relationship characteristics of small suppliers and their larger customers on the process of relationship development in the Taiwanese electronics industry. It is hoped that this study can benefit small suppliers by developing a set of managerial lessons from the study concerning relationship

development with larger customers in the Taiwanese electronics market. Furthermore, the research provides indicators that different types of relationship development impacts on the relationship characteristics may influence the relationship development process between small suppliers and their larger customers at different stages of relationship.

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To the memory of my father, Gung-Jau Lee,
Who was a great inspiration for me with all the love and support he gave me.

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CHAPTER ONE: INTRODUCTION TO THE THESIS

1.1 Introduction

This research is concerned with some of the critical issues involving the process of development of relationships between small suppliers and their larger customers in the Taiwanese electronics industry. These issues centre on how the relationship development impacts on the small suppliers influence the relationship development process between small suppliers and their larger customers in the Taiwanese electronics market.

This chapter sets out the research background, explains the research aim and objectives, and the structure of the thesis. In brief, this chapter provides an overview of the rationale for the research.

1.2 Background of the Research

1.2.1 Academic Rationale

Academic interest in business networks and the relationships in industrial markets have grown in recent decades. There were a number of initial articles on the distribution channel in the 1960s and 1970s. Then a number of researchers examined internationalisation in the late 1970s or early 1980s (Ford, 2002). A lot of research during the 1980s focused on the existence and importance of customer-supplier relationships in business markets (Ford, 1980; Levitt, 1983; Anderson and Narus, 1984, 1990; Carlton, 1986; Dwyer *et al.*, 1987; Gadde and Mattsson, 1987; Frazier, *et al.*, 1988). The network perspective has, over the last fifteen years, gradually become one of main theories for understanding relationships between enterprises (Håkansson and Snehota, 1989; Håkansson and Johanson, 1993; Anderson *et al.*, 1994).

More recent research has focused on the investigation of the relationship between customers and suppliers where there is a difference in size and importance between the parties (Blomqvist, 2002; Chen and Chen, 2002; Johnsen and Ford, 2004; Johnsen, 2005). Several papers examine the characteristics of the relationship and several papers investigate the relationship development process. A few studies link the relationship characteristics and relationship development process. The present

research is focused on the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry. Network and relationship theory is central to the interpretation of this research. The Industrial Marketing and Purchasing (IMP) literature confirms the significance of lasting customer-supplier relationships. The basic network and relationship perspectives of the IMP literature are derived from the findings of the (Håkansson, 1982; Turnbull and Valla, 1986; Håkansson and Snehota, 1989; Ford, 1990). A similar perspective on the characteristics of relationships and on the relationship development process, is adopted in this thesis.

1.2.2 Rationale for Research on Small Suppliers and Their Larger Customers in the Taiwanese Electronics Industry

Relationships and networking are increasingly important topics in research into customer-supplier relationships. Taiwan is a small country by international standards. Given the constraints imposed by a small domestic market, the development of relationships between customers and suppliers in the electronics sector is of critical importance to the economic growth and development of the country.

Through nearly five decades after the Second World War. Taiwan has promoted itself from an underdeveloped, agricultural island to an economic giant that is a leading producer of high technology goods (Central Bank of China, 2008). At present, Taiwan agriculture constitutes only 3% of the GDP, down from 35% in 1952. Traditional labour-intensive industries are steadily being moved overseas and replaced with more capital and technology-intensive industries. Although the Asian financial crisis had a great impact on Taiwan, the economy continues to expand at about 5% per year (Ministry of Economic Affairs, 2006). Taiwanese industries have been involved in global competition, especially in the manufacturing sector. This situation forced many industries to explore relationship development between supplier and customer in the domestic market, and to examine how they may sustain their inputs as a significant contributor to Taiwan's economic development (Hsiao *et al.*, 2002).

From January 2002 Taiwan became a member of the World Trade Organisation (WTO) and Taiwan had to open up its domestic market and further reduce its tariff rates. The domestic business environment is accordingly becoming more competitive. The development of relationships with larger customers and the contribution of these relationships to economic growth has become a critical issue in

recent years for many small Taiwanese suppliers. Taiwan's economic growth depends on the export of electronic products (Hwang, 2002). For these reasons, this research examines relationship development in the electronics industry of Taiwan between small suppliers and their larger customers.

1.2.3 Definition of Small and Medium-Sized Enterprises (SMEs)

SMEs exist in all the economies in the world; although their relative importance may differ from country to country. There is no single definition of an SME, since the criteria for judging whether an enterprise is "small" will be relative to the characteristics of the economy in each country.

In terms of the number of employee, capital and sales, in the EU, SMEs are companies, which employ between 50 and 249 employees and annual turnover not exceeding EUR 50 million, and/ or an annual balance sheet total not exceeding EUR 43 million (European Commission, 1996).

As far as Taiwan's SMEs are concerned the Small and Medium Enterprise Administration, of the Ministry of Economic Affairs recognises, firms that have legally completed company or commercial registration and meet the following requirements as SMEs (modified in July 2005): (Ministry of Economic Affairs, 2006)

1. In the case of manufacturing, construction, mining and quarrying enterprises, paid-in capital must be less than NT$80 million (around US$2.42 million), or the number of regular employees must not exceed 200.
2. In the case of forestry, agriculture, fishing, animal husbandry, hunting, plumbing, electrical, gas and fuel oil, commerce, transportation, warehousing, courier, finance, insurance, real estate, industrial and commercial service, and personal service enterprise, sales must be less than NT$100 million (around US$3.03 million) for the previous year, or the number of regular employees must not exceed 50.

This research focuses on the relationships between small suppliers and their larger customers in the Taiwanese electronics industry. Therefore, these suppliers will come from the first category of Taiwan's SMEs, namely having employees not exceed 200 and paid-in capital less than NT$80 million (around US$2.42 million).

According to the Hsueh *et al.* (2007), as of 2006, there were over 1.24 million SMEs

in Taiwan, accounting for nearly 97.77% of all business enterprises in the country. The type of industry in which SMEs are involved varies from food to metal. Moreover, the SMEs in Taiwan hold 76.66% of labour market (Ministry of Economic Affairs, 2006). Hsiao *et al.* (2002), conclude that the small and medium sized companies are one of the pillars of Taiwan's economic success.

1.2.4 Defining the Relative Company Size of Small Suppliers and Their Larger Customers

The company relationships were selected for study on the basis of the difference in size between small suppliers and their larger customers. The small suppliers in Taiwan often have less than 200 employees. In this research, small suppliers are selected and defined on the basis of number of employees and turnover rather than paid-in capital.

Small suppliers and their larger customers included in the study are all located in Taiwan and active in the Taiwan domestic market for electronic goods.

1.3 Aim and Objectives

This thesis examines how the relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customer (defined by number of employees and turnover) in Taiwanese electronics industry.

1.3.1 Aim

The aim of this research is to examine the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry.

1.3.2 Objectives

In order to achieve the aim, the following objectives, (derived from the literature review and conceptual framework, and discussed below) have been set.

1. To review the existing published research and frameworks on the relationship characteristics and relationship development process of small suppliers and their larger customers

2. To examine the relationship development impacts of the relationship characteristics on the process of relationship development
3. To explore small suppliers' and their larger customers' approaches to relationship characteristics and relationship development process in the Taiwanese electronics industry
4. To contribute both academic and practical knowledge of the relationship development between small suppliers and their larger customers in the Taiwanese electronics industry

The first objective aims at establishing the current view of the relationship characteristics and relationship development process between small suppliers and their larger customers. This topic has been addressed by IMP Group research. Thus, a review of the existing published research and frameworks for the relationship characteristics and relationship development process of small suppliers and their larger customers will focus on the IMP literature.

The second objective is to review the different types of relationship development impacts that may influence the relationship development process between small suppliers and their larger customers. This objective is investigated through the conceptual framework and construction of links between the relationship characteristics and relationship development process between small suppliers and their larger customers.

The third objective is to explore the relationship development impacts of the relationship characteristics on the process of relationship development in the Taiwanese electronics industry, with the aim that the thesis conclusions and framework developed can be used for future research in relevant research areas.

The final objective is to identify research gaps that can form the basis for recommendations for future research and managerial guidelines for small suppliers in better managing their relationship with their larger customers in the Taiwanese electronics industry.

1.4 Structure of the Thesis

This thesis is divided into nine chapters in the order set out below:

Chapter two explains the cultural and economic context of the electronics industry in

Taiwan. This chapter is to understand and learn about the general background of business in Taiwan, the Taiwanese business culture, and electronics industry in Taiwan. This is including guanxi in the Taiwanese business culture. It helps understand Taiwanese electronics industry as well.

Chapter three consists of the literature review related to this research which includes the network perspective, dyadic relationship perspective, the definitions of the themes, relationship characteristics, relationship development process, and the key concepts related to the relationship between small suppliers and their larger customers.

Chapter four examines the conceptual basis and development of the empirical investigations. The conceptual framework is based on the literature review and the primary research. This chapter identifies the relationship development impacts of the relationship characteristics on the relationship development process between small suppliers and their larger customers. Finally, this chapter concludes by outlining the emerging research questions.

Chapter five considers the research philosophy and methodology. This chapter begins by discussing the philosophical assumptions. The phenomenology was adopted in this research. The research approach, process and strategies are then discussed. The Five in-depth case studies between small suppliers and their larger customers adopted are described, along with the development of data collection methods, research indicators, designing questions, and data analysis methods. Finally, the chapter concludes with a discussion of the research validity and credibility.

Chapter six presents the findings from the five in-depth case studies, using the first case as an initial pilot study. The overall structure in each case follows the conceptual framework. Each case is discussed in the same structure and format in terms of company profiles, relationship characteristics, relationship development impacts, and relationship development process. Conclusions and reflections are drawn on each case in sequence.

Chapter seven reports the cross-case analysis. This chapter provides an overview of the main findings from the five case studies. The analysis builds on the empirical findings from the case comparisons and identifies patterns emerging from the research. Finally, this chapter also integrates the reflections on the results into a

revised conceptual framework which may be useful for future development and investigation.

Chapter eight is to investigate the research data from the relationship development impacts on small suppliers. This chapter focuses on the novelty of the section on impacts. It discusses the relation of the findings more strongly to the literature and the wider theoretical literature. The outcome of this chapter leads to the completion of the finalised conceptual framework.

Chapter nine is the final chapter and presents the conclusions from the research. This includes the discussion and reflections on the research questions set out at the end of Chapter Four. The chapter then discusses contributions to knowledge, managerial implications, limitations of the research strategy, and recommendations for future research.

1.5 Conclusions

This chapter outlines the motivation and rationale for this research into the main relationship development impacts of the characteristics of the relationship between small suppliers and their larger customers in the Taiwanese electronics industry on the relationship development process. This chapter also presents the local definition of SMEs adopted, to classify small suppliers, and indicates with brief explanations, the four objectives, derived from the research aim. The research is motivated by an academic concern, based on the special importance of SMEs in the Taiwanese electronic industry (Hwang, 2002). Previous research has investigated the relationship characteristics and relationship development process between small suppliers and their larger customers, but there is a lack of research into the link between relationship characteristics and the relationship development process, especially in the specific context of the Taiwanese electronics industry. Thus, the aim of the thesis is to examine the relationship development impacts on small suppliers and their larger customers in this context.

CHAPTER TWO: THE CULTURAL AND ECONOMIC CONTEXT OF THE ELECTRONICS INDUSTRY IN TAIWAN

2.1 Introduction

The previous chapter outlines the topic of this research, presenting the background of the research, and the aim objectives and structure of the thesis. The purpose of the present chapter is to examine the particular context and characteristics of the electronics industry in Taiwan, including the general background of business in Taiwan covering features of the macroeconomic environment, and specific cultural factors (notably guanxi) in the Taiwanese business culture. High-tech enterprises in Taiwan have become key Original Equipment Manufacturing and Original Design and Manufacturing participants in the value chain. Particular attention is paid to a discussion of how these factors influence the form of Taiwanese company's interaction with the global economy, and with each other, since the former is central to Taiwan's survival, and the latter central to the present research.

2.2 General Background

2.2.1 Background of Business in Taiwan

Taiwan is one of the world's great economic success stories, having been created essentially from scratch following the defeat of the Japanese colonial power in WWII (Wikipedia Encyclopaedia, 2008). Despite its limited natural resources, Taiwan is a highly successful value-added economy, heavily dependent on foreign trade for survival. Taiwan's success can, in no small measure, be attributed to the business ethos of the mainly ethnic Chinese population (Industrial Development Bureau Ministry of Economic Affairs, R.O.C., 2008).

The official language is Mandarin Chinese, though English is widely understood. Since the end of martial law there has been a multiparty republican system in place. Although the Taiwanese practice a variety of religions the culture is strongly influenced by Confucianism (Shay, 2003; Morrison and Conway, 2007; Wikipedia Encyclopaedia, 2005).

2.2.2 The Local Macroeconomic Environment

The economic performance of Taiwan over the past decades has been strong and stable. Between 1991 and 2000, the average annual growth rate of GDP was about 6.4%. After suffering negative growth for the first time in 2001, the economy recovered to resume a path of steady growth, and in 2004 GDP grew by 6.4%. In 2005, however, the economic growth rate declined to 4.1% due to a worldwide slowdown. In spite of the weak growth in 2005, Taiwan still enjoys strong potential for economic development. The economy grew by 4.9% in the first quarter of 2006, aid by continuing dynamism in exports, manufacturing production, and private consumption (National Bureau of Statistics of China, 2007).

Taiwan is now the world's 17th largest economy, with total trade amounting to US$341.9 billion. Its foreign exchange reserves of more than US$253 billion rank third highest in the world. Two-way trade in 2005 expanded by 12.2%. The trade surplus increased from US$13.6 billion in 2004 to US$15.8 billion in 2005, and it reached US$3.36 billion in the first half of 2006, up US$76 million from the same period the year before. Total investment in Taiwan increased at a modest rate of 0.5% in 2005, with private investment declining by 1.3% while investment by the government and public enterprises expanded by 0.3% (Small and Medium Enterprise Administration, 2007).

According to the 2005-2006 Global Competitiveness Report by the World Economic Forum (WEF), Taiwan ranked fifth out of 104 economies around the world and first in Asia on the Growth Competitiveness Index (GCI), the WEF's key indicator of medium to long-term economic growth expectancy. In addition, the number of Taiwan's patents registered in the U.S. ranked third in 2005. Taiwan also ranked fifth in the world in "chances of making a profit from investments" in the Business Environment Risk Report conducted by the Swiss risk-assessment company, BERI. Several other prominent international institutes also give Taiwan a high rating for overall economic performance and competitiveness (World Economic Forum, 2007).

2.2.3 The Taiwanese Enterprises

Most of the industries in Taiwan comprise of small and medium enterprises engaged in manufacturing products (Small and Medium Enterprise Administration, 2007). Though these small and medium enterprises enjoy great flexibility due to their sizes

and can respond fast to the market demands, information technology tools can help them to integrate with their suppliers and customers. In the past, Taiwan's economy has flourished because of its OEM/ODM works. However, in recent times, due to pressure to lower costs and other unfavourable economic conditions, companies dealing with hardware and semi-conductor products are shifting their bases to China and other Asian countries. Though most of the Taiwan's manufacturing companies are shifting their factories to China, they still have their head offices in Taiwan (Ministry of Economic Affairs, R.O.C., 2007).

2.3 The Taiwanese Business Culture

Confucianism remains a profound influence in the Chinese society. Taiwanese practice a variety of religions but the culture is strongly influenced by Confucianism. Business relationships are based on respect and are conducted in accordance with the philosophy's moral and ethical teachings. Taiwanese greatly value social harmony and benevolent paternalism, both of which are pillars of the major socialising force in Taiwan (Saner and Yui, 1984). In Taiwanese business culture, establishing a cordial business relationship is often considered a higher priority than profits. Relationship building is most often based on 'guanxi'. The term guanxi translates into 'relationship' or 'connection', but refers to a highly formalised set of social interactions. Guanxi not only signifies connections but also consideration or obligation, either in terms of obligation to family or others.

In Taiwanese business culture, relationships are based on respect and trust. One will have to take time to establish goodwill. The Taiwanese usually begin a meeting by making some preliminary, good natured, "small talk". Taiwanese businesspeople are shrewd negotiators. Bargaining is a way of life in the Taiwanese culture, so one should be prepared to make compromises.

2.3.1 Guanxi

The focus of this section is how companies can run business smoothly and compete with others by managing their relationships with partners well. There are some strategic implications of guanxi which are related to this research on social capital, so this concept must be included. In fact, this idea has already been put into practice in the Chinese community years ago. Plenty of literature focuses on the utilisation of guanxi, which is a special and important cultural and social element in the Chinese community (Kao, 1993; Björkman and Kock, 1995; Yeung and Tung, 1996; Luo,

1997; Tsang, 1998; Fock and Woo, 1998; Yi and Ellis, 2000). Although there are different ways of looking at guanxi, guanxi facilitates the smooth running of a company. No doubt, managing relationships plays a major role in the business word, especially in Chinese society. For instance, Luo (1997) said that "it is widely recognised that guanxi is a key business determinant of firm performance because the life blood of the macro economy and the micro business conduct in the society is guanxi network... No company can go far unless it has extensive guanxi in its setting" (Luo, 1997, p. 43).

In Chinese, guanxi literally means "relationship" or "connection" (Yeung and Tung, 1996; Luo, 1997; Tsang, 1998). Guanxi is a cultural and social product of Chinese society. By developing personal and organisational relationships, firms can gain potential benefits. That is often considered as a necessary condition to run business in China. Sternquist, Chen, and Huang (2003, p. 36) interpret business guanxi as "...the process of finding business solutions through personal connections".

In Björkman and Kock's (1995) study, all their respondents regarded guanxi as a prerequisite factor for most information and business exchanges in Chinese society. As Yeung and Tung (1996) mentioned, there is a popular saying, "Who you know is more important than what you know." Personal connections with the appropriate authorities or individuals (who you know) are an imperative extensive web of world-wide connections for any company.

In 1997, Luo published an empirical study of the relationship between guanxi and performance of foreign-invested enterprises in China. The key results show that transnational investors can obtain a competitive advantage over other competitors in China by building and maintaining their own guanxi network. Guanxi could become a most effective and efficient marketing tool (Luo, 1997).

Tsang (1998) analyzed whether guanxi can be a source of sustained competitive advantage for doing business in Chinese society. In Fock and Woo's (1998, p.35) study, even though guanxi is perceived as incurring extra time and cost, but it is crucial for mangers to build up their guanxi and mount sustained efforts to maintain it. After reviewing earlier research, they gave guanxi a new and narrower definition: "a strategically-constructed network of personal connections selected from among all the potential personal relationships". They identified four main groups of benefits derived from guanxi. Firstly, guanxi helps firms to obtain information on government policies, market trends, and business opportunities. Secondly, it helps to

lower uncertainty and improves efficiency. Thirdly, saves time and eases the procurement of necessary production resources. Finally, guanxi can help a firm to build up its company image, etc.

Park and Luo (2001) analyzed the utilization of guanxi, and the impact of guanxi on firm performance. Their study shows that guanxi leads to higher firm performance, benefits market expansion and competitive position, but does not enhance internal operations. Tang (2003) suggested drawing a map of all a firm's relationships to understand, describe, and analyse all the relationships. This helps to identify direct and indirect relationships, and find potential partners. A major advantage of the relationship map is that it can enable a foreign company to find the ideal compromise that will make the relationship work for all parties (Tang, 2003). Su, Sirgy and Littlefield's (2003) study showed that guanxi is practiced more by Chinese organisations that have fewer resources than organisations with more resources. However, their paper shows that people who are more educated tend to rely less on business relationships to become successful. Education becomes a substitute for guanxi.

Economic pundits have proposed several concepts as critical factors in the success of companies during periods of recession. Social capital, networks, and special relationships/guanxi are examples. In addition, Dunning (2000) proposed a new concept - Relational Assets as another important factor. As Professor Dunning said, "Today, the critical assets consist of a kaleidoscope of intangible resources and capabilities, especially all kinds of knowledge and information embodied in human and physical capital, both owned and accessed from a variety of sources and by firms" (Dunning, 2000, p. 4).

2.3.2 Guanxi in the Taiwanese Business Culture

Yang (1994) defined Guanxi as cultivating personal relationships through the exchange of favors and gifts for the purpose of obtaining goods and services, developing networks of mutual dependence, and creating a sense of obligation and indebtedness. Park and Luo (2001) argues that Guanxi is social capital because it involves exchanges of social obligations and determines one's face in Chinese society. In this thesis Guanxi would be treated as social capital (business relationship between supplier and customer). Chinese philosophy related to Guanxi has been widely viewed as social capital. The first time when social capital applied to explain organisation learning was in 1998 by Nahapiet and Ghoshal. They defined social

capital as the sum of actual and potential resources embedded within available through and derived from the network of relationships possessed by an individual or social unit. Social capital comprises of both resources within the network and the asset that may be mobilised through that network. Similarly, Burt (1992) also conceptualized social capital as a set of social resources embedded in relationship. Social capital encompasses many aspects of a social context, such as social ties, trusting relations, and value systems that facilitate actions of individuals located within that context. Drawing on a comprehensive review of previous work on social capital, Nahapiet and Ghoshal (1998) called these different aspects of social context the structural, the relational, and the cognitive dimensions of social capital.

Guanxi is a prominent feature of Chinese culture, and may be loosely translated as "special relationships" or "connections" (Davis *et al.*, 1995; Fock and Woo, 1998; Yeung and Tung, 1996). Guanxi, through the cultivation of give-and-take reciprocation, can get things done (Arias, 1998). Hwang (1987) calls it the Chinese power game, a socially worldly-wise approach to the acquisition of resources and the achievement of high customer satisfaction.

Guanxi is an essential part of doing business in Taiwan. There are even classes teaching people how to manage guanxi (Asia-Learning, 2005). Academic recognition of, and interest in guanxi, has grown rapidly over the last decade, concentrating on its implications and benefits in business (Ang, 2000; Fan, 2002; Fock and Woo, 1998; Merrilees and Miller, 1999; Pearce II and Robinson, 2000; Wong, Wong, Hui, and Law, 2001; Wong, 1998a; Yi and Ellis, 2000), and relating it to Western concepts of relationship marketing and competitive strategy (Ambler, *et al.*, 1999; Arias, 1998; Gilbert and Tsao, 2000; Wong, 1998b; Wong and Chan, 1999; Wong and Tam, 2000; Yau *et al.*, 2000). These cross-cultural business studies focus on the customer-supplier relationship, that is to say, the influence of Chinese culture on the conduct of B2B and B2C relationships.

2.3.3 Summary Guanxi in the Taiwanese Business Culture

There is an old Chinese saying, "If you have a relationship, you have a road." The first stage for any company is to know all of their relationships; thus relationship mapping (Tang, 2003) is a suitable tool. Once a firm knows its key partnerships and potential partnerships, it should try to develop and maintain them. Trust and commitment are two important elements for long-term relationships.

Is there a difference between guanxi and relationship? Actually, both them share similar concepts, but guanxi includes more elements, such as ganqing (pronounced gahn-tchin), which is a measure of the emotional commitment of the parties involved. Two actors could have a relation but no ganqing. For example, two alumni may have a relationship because they come from the same university, but that doesn't mean that they have a good and close connection if they don't have further interactions to cultivate ganqing (Tsang, 1998). Furthermore, face is another distinctive element in guanxi, which means an individual's public image (Tsang, 1998), favour owed or a credit slip. These credit slips constitute a huge set of credit which the holder could call in if necessary (Coleman, 1988). That is, guanxi implies an obligation to return favour to the other side.

All these concepts are related as closely as each breath is to the next one. While the value of social capital, network and relationships has long been recognised in Western business literature, the peculiarly Chinese concept of guanxi can give us more ideas to scale new heights in business. Throw away the shady sides of guanxi; we should obtain more worth concept from guanxi. Because personal relationships are the quintessential basis for all business, guanxi isn't suited only for Chinese businesses. All firms need to establish, sustain and even enhance the quality of their relationships with every partner. That will bring them unexpected gains. That's what people call, Relational Assets (Hayes and Schmenner, 1978). Tsang (1998) and Fock and Woo (1998) mentioned that guanxi may help firm to get more convenience when running business. For instance, banks will faster approval of loans for your company or government will faster approval licenses your company apply for. This another kind of flexibility that makes a company can running business more smoothly than its competitors.

2.4 Electronics Industry in Taiwan

This section attempts to describe the special features of the Taiwanese electronics industry in the context of the SE Asian and global economies, and relate these to the research investigation. Taiwan ranks third (after the US and Japan) in global IT production yet its IT manufacturing sector is dominated by relatively small locally based enterprises, with a limited multinational presence. High-tech enterprises in Taiwan have become key Original Equipment Manufacturing and Original Design and Manufacturing participants in the value chain (Minister of Economic Affair, R.O.C., 2008). The advantages they have are based on cooperation in supply chain systems generally controlled by larger global enterprises. This section describes the

electronics industry and the cultural features that may facilitate cooperation by and between Taiwanese electronics SME's.

2.4.1 History

Taiwan's economy has gone through several distinctive phases. Due to its subtropical climate, agricultural products flourish in Taiwan and until the 1950's the economy were mainly agrarian. After land reform policies, the government implemented a series of policies aimed at making Taiwan self-sufficient. Consequently, the manufacturing sector expanded dramatically in the 1950's and Taiwan became a major exporter of textiles and cheap manufactured goods (Hsiao *et al.*, 2002; Essig and Ulli, 2001).

In the 1960's Taiwan's manufacturing sector shifted to electrical equipment and electronic goods causing the economy to grow between 1962 and 1985 at an average annual rate of almost 10 percent, more than twice the economic growth rate of industrialised countries during the same period. By the 1980's and 1990's industry began shifting to chemical product exports and high technology (Ministry of Economic Affairs, 2007).

Taiwan developed its electronics manufacturing capabilities over the past four decades. In the 1960s, Taiwan assembled such products as transistor radios, tape recorders, and some transistor packaging. In the 1970s, Taiwanese firms entered the component manufacturing business with CRTs, IC pilot production of ICs (via ERSO), electronic watch production, and VCR magnetic drum developments. In the 1980s, Taiwan entered into computer manufacturing with United Microelectronics Corporation's (UMC's) semiconductors, the IBM-compatible PC, 256K DRAM development, colour monitor production, and establishment of Taiwan Semiconductor Manufacturing Company (TSMC) (World Economic Forum, 2007). Electronics became the number one export and Taiwan became the fifth-largest supplier of PCs (Hsiao *et al.*, 2002). In the 1990s, Taiwan moved into microelectronics manufacturing and became the number one supplier of motherboards, monitors, scanners, and mice. In 1995, Taiwan became the number three supplier of computers, with a value of $19.7 billion. In 1995, Taiwan produced $3.3 billion in semiconductors, began mass production of 16 Mbit DRAMs, and opened four of 20 planned 8-inch wafer fab operations (CETRA Power Sourcing with Taiwan Trade, 2008). Today, Taiwan is targeting the markets for semiconductors, optoelectronics, displays, and packaging (Ministry of Economic

Affairs, 2007).

In the early 1970s, the Taiwanese government targeted electronics as a "strategic" technology and heavily promoted it through various policy instruments. Since then, the Taiwanese electronics industry has achieved outstanding success, especially the semiconductor and information products sectors (Chang, 2004; Glover, 2001; Hwang, 2002). For example, today Taiwan is the largest provider of personal computers and the fifth largest producer of integrated circuits (Department of Statistics MOEA, 2008).

2.4.2 The Characteristics of the Electronics Industry

Taiwan is a global leader in the manufacture of information and communications technology (ICT) products. However, most Taiwan high-tech companies are original equipment manufacturers (OEM) and as a result are less likely to develop brand names and global marketing strategies. As a result, Taiwan electronics manufacturers frequently attend trade shows and advertise their products in trade magazines and newspapers to develop marketing channels. The newest marketing promotion and communication channel for manufacturers is the website. A large number of the companies are displaying products and providing information online and some have comprehensive e-commerce sites. Local companies are also designing websites for buyers to place orders, to eliminate intermediaries, and increase profits.

Taiwanese government officials consider Taiwan's primary strengths to be in electronics manufacturing (Hwang, 2002; Small and Medium Enterprise Administration, 2007). While Japan has been Asia's benchmark in electronics' R&D, design, manufacturing, marketing, and sales, Taiwan has been strongest in all areas of computers and in component technologies (Chang, 2004; Glover, 2001; Hwang, 2002).

2.4.3 The Importance of the Electronics Industry

Taiwan's electronics industry, with 670 companies listed on the Taiwan Stock Exchange (TSE) and the OTC (over-the-counter) Securities Market and having an annual production value of US$300 billion, has been central to Taiwan's long-term economic development (Chiger and Karp, 2003).

Taiwan has become a world-class manufacturing centre and has a leading global market share in many products. Many products made in Taiwan and made by Taiwanese companies that ranked No. 1 globally in terms of production value or volume such as IC Foundry, IC Packaging, Notebook PCs, PDAs, and so on (Industry & Technology Intelligence Service (ITIS) and IDB, 2006).

2.4.4 The Global Context

The term "globalisation" describes the progressive integration of economic activity across national borders, accompanied by a reduction in the fiscal barriers to trade imposed by national government regulation in a prevailing climate of economic liberalism (Dicken, 1998). Globalisation is eliminating the boundaries for manufactured goods, commodity and capital flows, intensifying competition and shortening the life cycle of many products.

The process may be regarded positively, as giving universal access to global markets and opportunities, or negatively, as reflecting and promoting the uneven distribution of wealth and power, associated with the increasing hegemony of (mostly US-based) multinational corporations (Gilpin, 1987).

Both these views of globalisation as a homogenising process are simplifications, since the manifestations of globalisation are heavily dependent on local financial, political, cultural and structural factors. The positive economic effect is concentrated in certain regions, notably North America, Europe, and Japan/South East Asia, and varies greatly within and between them. Taiwan in particular does not match very well with a simple hegemonistic view of globalisation.

2.4.5 The Local Context

Taiwan's IT industry was outstandingly successful in the 1990's, growing at over 20% per annum, making the country the third largest producer of IT hardware (after the US and Japan) by 1999, and driving a doubling of GDP between 1988 and 1999, (MOEA , 2000) yet the industry is dominated by local Small and Medium Enterprises (SME's), mostly started after 1980. This contrasts with the situation in Singapore, where the government has successfully promoted the establishment of multinational subsidiaries, and Japan and Korea, dominated by a few large domestic conglomerate corporations. Of 153 Singapore-based electronics companies surveyed in 1997, 108 were wholly foreign-owned, and the remainder were joint ventures.

Overall, locally owned firms accounted for only 8% of Singapore's exports in 1992 (Yue, 1997). It is thus of some interest to consider how this situation has been avoided in Taiwan.

2.4.6 Participation in the Value Chain

Globalisation involves the stimulation of international trade, and the increasing importance of multinational companies in international trade, symbolised by the ubiquity of their brands. World Bank Group (2004) statistical indicators of global economic integration show general and sustained increases, for example international trade increased from 32.4 to 40%, gross private capital flows from 10.3 to 29.1%, and gross direct foreign investment from 2.7 to 8.8% of Gross Domestic Product between 1990 and 2000. Globalisation has tended to favour high technology industries, and companies in a controlling position in their value chain, (Porter, 1986; Whitley, 1996).

The concept of the value chain was introduced by Porter (1986) who applied it to describe the trading relationships of a company. With "pure" globalisation, the value chain may cross national boundaries unhindered, with its component "link" activities in the most profitable locations worldwide. Gereffi (1999) distinguishes two types of commodity chains, producer-driven, involving capital intensive technological products, and buyer-driven, involving labour-intensive industries in which the marketing and manufacturing agents set up production networks, principally in developing countries. Economic benefit to the producer is much greater in the former case, although these chains are dominated by multinational corporations who extensively sub-contract actual production under original equipment manufacturing (OEM) arrangements, much of it carried out in Taiwan.

2.4.7 Cooperation Versus Competition

Global marketing can bring significant economies of scale. These economies of scale are realised by large scale investment, which, along with the market dominance of established global brand leaders, is a significant barrier to global market entry. These barriers can, to an extent, be circumvented by various forms of cooperative venture, either "horizontal" , involving, for example, joint distribution and marketing ventures with overseas companies with complementary product ranges, or "vertical" participation as a supplier or distributor, in an established global brand leaders supply chain (Youngdahl and Loomba, 2000; Matear *et al.*,

2004). Taiwanese companies have generally used the latter means to gain exposure to global markets, though in a few cases they have eventually acquired the capability to market their own products globally under their own brands (Chang and Liou, 2000).

Optimal matching of supply and demand, in space and time, reduces costs and increases customer satisfaction (Handfield and Nichols, 1999; Jayaram *et al.*, 2000; Youngdahl and Loomba, 2000; Cousins and Spekman, 2003). Information can now be transferred instantaneously, but for physical goods, mismatches in supply and demand are accommodated by buffer/safety stocks, or reduced by the rapid exchange of production and customer order information, (the so-called virtual inventory) required in just-in-time production techniques. These techniques are critically dependent on coordination in the supply chain.

2.4.8 Supply Chain Cooperation

There are two main ways to promote coordination in the supply chain. Either the supply chain is taken under direct ownership, or cooperative relationships are promoted between legally independent supply chain members. The former mechanism is now rather unfashionable, with companies tending to concentrate on their "core competencies" and outsourcing other functions. The cooperative relationship required by the second mechanism tends to produce a few long-term supplier partners, with closely coupled information systems. Within a company, the required coordination may be mediated by an Enterprise Resource Planning (ERP) System, with coordination of external entities via Supply Chain Management (SCM) and Customer Relationship Management (CRM) Systems (Dornier *et al.*, 1998; Chang, 2002; Ettlie *et al.*, 2002; Cagliano, Caniato and Spina, 2003).

2.4.9 The Virtual Enterprise

This IT-mediated coordination has resulted in the emergence of the concept of the "extended" or "virtual" enterprise, consisting of cooperating but legally independent companies forming a supply chain. In this model, competition is considered to occur between rival supply chains rather than between the component companies of a supply chain, and attention is focused on optimising the performance of the whole supply chain, rather than that of individual component companies (Melin, 1992; Mclean, 1999; Lin *et al.*, 2002; Rajagopal, 2002; Sarker and Lee, 2004). In the computer manufacturing sector, IBM, Dell, and HP provide examples

of the benefits of SCM, providing a level of vertical integration previously only contemplated (and seldom achieved) by organisations with sole ownership of their supply chains.

2.4.10 Reality Check: The Limits on Cooperation

While this model has achieved wide acceptance, perhaps partly because it contrasts interestingly with the conventional view of unrestricted and general competition, it is perhaps worth remembering that such competition is still arguably the norm in commercial relationships. Even for "classic" cases of the extended cooperative enterprise, such as those mentioned above, there are powerful disruptive forces tending to re-assert "pure" competition. For example, in the "commoditisation" process commonly encountered in IT, a product technology becomes ubiquitous, so that competing products come to be regarded by the consumer as equivalent, and purchasing decisions are taken solely on the basis of availability and price. Dell's build-to-order business model was successful in commercial marketing terms when the base price of a laptop was $2000. It is less so now, when the base price is $600 (Senior Dell employee, Personal Communication, 2008).

Traditional adversarial supply chain relationships, where a manufacturer might typically promote price competition among multiple suppliers, do not encourage the free exchange of information. According to Dalton (1999), only 36% of US enterprises were happy to share production, marketing and demand variation information with corporate customers. There are, however, some grounds for a belief that business cultures in Asia may be more predisposed to cooperation.

2.4.11 Guanxi in the Taiwanese IT Business Culture

Stubbs (1998) suggests that Asia-Pacific cultures have evolved an ethos of social cohesion and obligation which predisposes them to the formation of mutually beneficial business networks. Within this general cultural context there is naturally considerable local variation. Whitely (1998) contrasts the Japanese kaisha (corporation) and powerful Korean chaebol ('financial cliques') with the Chinese family business model dominant in Hong Kong and Taiwan. The latter tend to be quite specialised in their business activities (although they may invest in a variety of other businesses) and the managers in a business group ("traditionally" members of one family), are not usually structured in a strict hierarchy.

Applied to high tech electronics businesses, this model encourages flexibility and the formation of alliances between complementary specialism, with social networks of former classmates and colleagues supplementing and substituting for family connections.

This extended network of mutual obligation is a manifestation of the "Guanxi" described above. In the 70's many Taiwanese engineers worked and trained abroad, and formed persistent and extensive links with Silicon Valley in California, partly mediated by overseas Chinese engineers and venture capitalists living and working there. (Saxenian and Li, 2003). In general Taiwan's SME's have not initiated new basic technologies but have become very adept at techniques for rapid commercial production, leading to Taiwan becoming the production base for IC technologies initially developed in the US.

Taiwan now ranks third (after the USA and Japan) in annual per capita US patent registrations.

2.4.12 Comparison with Western Business Culture

Co-operative relationships between Western businesses tend to be more formal, contractual, and hence less flexible. (Whitely, 1998; Reynolds, 1999). The relatively few large Taiwanese IT companies tend to follow standard Western business models, not always entirely successfully. Taiwanese computer company Acer's global expansion strategy in the 1980's involved significant horizontal and vertical acquisition and merger, buying US-based Counterpoint Computers in 1987, Texas Instruments DRAM fabrication in 1988, Altos Computer Systems in 1990, router company Pivotal Networking in 1999, and merging Acer Semiconductor Manufacturing Inc. with Taiwan Semiconductor Manufacturing Company to form TSMC-Acer Semiconductor Corporation in 1999. The company thus directly controls a large proportion of its supply chain, and its operations range from the manufacture and distribution of basic components to the selling of finished equipment both to other global brand leaders, and under its own name. The risks reflect the scale and scope of this global operation. Assimilating the mergers, and coordinating such a wide ranging operation, has lead to high restructuring, inventory and staffing costs (Jayaram *et al.*, 2000; Lin *et al.*, 2002; Huang and Liu, 2004). In 2000, Acer Inc operating losses were $135 million, forcing a substantial withdrawal from the US market to concentrate on Asia, and a reduction in the product range. Arguably the company has lacked focus, and its unusual mix of OEM and

own-brand global marketing has potential for conflict, since the brand may compete with OEM customer's products (Burns, 2001).

This "integration by ownership" model is generally unavailable to Taiwanese companies due to their limited size, and contrasts with that employed by other global brand leaders in the PC industry, notably Dell, which outsources its component supply to "partner" organisations, which are closely integrated with Dell's direct marketing system, allowing "build to order (BTO)" and "configuration to order (CTO)" from a customer specification (Malcolm, 1998; Dell, 1999; Rajagopal, 2002; Ettlie *et al.*, 2002; Cousins and Spekman, 2003).

2.5 Summary

In summary, there are reasons to believe that Taiwanese electronics SMEs may be predisposed to a higher level of cooperation than is the Western commercial norm, both culturally, and because their small size makes it mandatory in the global market. It could perhaps even be argued that the Taiwanese networked business model, mediated by "guanxi" prefigures the IT-mediated cooperative production model exemplified by Dell. This interpretation encouraged an investigation of several electronics SME supplier – customer relationships, via case study interview aimed at determining the nature of their business relationships, and the influences on their development.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

The aim of the research is to examine how the relationship characteristics of small suppliers and their larger customers create relationship development impacts on the small suppliers and influence the process of their relationship development. Therefore, this research's primary function is focused on the dyadic relationships between buyer and seller. A dyad is defined as a "group of two" (Wilkes and Krebs, 1985) and thus represents two levels of organisation: firms and relationship. As each relationship is part of a network. A business network is defined as a set of two or more connected business relationships, in which each exchange relation is between business firms that are conceptualised as collective actors (Emerson, 1981). The network will be discussed at the beginning of the literature review to explore its influence on the development of a dyadic relationship between a customer and supplier, which is the main area of focus of this study.

Existing academic research has investigated distribution channels and internationalisation extensively in the 1960s to 1970s. Internationalisation became a focus of investigation from the late 1970s and early 1980s to 1990s. At present, researchers are interested in and trying to understand the network perspective (e.g. Johanson, 2000; Ford, 2002). The network theory is one of the main research areas of the Industrial Marketing and Purchasing Group (IMP Group) (Håkansson, 1982; Turnbull and Valla, 1986; Håkanson and Snehota, 1989; Ford, 2002). It is argued that the nature of the interaction between the network and the dyadic relationship is an important aspect of the network view of business relationships (Alajoutsijärvi *et al.*, 1999; Anderson *et al.*, 2003). Therefore, the network and relationship theory will be addressed in this research to understand current thinking on how relationships between customers and suppliers develop.

Relationships and networks are of current interest from both an academic and a practitioner viewpoint (Henneberg *et al.*, 2006). The IMP Group (Håkansson, 1987; Håkansson and Snehota, 1998; Ford, 2002) has been an important influence in this research area. No business exists without networks and relationships (Håkanson and Snehota, 1989). Ford *et al.*, (2003) suggested that each company has to research their own customers and suppliers in the area of products, service, technology, finance, and advice. In his view companies should pay more attention to their

competitors and collaborators. The focus of this study is to identify the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry. In other words, the relationship development impacts of relationship characteristics on the process of development of these relationships. Therefore, part of the study will examine existing literature on the network and relationship perspectives, as discussed in the following sections.

3.2 Network Perspective

Networks have been defined variously as "sets of connected exchange relationships" (Cook and Emerson, 1978, p.725), as "a structure where a number of nodes are related to each other by specific threads" (Håkansson and Ford, 2002, p.133). Easton (1992) points out that the network is a mode describing a large number of entities that are related. Network theorists (Ford *et al.*, 1980; Hallén and Johanson, 1989) have emphasised the strong bonds business partners develop over time in business-to-business markets. Håkansson and Ford (2002) explain that the nodes are business units. The nodes include resources, knowledge, and understanding in many different forms (Håkansson, 1997). In particular, nodes in the networks are not individual and isolated transactions between companies. However, each node is related to others in different ways by virtue of its unique technical and human resources.

It is argued by Purchase and Olaru (2003) that networks are built of both dynamic and stable elements. Johanson (2000, p.3) mentions three essential network views as follows:

"First, it is between two firms' resources in a long-term exchange. Second, it is frequent and tends to important in the resources exchange. Final, both are in terms of volumes and function for the firms."

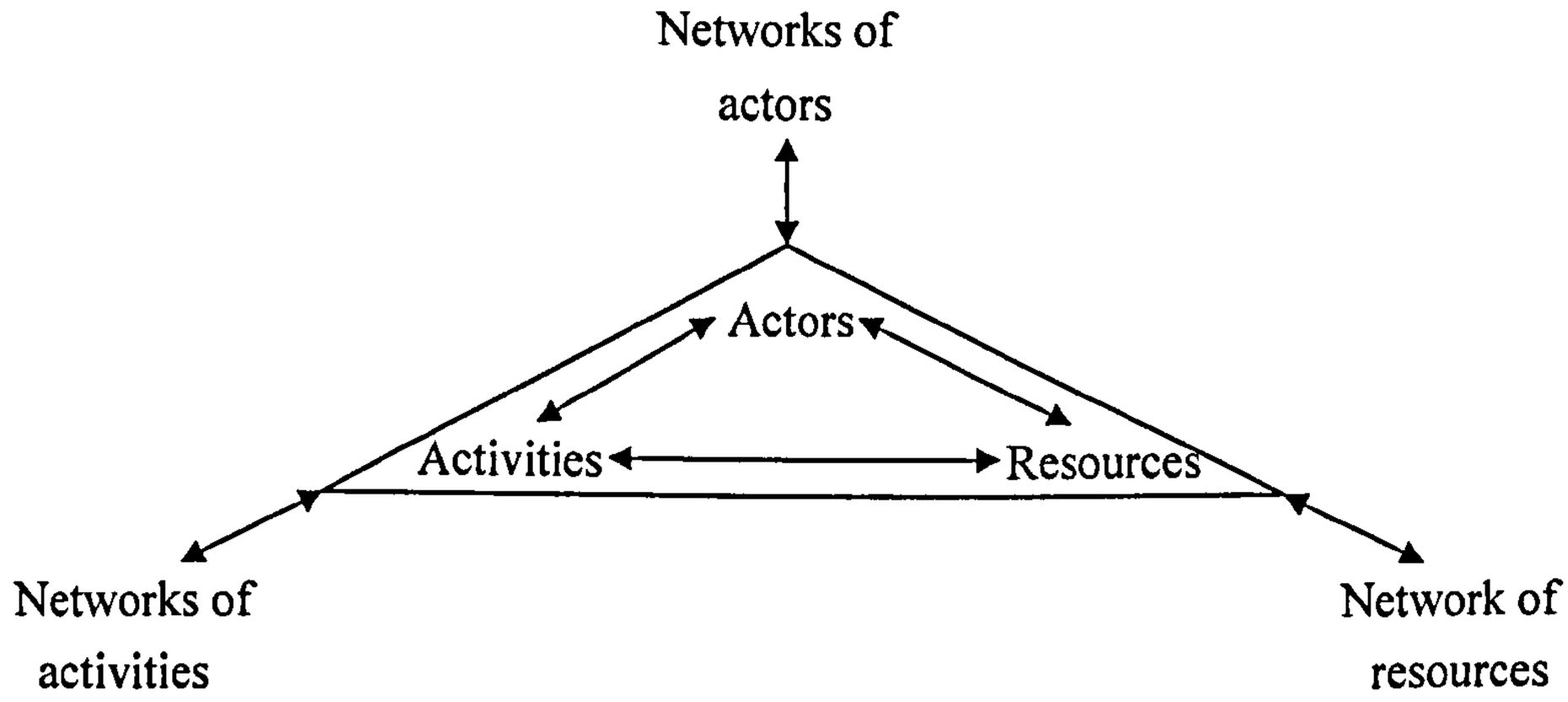
Business networks within the IMP Group tradition are based on the dyadic buyer-seller concept of marketing. This tradition looks at industrial marketing from different relationship perspectives (Håkansson, 1982; Turnbull and Vallia, 1986; Håkansson and Senehota, 1989; Ford, 1990). Within an organisation the interaction and exchange processes were classified into actors, activities and resources by Håknsson and Snehota (1989). This developed into what is also called the basic structure of the industrial network model, which has been an important model in developing an understanding of the interconnections and elements in any business

network.

3.2.1 Basic Structure of the Industrial Network Model

The basic structure of industrial networks model was developed by Håkansson (1987); Håkansson and Snehota (1989, 1995). The principle of this model is to "make possible an integrated analysis of stability and development in industry" (Håkansson and Johanson, 1992, p.29). A second aim of the model is to understand "the roles of actors and sets of actors in industrial development processes, given the relation between industrial stability and development" (ibid, 1992, p.29). The industrial network model depicts the relationship between actors, activities and resources. (See Figure 1)

Figure 1: Basic Structure of Industrial Networks



Source: Håkansson (1987); Håkansson and Snehota (1989)

According to Håkansson and Johanson (1992), the first variable is actors. Actors are nodes, which conduct activities and use resources in these activities. In other words, actors are like individuals, groups of individuals, parts of firms, firms, and groups of firms. Therefore, actors have different levels of organisation in the industrial network. Actors in the lower levels could be part of higher level actors, whereas higher levels are independent. Håkansson and Johanson (1992) argue that actors have five characteristics. Firstly, actors achieve and manage activities. Secondly, actors can develop relationships with others via exchange processes. Thirdly, actors direct their activities and manage resources in a goal oriented fashion. Finally, different actors have different knowledge of the activities and resources and this

differential knowledge may be exploited for advantage in their relationship with other actors.

The second variable of the model is activities. Cook and Emerson (1984) maintain that sets of connected exchange relationships between actors control business activities. Håkansson and Johanson (1992) provided two types of activities; transformation activities and transfer activities. Transformation activities are directly controlled by one actor, whereas transfer activities involve shared control over the transfer of resources from one actor to another. Transfer activities link the transformation activities of different actors to each other. Therefore, a complete activity cycle always includes both transformation and transfer activities. A single actor never controls activity. In the industrial network, a single activity is not necessarily conducted by a specific actor. The activities in the industrial network change over time, and links to actors and resources in other organisations may change dynamically to reflect this.

The final variable of the model is resources. The transformation and transfer activities described above require transformation resources and transfer resources, respectively. Transfer and transformation resources are interdependent. Håkansson and Johanson (1992) describe knowledge and experience as other important resources. Furthermore, Purchase and Olaru (2003) describe the movement of resources in terms of knowledge and skills brought together, and technology and information distributed. For example, companies may do business with various markets and customers, and have to deploy different knowledge and experience for dissimilar markets and customers. Thus, knowledge and experience are key resources, and their management is a key skill.

The basic structure of industrial networks was provided by these three variables. In addition, actors are influenced by power and knowledge. Actors often affect the stability and development of the network. Therefore, the model is used to demonstrate how stability and change in industrial systems do not coexist. From the above model description, we can understand the basic element of the industrial network model is the relationship between two companies. The purpose of this research is to focus on the relationship development impact of relationship characteristics of small suppliers and their larger customers on the relationship development process, by analysing both sides of the buyer and seller relationship. In other words, the dyadic relationship between small suppliers and their larger customers will be explored in this research. Thus, the basic structure of the industrial

network model is relevant to a better understanding the relationship between customer and supplier and the impacts on that relationship from the surrounding network.

3.3 Dyadic Relationship Perspective

Having discussed networks briefly, the dyadic relationship perspective will now be considered. A network consists of nodes or positions and links manifested by interaction between positions (Thorelli, 1986). These "links" are usually called relationships (Ojasalo, 2002). A relationship is defined by Håkansson and Snehota (1995, p.25) as "mutually oriented interaction between two reciprocally committed parties". Forsstrom (2003) describe relationships between companies as connected by process and interdependence. Relationships are important in determining network structure and providing a context for the processes that characterise companies' behaviour towards each other.

The IMP Group has focused on customer-supplier relationships and interaction between parties (Ford, 1980; IMP Group, 1982; Ford *et al.*, 1986; Håkansson, 1987). In empirical IMP research, it was found that the major marketing problems in the firms concerned the establishment, development and management of business relationships with customers, suppliers and other important actors. From this observation research has tended to focus on interaction in business relationships (Håkansson and Östberg, 1975, Håkansson, ed., 1982). Ford *et al.*, (2003) use the relationship model to describe the interaction between buyer and seller.

The relationships of a firm in a domestic network can be used as bridges to other networks in other countries. Relationships in business markets are increasingly important in many companies' operating strategies. Nowadays relationships have become strategic and the process of relationship development is accelerated as firms attempt to create relationships to achieve their goals (Turnbull *et al.*, 1996; Johnsen and Ford, 2000).

3.3.1 Interaction Approach

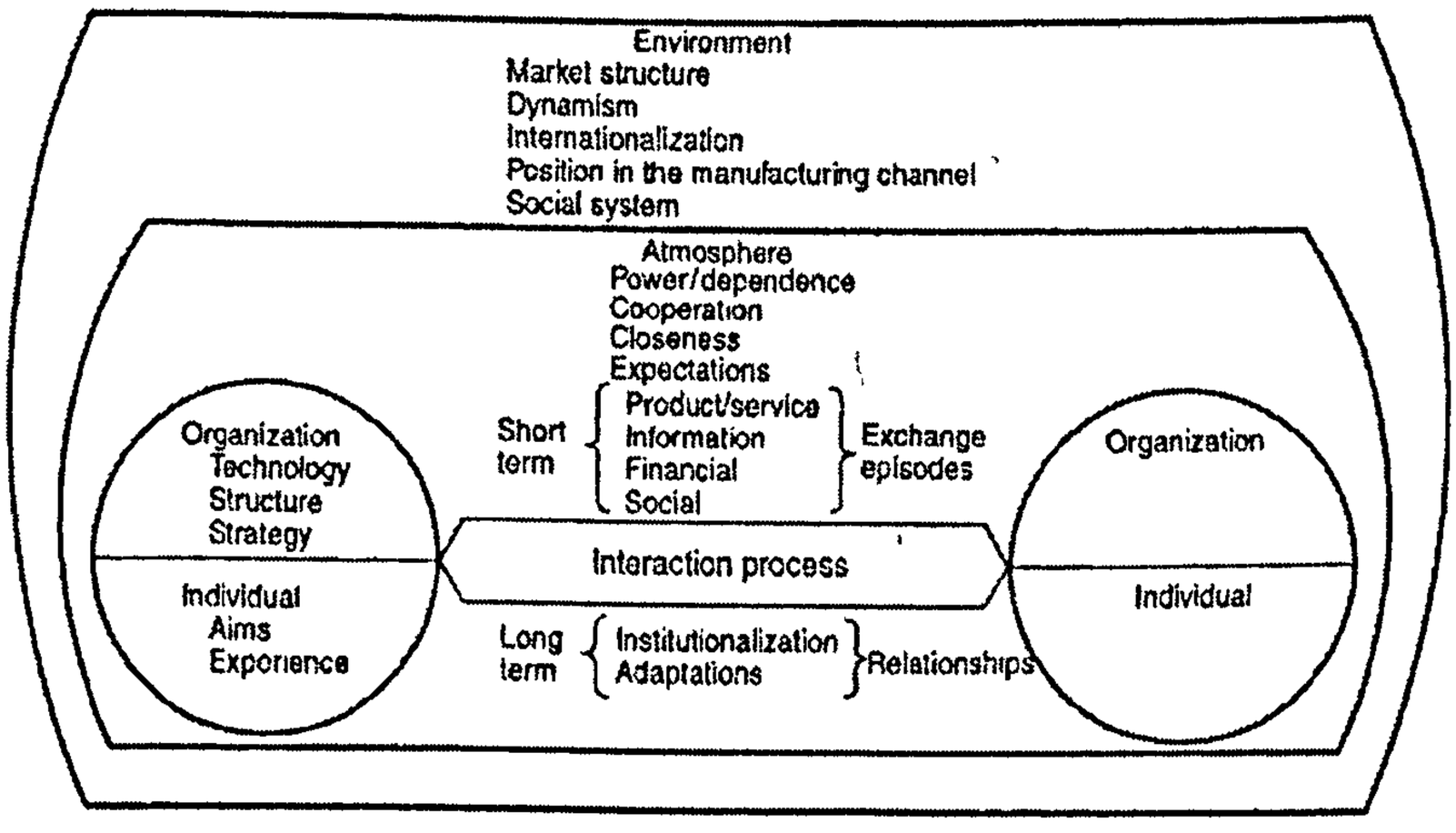
The interaction model was developed by a group of researchers known as the International Marketing and Purchasing (IMP) research group (IMP Group, 1982; Håkansson and Johanson, 1988; Ford, 1990; Håkansson and Snehota, 1995).

The interaction approach looks at how companies behave towards each other and how relationships are built up between two parties, a customer and a supplier. For example: IMP Group successfully applied the interaction approach to the buyer and seller relationship (Cunningham, 1980). The IMP Group (1982) claim that the interaction approach is based on elements that is very important in industrial marketing research.

In the interaction model, IMP Group (1982) highlights four groups of variables. These variables illustrate and influence the interaction between buyer and seller companies. These four variables in the interaction model are explained below. (See Figure 2)

- The interaction process
- The participants in the interaction process
- The environment within which interaction takes place
- The atmosphere affecting and affected by the interaction

Figure 2: An Illustration of the Interaction Model



IMP Group, (1982), *International Marketing and Purchasing of Industrial Goods: An Interaction Approach*, Chichester: Wiley, pp. 10-27.

The Interaction Process

The interaction process discriminates between short-term exchange episodes or long-term relationships (Håkansson, 1982; Ford, 1990). The major elements of exchange episodes in the interaction process are products and services, information,

finance, and social interactions.

The product or service bought and sold is the core of the interaction and exchange. However the product or service affects the transaction process undergone by the buyer and seller. Several aspects of information exchange are of interest, such as its content (technical, economic, or organisational questions dominate the exchange), and the degree of formality. Financial exchange is an indicator of the economic importance of the relationship. Social exchange is a key function in reducing uncertainties between customer and supplier (IMP, 1982).

The Participants in the Interaction Process

Some major characteristics of the buyer and seller companies are discussed below:

Technology: The production technology of both buyer and seller companies is very important. This is because the interaction process can be interpreted as tying the technologies of the customer and supplier together.

Organisational size, structure and strategy: The size and power of the parties give them basic positions from which to interact and share resources.

Organisational experience: Important organisation experience is not restricted to the companies experience in the relationship, but also includes all outside experience and activities.

Individuals: At least two individuals, one from each different organisation, are involved in a relationship. These are usually a customer and a supplier. The individuals' exchange of information develops relationships and builds up strong social bonds. Some individuals at different levels in the organisation have different roles in the inter-company personal interactions. For example, higher level staff in an organisation may sign formal contracts, but lower staff may maintain the relationship on an interpersonal level in practice, perhaps with little formal control. Individuals can thus have a key influence on a business relationship.

The Environment within which Interaction Takes Place

Although often influential, the analysis of relationship interaction between a buyer and seller company cannot be limited to the individual level but must also consider the wider context including market structure, dynamism, and the social system. The market structure includes the concentration of both buyers and sellers and the

stability or rate of change of the market. The degree of dynamism in the market influences the ability of companies to make plans in their relationship. The social aspect the buyer and seller relationship enables the company to really understand problems arising between the buyer and seller companies. Also important is experience in choosing trading partner companies.

The Atmosphere Affecting and Affected by the Interaction

In the Figure 2, the model shows the short-term and long-term interaction process between buyer company and seller company. The short-term exchange episodes include product/ service, information, financial, and social exchange. The long-term relationships involve institutionalisation and adaptations. Both the short-term and long-term interaction process is considered to be influenced by organisation and individual. The interaction process between two companies has to consider environment. Environment consists of the market structure, dynamism, internationalisation, position in the manufacturing channel, and social system. Finally, atmosphere has to consider the development of the relationship between the two companies. Atmosphere contains power/dependence, cooperation, closeness, and expectations. This model identifies connections between the variables on different levels. The parties in the exchange process are related to the interaction environment. The two parties in the exchange are related to the exchange process, and the product exchanged is related to the information that is exchanged. Finally, environment, company, and interaction categories provide a number of interaction atmospheres within different linkages. The model is thus an attempt to describe how relationships between customers and suppliers are maintained and established.

3.4 Relationship Development

The study of relationship development primarily involves research into structures and processes in the dyadic relationship between customer and supplier (Ford, 1980; Ford *et al.*, 1986; Håkansson and Snehota, 1995; Wilson, 1995; Alajoutsijärvi *et al.*, 1999). Håkansson and Snehota (1995) argue that the relationship development process concerns an interaction where connections have been developed between two parties that produce a mutual orientation and commitment. The relationship structure is described in terms of three layers: activity links, resource ties and actor bonds. These three functions can be used to characterise the nature of a relationship that has developed between two companies.

The research framework developed here for the dyadic relationship between

customers and suppliers' characteristics is derived to a large extent from the IMP Group's work, from authors such as Ford *et al.*, (1986); Håkansson and Gadde, (1992); Alajoutsijärvi *et al.*, (1999). Ford *et al.* (1986) describe the four aspects of companies' interactions as capability, mutuality, inconsistency, and particularity. These characteristics have tended to be used to describe the nature of interaction in relationships between customer and supplier where the parties are of similar size and importance to each other, rather than in situations where there is a relative difference in size and importance between a customer and supplier. Recently Johnsen and Ford (2004) have argued that capability should be excluded from classifications of relationship characteristics, as capability should be viewed as a firm characteristic rather than a relationship characteristic per se.

The following classification has been developed to enable a better understanding of possible characteristics of relationships between small suppliers and larger customers, based on set of common relationship characteristics that has been derived from the literature.

3.4.1 The Characteristics of the Relationship

Table 1: Classification of Relationship Characteristics

Relationship Characteristics	Focus of Literature
Mutuality	**Ford *et al.* (1986, p.33)** Mutuality is defined as "how the parties handle the relationship between their respective and common interests". Shared goals or common interests between companies.
Particularity	**Ford *et al.* (1986)** Particularity is the quality of uniqueness possessed by a given interaction.
Trust	**Pruitt (1981, p.16)** "Trust is the belief that the other party is also ready to undertake coordinative actions". **Anderson and Weitz (1989, p.312)** Trust as "one party believes that its needs will be fulfilled in the future by actions taken by the other party".
Cooperation	**Anderson and Narus (1990)** Cooperation can be defined as similar or complementary coordinated activities performed by firms in a business relationship to achieve mutual outcomes or singular outcome with expected reciprocity over time. **Contractor and Lorange (1988); Ring and Andrew (1992)** describe cooperation by listing a number of different cooperative strategies or relationships.
Inconsistency	**Ford *et al.* (1986)** Inconsistency is defined as ambiguity or lack of clarity in interaction.
Power/dependence	**Anderson and Weitz (1989)** Power as the ability of one partner to get the other partner to do something they would not normally do. **Wilson (1995)** Power is directly related to one partner's dependence on the other partner. **Emerson (1981)** Dependence is the obverse of power.

Mutuality

The concept of mutuality involves of the importance of the shared goals or common interests between companies. Mutuality can be defined as a measure of how much a company is prepared to give up its own individual goals or intentions, so that it can increase the positive outcomes of orders and in this way its own ultimate well-being (Ford *et al.*, 1986). For example, many customers will share technology, information and knowledge with suppliers so that both benefit. On the other hand, it may make small and medium-sized suppliers faced with adapting to the needs of a demanding customer feel that all the efforts are geared for the customer benefit with little impact on their own well-being (Johnsen and Ford, 2001). Therefore, developing shared goals through interacting with a customer and researching the customer's needs could be very important to the small supplier. This could result in improved suppliers' performance through a better understanding of the customer. However, sometimes a small supplier may not have access to customers in order to develop shared goals and so a supplier may consider its customers are selfish and untrustworthy as they focus mostly on comparing price and benefits. Ford *et al.*, (1986, p.34) argue that "mutuality is the mirror of the trust which exists between parties". Johnsen (2005) maintains that mutuality mirrors the past, present, and future relationship between companies. Therefore, for mutuality to develop between a small supplier and larger customer it may be important for both parties to dedicate time and effort to developing shared goals and to give signals that they believe the other party.

Particularity

The concept of particularity is concerned with the direction and uniqueness of the interaction between supplier and customer in the relationship (Ford *et al.*, 1986). Some firms may approach their relationships in a standardised or contractual way, such as some larger customers in their interaction with small suppliers. The larger customers may even act as a group, controlling the development of a range of small suppliers in aspects such as product, technology, and process development for the customers' benefit. This behaviour limits the customer's particularity towards its suppliers.

Particularity is concerned with the extent to which a small supplier specifically and uniquely meets the needs of the larger customer in the relationship, by efforts in product innovation or product technology. Particularity is often closely related to costs (Ford *et al.*, 1986). However, small suppliers may have limited financial resources to make specific investment dedicated to their interaction with their larger

customers. Thus, particularity requires small suppliers to seek ways to give special treatment without increasing costs.

Trust

Anderson and Weitz (1989, p.312) defined trust, as "one party's belief that its needs will be fulfilled in the future by actions taken by the other party". Ford (1984) suggests trust is an important consideration, since:

"------- many aspects of relations between customers and suppliers cannot be formalised or based on legal criteria. Instead relationships have to be based on mutual trust." (Ford, 1984, p.18)

In long-term buyer-seller relationships, Sako (1992) differentiates between three types of trust contractual trust (one's expectations that an exchange partner keeps its promises by contract), competence trust (one's confidence in the exchange partner's competence, or professional standards, in carrying out specific tasks), and goodwill trust (one's confidence in the exchange partner's open commitment to supporting and continuing a focal exchange relationship), and suggests these will differ in relative importance at different stages in a relationship's development. For example, contractual trust may be most important in the early stage or dissolution; competence trust may be most important in the developing stage; goodwill trust may be most important in the stable stage.

Trust is a common notion in industrial network research (Johanson and Mattsson, 1987; Ford *et al.*, 1990; Håkansson, and Snehota, 1995). Trust is enhanced by the degree of the two-way communication between customers and suppliers. Trust can make communication, information sharing and conflict management more open (Sako, 1992; Barney and Hansen, 1994; Aulakh *et al.*, 1996; Creed and Miles, 1996; Bidault and Jarillo, 1997; Blomqvist, 2002). Trust is often stated as a vital factor in successful relationships (Conway and Swift, 2000). Trust has an important influence on the stability of the dyad. Trust leads buyers and sellers to focus on long-term benefits of the relationship (Ganesan, 1994). Trust has been recognised as an important factor in team success intra-organisational cooperation, inter-organisational partnerships, strategic alliances, and the performance of networks of small firms (Larson, 1992; Dogson, 1993; Aulakh *et al.*, 1996; Sako, 1998; Blomqvist, 2002).

Cooperation

Cooperation can be defined as similar or complementary coordinated activities performed by firms in a business relationship to achieve mutual outcomes or singular outcome with expected reciprocity over time (Anderson and Narus, 1990). It involves working together, jointly creating value, and sharing benefits. Alajoutsijärvi *et al.* (1999) suggest that cooperative companies intentionally seek common goals and procedures. Long-term cooperative relationships between buyers and sellers are based on a clear distribution of activities and resource contributions. Relationships based on cooperation indicate a shared interest to work together towards a mutual goal (Bengtsson *et al.*, 2003). In the relationship development framework of Dwyer *et al.* (1987), cooperation is a part of the initiation and expansion phases.

Relationships between buyer and seller in different industries involve a wide range of cooperative activities from R&D to marketing (Powell *et al.*, 1996). Firms' cooperate in business relationships in order to gain profit or some other payoff (Blankenburg *et al.*, 1996; O'Toole and Donaldson, 2002). Small suppliers may feel it difficult to cooperate with their larger customers if the latter are only interested in their own unilateral advantage.

Inconsistency

Inconsistency is described as ambiguity or lack of clarity in interaction (Ford *et al.*, 1986). Inconsistency may be dependent on the developmental stage of relationship (Ford, 1980). Interpersonal inconsistency relates to the personal expectations and individual interests influencing the interaction. This may be inconsistency in communication. Alajoutsijärvi *et al.* (1999) maintain that high levels of interpersonal inconsistency are likely to result from organisational complexity hindering communication between firms, units, and departments. Inconsistency is a common relationship characteristic between customers and suppliers and may accordingly be an important influence on the relationship development process. Small suppliers may have less competitive advantage compared with larger suppliers.

Inconsistencies are important to both sides in an interaction and may lead to conflict, due to misunderstanding between small suppliers and their larger customers. In the relationship development process, each different stage has a different level of inconsistency. Inconsistency does not exist to any significant extent in the mature stage. Small suppliers may have to overcome inconsistency in creating long-term business relationship with their larger customers.

Power/dependence

Dahl, (1961, p.202-203) defines power is "the ability to get another person to do something that he or she would not otherwise have down". Bachrach and Baratz (1970, p.44) suggest that the existence of conflict is obscured by power, as issues are "suffocated before they are voiced, or kept covert; or killed before they gain access to the relevant decision-making arena". Lukes, (1974, p.24) suggests that the powerful view their situation as "divinely ordained and beneficial" and are able to "imagine no alternative" to it. Dependence is defined as the obverse of power (Emerson, 1981). Håkansson (1987) distinguishes different types of dependence; technical, knowledge, social, logistic and administrative dependence. These distinctions are relevant to the present research since the relationship between small suppliers and larger customers may show dependence in some areas and not in others.

When a relationship is mature it may be possible that power is more balanced between a supplier and customer as they have had time and opportunity to accustom themselves to each other's way of working. In contrast, it is possible that in the earlier stages of a relationship small suppliers may be controlled by larger customers in areas such as pricing, design, and product development as they have yet to establish their position in the relationship and prove their value to customers. For example, some larger customers may control small suppliers' products and pricing. Thus, the small supplier cannot introduce new products and ideas to their larger customers and may have limited influence in these areas.

The discussions on the characteristics of the relationship have begun to identify some of the influences on relationship development. Extending this requires the links between the structural characteristics of the relationship, and the influences that these may have on relationship development, to be examined in more depth. The following section therefore examines the relationship development frameworks and literature and identifies the potential relationship development impacts of relationship characteristics on relationship development patterns.

3.4.2 The Relationship Development Process

Scanzoni (1979) identified five phases within the relationship development process: awareness, exploration, expansion, commitment, and dissolution. This classification can be compared to Ford's (1980) four relationship development stages;

pre-relationship stage, exploratory stage, developing stage and stable stage. However, Ford did not consider dissolution in the relationship development process. Not every relationship between customers and suppliers will be successful, and Ford's relationship development stage model, while a powerful analytical perspective is to this extent incomplete. Small companies are seen as slow in learning within relationship development (Elo, 2003). Not every relationship tested in the exploration stage enters expansion stage or progresses to the commitment stage (Dwyer *et al.*, 1987). Therefore, dissolution may be very important in the relationship between small suppliers and their larger customers.

Table 2: The Summary of the Development of Customers and Suppliers Relationships in Business Markets

Stage 1: **The Pre-relationship Stage** **(Awareness)**	**Stage 2:** **The Exploratory Stage** **(Exploration)**	**Stage 3:** **The Developing Stage** **(Expansion)**	**Stage 4:** **The Stable Stage** **(Commitment)**	**Dissolution**
Companies are seeking new sources of customer or supplier. Evaluation: Existing relationship Other information Overall policy decision Compare with previous supplier Uncertainty about current relationship Evaluation conditioned: Experience, uncertainty, and distance. Have communication, but no commitment in this stage.	Customers and suppliers engage in discussion and negotiation about a possible first time business. Experience - low Uncertainty - high Commitment - low Distance - high In this stage, lack trust in the other firm's commitment, and only has little cooperation, mutuality. Particularity - low Inconsistency - high Power - low The two counterparts will need to learn about how to reduce the distance between them.	Customer and supplier are both growing in volume or changing in a positive way. Experience - high Uncertainty - low Commitment – high Distance - low In this stage, there is increasing mutuality, commitment, trust, and cooperation for each party. Power is increasingly shared Inconsistency - low But this development does not inevitably continue and either party can cause to revert to the pre-relationship stage.	The companies' are mutual important. Both customer and supplier are stable and long-term in the market. Experience - high Uncertainty - low Commitment - high Distance - low Customer and supplier have a strong relationship. The relationship is stable and potentially long-term. In this stage the relationship has positive advantage for the companies.	Not every relationship between customers and suppliers will be successful and may fail at any stage. Therefore, the relationship development process description has to include dissolution. Experience - high Uncertainty - high Commitment - low Distance - high

Source adapted from:

Ford, D., (1980), The Development of Buyer-Seller Relationships in Industrial Markets, *European Journal of Marketing*, Vol. 14, Issue 5/6, pp. 339-353.

Dwyer, F. R., Schurr, P. H., and Oh, S., (1987), Developing Buyer-Seller Relationships, *Journal of Marketing*, Vol. 51, April, pp. 11-27.

Stage 1: The Pre-relationship Stage (Awareness)

Dwyer *et al.* (1987) argued that awareness is party A's recognition that party B may be a possible exchange partner. The awareness is similar to the relationship development stage model, stage one: the pre-relationship stage. In this stage the parties are not yet playing the roles of customer and supplier. They only raise awareness of each other and have communication without commitment. Suppliers try to create and develop cooperation and trust with customers but at this stage there may be little mutuality, and cooperation. For example: the small supplier may introduce new product to the market. Customers may evaluate a new supplier and new product, if it offers a lower price or better solution to a current problem. A customer may have questions such as: Do I change my current product or supplier? Do I trust the new small supplier? Does this small supplier have goodwill? They both may start to look for and evaluate a new counterpart in the pre-relationship stage.

Stage 2: The Exploratory Stage (Exploration)

Dwyer *et al.* (1987) pointed out that exploration refers to the research and test phase in relational exchange. Exploration characterises stage two of the relationship development model: the exploratory stage. In this stage customers and suppliers engage in discussion and negotiation about a possible first time business. Each party has to convince the other that they are seriously interested in the relationship and other party. They also lack trust in the other firm's commitment. There may be little mutuality and cooperation but high inconsistency. The lack of particularity and power reflects a lack of commitment. There is relatively little to loose. In the relationship development framework, Dwyer *et al.* (1987) argued that cooperation is a part of the initiation and expansion phases. For example, small suppliers will send a sample to their larger customers. Customers try this sample and evaluate this product. At this stage customers may think, how do I trust new small suppliers? The customer does not have very clear interaction with small suppliers. Small suppliers may lack resources and information to survive this critical stage.

Stage 3: The Developing Stage (Expansion)

Dwyer *et al.* (1987) describe expansion as continuous improvement in benefits obtained by the exchange partners, contributing to their increasing interdependence. Expansion corresponds to relationship development model stage three: the developing stage. Business between two companies in this relationship stage is growing in volume or changing in a positive way. As the relationships develop between suppliers and customers, their mutuality increases and their commitment to each other grows. Cooperation and trust in each party increases and power is shared. Inconsistency is

reduced. However, this development does not continue inevitably and the relationship may revert to the pre-relationship stage. For example, small suppliers with their customers have more than one business operation. However, customers still have some questions, such as: should our company keep a long-term relationship with small suppliers? Should our company build trust through these relationships?

Stage 4: The Stable Stage (Commitment)

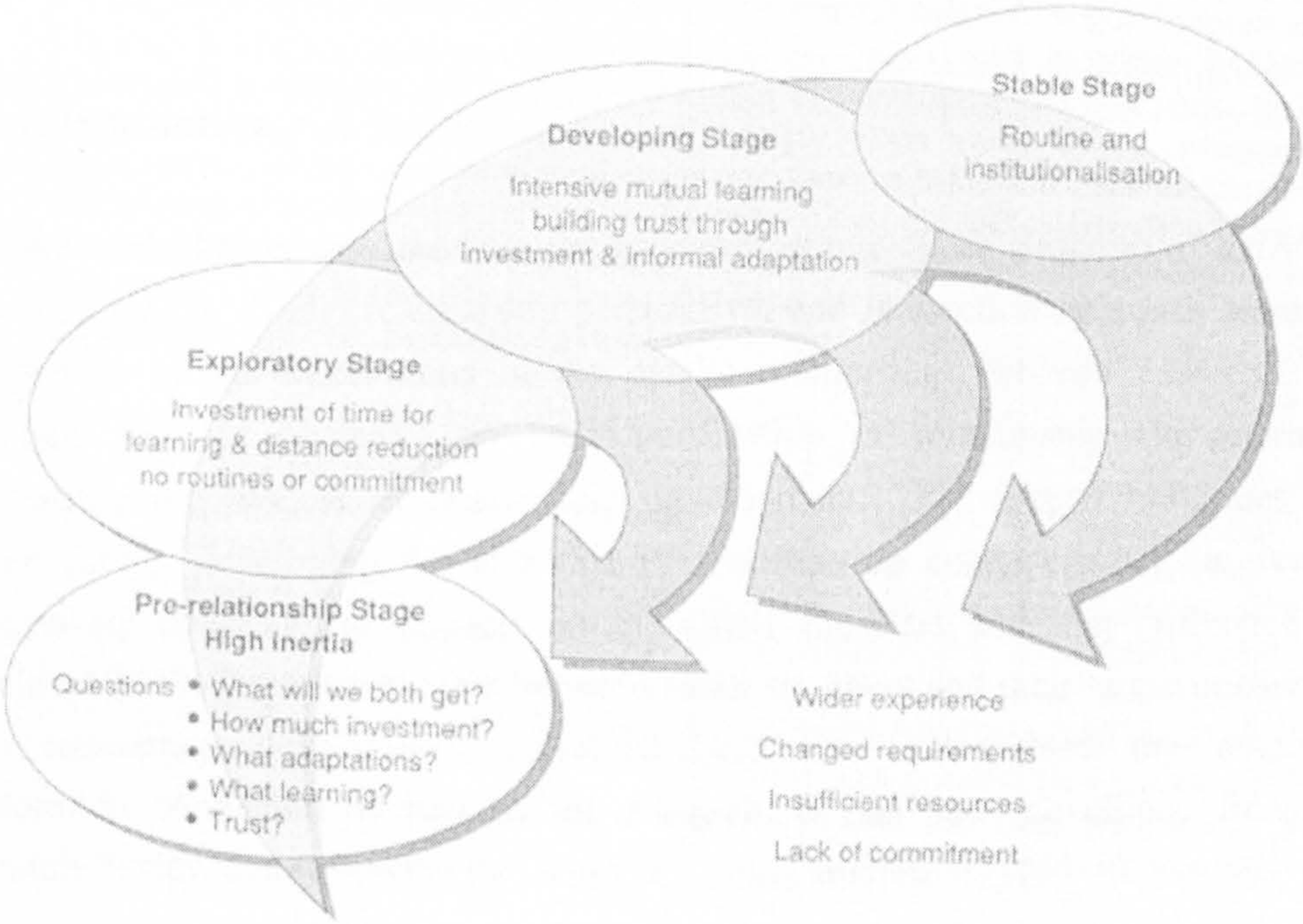
Dwyer *et al.* (1987) maintained that commitment is an explicit assurance of relational continuity between exchange partners. Commitment corresponds to relationship development model, stage four: the stable stage. At this advanced level customers and suppliers have achieved a level of satisfaction and positive advantage from the exchange process. In this stage customers and suppliers have reached long-term stability in their learning about each other and in their investments and commitment to the relationship. Both, the customer and supplier have strong mutuality, particularity, long-term cooperation; trust in each party and share power. Trust is an important impact on the stability of the dyad relationship. Ford (1980, p.47) argued that long-term relationship is a characteristic of the firm's "mutual importance to each other". Small suppliers need to keep the customers goodwill because small companies may only have limited resources to seek new partners. Therefore, the maintenance of a long-term relationship is very important for small suppliers.

Dissolution

Relationship dissolution can be defined as "the permanent dismemberment of an existing relationship" (Duck, 1982, p.2). Tähtinen and Halinen-Kaila (1997, p.560) argue that a business relationship dissolution is "a process where activity links, resource ties, and actor bonds are broken, disconnecting the former parties from each other". According to Bygballe and Harrison (2003) business relationship dissolution can be considered as outcomes, antecedents, process, switching, exit, dissolution, termination, disengagement, break-up, divorce, ending and failure. Ford's relationship development stage model is a powerful tool to analyse customer and supplier perspective. However, the model did not explain the dissolution process. Small suppliers may fail in some stages. Therefore, dissolution may be very important in the relationship process for small suppliers and their larger customers and must therefore be considered in any relationship stages model.

The following figure shows the model of the development of buyer and seller relationship in business markets.

Figure 3: The Development of Buyer-Seller Relationship in Business Markets



Ford, D., Gadde, L.-E., Håkansson, H., and Snehota, I., (2003), *Managing Business Relationships*, 2nd ed. Chichester: Wiley pp.51.

3.5 Conclusions

This chapter sets out to examine the concept of dyadic relationships between small suppliers and their larger customers. The examination has highlighted the significance of understanding the nature of the basic structure of industrial networks model, interaction process model, relationship characteristics, and relationship development process between small suppliers and their larger customers, from the perspective of understanding how the process of dyadic relationship between small suppliers and their larger customers involves interaction process, relationship characteristics, and relationship development process. The aim of this research is to investigate how the relationship characteristics between small suppliers and their larger customers may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers. Therefore, this chapter has discussed the interaction process, relationship characteristics, and relationship development process between small suppliers and their larger customers with a view to developing a better understanding of these processes and characteristics.

CHAPTER FOUR: CONCEPTUAL DEVELOPMENT

4.1 Introduction

The previous chapter discussed the network perspective, basic structure of industrial networks model, dyadic relationship perspective, and interaction approach from the perspective of the interactions in the dyadic relationship between customer and supplier, with an emphasis on the identification of relationship characteristics influencing the process of relationship development. This chapter continues this theme further developing the idea that the relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers. The conceptual development presented here has underpinned the empirical exploration conducted as part of the research. It has been developed from the literature review and following the exploratory case studies.

This chapter commences with an identification of the relationship development impacts of relationship characteristics on the relationship development between small suppliers and their larger customers. This forms the central part of the conceptual development. This part of the conceptual development includes where appropriate additional literature, which has not been examined already in the previous chapter. It continues the literature review but more specifically on the relationship development impacts of relationship characteristics on the relationship development process between small suppliers and their larger customers. The conceptual developments are presented. Research questions uniform the empirical study to follow, are identified.

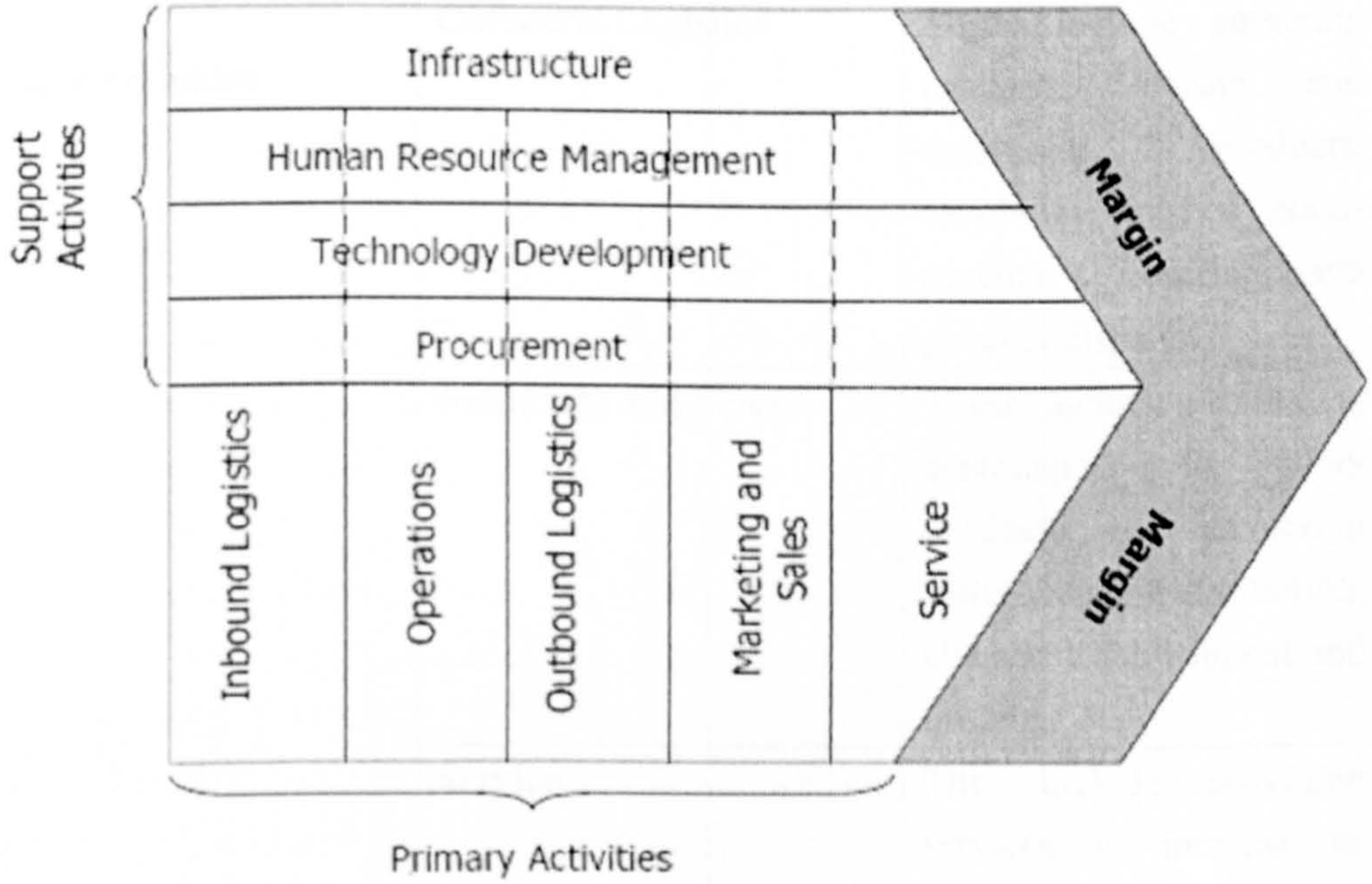
4.2 Relationship Development Impacts

In considering the research topic "relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry", there are three key themes: relationship characteristics, relationship development impacts, and relationship development process. The relationship characteristics and relationship development process have been discussed in the previous chapter. This section examines the theme of relationship development impacts in the context of Porter's value chain, Porter's five forces, and resource based view strategic management.

4.2.1 Porter's Value Chain

The value chain concept was developed by Michael Porter (Porter, 1985). The value chain analysis describes the activities the organisation performs and links them to the organisations competitive position. Its main aim is to model the influences on the overall performance of a firm by reconstructing the entire process of product or service creation, development, and sales to clients. Setting up a value chain requires studies of the firm's primary activities and support activities. The firm's primary activities include producing and delivering the product to the consumer, which requires inbound logistics, operations, outbound logistics, marketing and sales, as well as post sales service. Support activities involved in each of the primary activities include providing infrastructure, human resource management, and technology development as well as the procurement to facilitate the work involved in the primary activities. The Porter's value chain is represented in Figure 4.

Figure 4: The Basic Model of Porter's Value Chain



Sources:

Porter, M. E., (1985), *The Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press.

Porter (1985) mentions that the competitive advantage of the enterprise depends on both the value chain which it owns, and cooperation with the value system which it

belongs to. That recognises that the organisation is not a closed system, and that communication and interaction with suppliers and customers consolidates relationships critical to the value system.

Table 3: Activities of Value Chain

Primary Activities	Inbound Logistics	These include accepting orders, storing and purchasing, involving warehousing, inventory control, and material handling.
	Operations	These include the transformation from raw materials to the products, involving assembly, testing, and processing.
	Outbound Logistics	These include gathering products, storing and delivering products, involving finished goods inventory, ordering, and product dispatch.
	Marketing and Sales	These include persuading customers to buy products, involving advertisement, promotion, channel establishment and pricing.
	Service	This include providing services to increase or maintain the product values, and involves maintenance, spares supply, installation, and maintenance and repair.
	Infrastructure	This supports the whole value chain, and is

		dependant on individual activities such as general management, plan, finance, accounting, law, government affairs and, quality control.
Support Activities	Human Resource Management	These include recruitment, engagement, training, personal development, and welfare activities.
	Technology Development	Technical efforts to improve the products.
	Procurement	This means buying the things or functions in the inbound logistics flow, like raw materials, parts, consumables, machines, and plant.

Porter, M. E., (1985), *The Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press.

This research is focused on the relationship between small suppliers and their larger customers. Some small suppliers may have to apply certain standards for particular customers, due to small suppliers may be controlled in certain way by customers. Small suppliers may not be able to offer an excellent customer service system, because of their limited resources. The distribution channel comes from the marketing and sales of primary activities. Small suppliers need to have excellent goods delivery systems and warehousing, but may not have the resources or economies of scale to maintain buffer stocks, for example. Therefore, the relationship development impacts of operations, customer service, and distribution channel are taken from the primary activities.

Some small suppliers may build their technology for one product only for a single customer. Besides, small suppliers may lack experience and skill, and may be unable to produce products that customers require. Thus, technology development is including innovation. Therefore, the relationship development impacts of technology and innovation are taken from the support activities.

The relationship development impacts of operations, technology, innovation, customer service, and distribution channel used in the present research are derived from the value chain theory outlined above.

4.2.2 Porter's Five Forces

The model of the Five Competitive Forces was developed by Michael E. Porter in his book "Competitive Strategy Techniques for Analysing Industries and Competitors" in 1980. Since that time it has become an important tool for analysing the structure of an organisations strategic process.

Porter's model (Porter, 1980) is based on the insight that a corporate strategy should meet the opportunities and threats in the organisations external environment. In particular, competitive strategy should be based on an understanding of industry structures and the way they change. Porter identifies five competitive forces that shape every industry and every market. These forces determine the intensity of competition and hence the profitability and attractiveness of an industry.

The objective of corporate strategy should be to modify these competitive forces in a way that improves the position of the organisation. Porter's model supports analysis of the driving forces in an industry. Based on the information derived from the Five Forces Analysis, management can decide how to influence or to exploit particular characteristics of their industry. The Porter's five forces model is a simple but powerful tool for understanding where power lies in a business situation (Porter, 1987; March, 1991; Levinthal and March, 1993; Boyd *et al.*, 2002; Charles and Gareth, 2004).

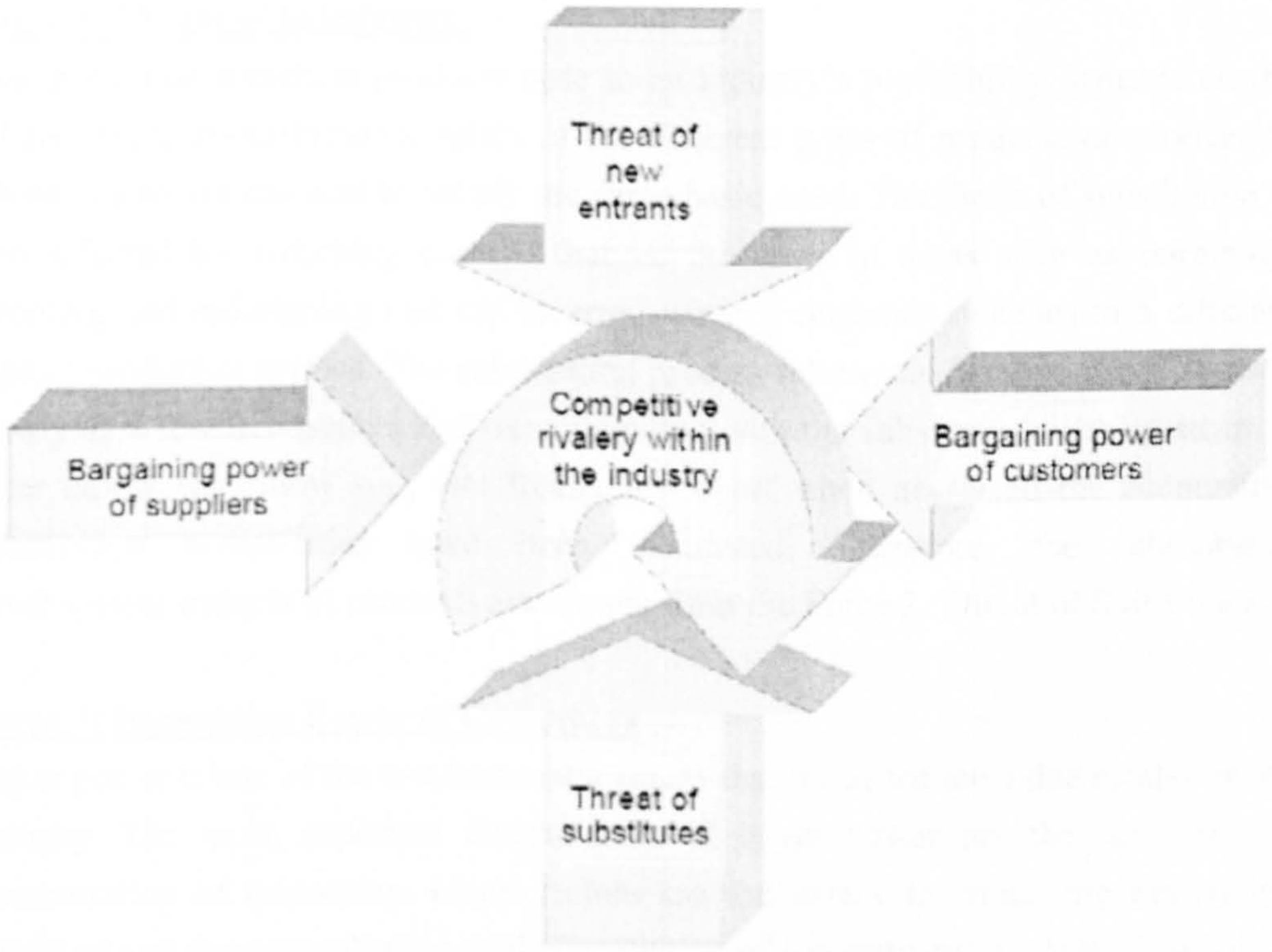
Porter's five forces framework refined the analysis of market competition in several respects. First, it challenged the general assumption of large numbers and homogeneity – that is, the prevailing assumption of a large number of essentially identical competitors. Second, it shifted attention from two-stage chains, each consisting of a supplier and buyer, to three-stage chains made up of suppliers, rivals and buyers. Third, it accounted for potential entrants and substitutes as well as direct rivals. Support for these generalisations, however, required Porter to reach beyond scientific evidence into the realm of common sense.

A survey carried out by Porter's opponents in the late 1980s found that only a few of

the influences Porter flagged commanded strong empirical support. Although the "five forces" framework focuses on business concerns rather than public policy, it emphasises the value of extended competition (as opposed to competition limited to existing rivals) which matched the political mood of the times, and its simplicity inspired companies as well as business schools to adopt it (Wheelen and Hunger, 1998).

Given the impact of Porter's "five forces" framework on the business strategy landscape, it is briefly outlined below.

Figure 5: Graphic Representation of the Five Competitive Forces



Sources:

Porter (1980, 1985, 1986, 1990, 1996, 2001); Boyd, *et al.*, (2002); Charles and Gareth, (2004)

Force 1: Competitive Rivalry within the Industry

The intensity of rivalry, which is the most obvious of the five forces in an industry, helps determine the extent to which the value created by an industry will be dissipated through head-to-head competition. The most valuable contribution of Porter's "five forces" framework in this issue may be its suggestion that rivalry, while important, is

only one of several forces that determine industry profitability.

Force 2: Threat of New Entrants

Potential competitors also influence average industry profitability. The key concept in analysing the threat of new entrants is the entry barriers. They can take diverse forms and are the factors preventing an influx of firms into an industry which would otherwise occur whenever profits, adjusted for the cost of capital, rose above zero. Entry barriers exist whenever it is difficult or not economically feasible for an outsider to replicate the incumbents' position. The most common forms of entry barriers, except intrinsic physical or legal obstacles, are usually the scale of the investment required to enter an industry as an efficient competitor.

Force 3: Threat of Substitutes

The threat that substitute products pose to an industry's profitability depends on the relative price-to-performance ratios of the different types of products or services to which customers can turn to satisfy the same basic need. The threat of substitution is also affected by switching costs – that is, the costs in areas such as retraining, retooling and redesigning that are incurred when a customer switches to a different type of product or service. The substitution process follows an S-shape curve. It starts slowly as a few trendsetters risk experimenting with the substitute, picks up steam if other customers follow suit, and finally levels off when nearly all the economical substitution possibilities have been exhausted. Therefore, the relationship development impacts of products are chosen from the Force 3: Threat of Substitutes.

Force 4: Bargaining Power of Customers

Buyer power is one of the two horizontal forces that influence the value created by an industry. The most important determinants of buyer power are the size and the concentration of customers. Other factors are the extent to which the buyers are informed and the concentration or differentiation of the competitors. It is often useful to distinguish potential buyer power from the buyer's willingness or incentive to use that power, willingness that derives mainly from the "risk of failure" associated with a product's use.

Force 5: Bargaining Power of Suppliers

Supplier power is the mirror image of buyer power. As a result, the analysis of supplier power typically focuses first on the relative size and concentration of suppliers relative to industry participants and second on the degree of differentiation in the inputs supplied. The ability to charge customers different prices in line with

differences in the value created for each of those buyers usually indicates that the market is characterised by high supplier power and at the same time by low buyer power (Porter, 1989, 1996). Price can also be an important dimension of business-to-business exchange. Thus, the relationship development impact of price is taken from the Force 5: Bargaining Power of Suppliers.

Small suppliers may have high costs compared with larger suppliers, due to the latter's economies of scale, and they may be unable to compete solely on the basis of price. Besides, small suppliers perhaps cannot produce a wide range of product lines, limiting customer product choice.

The relationship development impacts of price and products used in the present investigation are thus taken from Porter's five forces theory of competitive advantage outlined above.

4.2.3 Resource-Based View

The Resource-based View (RBV) of the Firm (Penrose, 1959; Wernerfelt, 1984; Barney, 1986, 1991) has earned a reputation as a promising contemporary theory that combines strategic insights on competitive advantage and organisational insights into the nature of the firm. While Porter's National Diamond model (1990) and his earlier "Five Forces" model of competition at the company or industry level (1980) consider the external factors acting on the enterprise, the resource-based view (RBV) considers internal factors, suggesting that the method by which resources are applied within a firm can create a competitive advantage (Wernerfert, 1984; Barney, 1991; Peteraf, 1993). The RBV, which builds on some earlier work of industrial economists, has been growing in popularity in the strategy literature since the mid-1980s. Its influence in recent marketing contributions can be seen, for example, in Day's (1994) work on marketing capabilities and in the work of Hunt and Morgan (1995; 1996) on competitive advantage.

The resource-based view of the firm was first coined by Birger Wernerfelt in 1984 and a hint of the richness that lay in the approach is evident in his description of the article as a "first cut at a huge can of worms" (Wernerfelt, 1984). However, the concept remained dormant for much of the 1980s until in the latter part of the decade increasing dissatisfaction with the Porterian focus on industry structure required an alternative.

Until the late 1980s, the resource-based view was characterised by a rather fragmented process of development. The earliest acknowledgement of the potential importance of enterprise-specific resources is to be found in the work of economists such as Chamberlin and Robinson in the 1930s (Chamberlin, 1933; Robinson, 1933) which was subsequently developed by Penrose (1959). Rather than emphasise market structures, these economists highlighted firm heterogeneity and proposed that the unique assets and capabilities of firms were important factors giving rise to imperfect competition and the attainment of supernormal profits. For example, Chamberlin (1933) identified that some of the key capabilities of firms included technical know-how, reputation, brand value, the ability of managers to work together and particularly, patents and trademarks, many of which have been revisited in the recent strategy and marketing literature (Hall, 1992; Day, 1994).

Nelson and Winter (1982) proposed that firms could be understood in terms of a hierarchy of practiced organisational routines which define both lower level organisational skills and higher level decision procedures for the deployment of those skills. The absence of either lower order routines or the higher order routines for invoking them constrains the organisation's capacity to innovate. Nelson (1991) argues that strategy, structure and core capabilities represent discretionary firm differences that do matter and ought to be recognised explicitly by economists.

Tangible assets refer to the fixed and current assets of the organisation that have a fixed long run value (Wernerfelt, 1989). Examples include plant, equipment, land, other capital goods and stocks, debtors and bank deposits. Tangible assets have the properties of ownership and their value is relatively easy to measure (Hall, 1989). The book value of these assets is assessed through conventional accounting mechanisms and is usually reflected in the balance sheet valuation of companies. The other defining characteristic of tangible assets is that they are transparent (Grant, 1991) and relatively weak at resisting duplication efforts by competitors. For example, though plant or land may be geographically immobile, they are relatively imitable and substitutable.

Intangible assets include intellectual property such as trademarks and patents as well as brand and company reputation, company networks and databases (Hall, 1992; Williams, 1992). The presence of intangible assets account for the significant differences that are observed between the balance sheet valuation and stock market valuation of publicly quoted companies (Rumelt, 1987; Grant, 1991). Intangible assets have relatively unlimited capacity and firms can exploit their value by using

them in-house, renting them (e.g., a license) or selling them (e.g., selling a brand) (Wernerfelt, 1989). They are relatively resistant to duplication efforts by competitors. Intellectual property is afforded regulatory protection (Hall, 1992) while databases, networks and reputation are examples of asset stocks (Dierickx and Cool, 1989) and the inherent complexity and specificity of their accumulation hinders limitability and substitutability in the short run.

Capabilities have proved more difficult to delineate and are often described as invisible assets (Itami, 1987) or intermediate goods (Amit and Schoemaker, 1993). Essentially capabilities encompass the skills of individuals or groups as well as the organisational routines and interactions through which all the firm's resources are coordinated (Grant, 1991). Typical of the latter, for example, are teamwork, organisational culture and trust between management and workers. Capabilities do not have clearly defined value as they are seldom the subject of a transaction (Hall, 1989). They have limited capacity in the short run due to learning and change difficulties but have relatively unlimited capacity in the long runs (Wernerfelt, 1989).

Hence, the relationship development impacts of capabilities are taken from the strategic management theory known as the Resource-based View (RBV). This is because the resource-based view (RBV) considers internal factors, suggesting that the method by which resources are applied within a firm can create a competitive advantage (Wernerfert, 1984; Barney, 1991; Peteraf, 1993).

4.2.4 Inter-connection between the Variables Used in "Impacts" on Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

The supplier and customer do not have inbound and outbound logistical connections in the pre-relationship stage. The customer evaluates their new supplier. They only have communication without commitment. They both feel uncertainty about the current relationship.

In the exploratory stage, supplier and customer may have little logistic connection. The customer still evaluates their new supplier. The supplier tries to produce product attractive to the customers and establish a channel with attractive pricing. In this stage supplier and customer only have little mutuality, cooperation and lack trust. Inconsistency is high. Particularity and power are not yet developed.

In the developing stage, logistic activity is growing. The supplier improves their operations, marketing and sales and provides services to increase or maintain the product values like maintenance, part supply, installation, and product correction. However, the supplier still needs to improve its technology and innovation to improve the relationship with their customer. Mutuality increases and commitment to each other grows. Cooperation, particularity and trust in each party increases and power may be shared across different domains. Inconsistency is declining.

In the stable stage, the supplier has regular logistic traffic with their customer. In this stage supplier and customer may cooperate in the area of product technology and innovation. Both the customer and supplier have strong mutuality, particularity, long-term cooperation, trust in each party and share power across common areas.

If supplier cannot attract customer to buy products and provide the reason for buying products or offer positive customer service, this may influence the relationship with their customer and may dissolve their business relationship.

Porter's Five Forces

The supplier and customer do not have business transaction in the pre-relationship stage. Customer evaluates their new supplier. They only have communication without commitment. They both feel uncertainty about the current relationship.

In the exploratory stage, supplier and customer may have few times business transaction. Customers still evaluate their new supplier. The bargaining power of supplier is low and customer's bargaining power is high in this stage. The risk of entry by potential competitors is high. Supplier is very vulnerable to substitution by other competitors. In this stage supplier and customer only have little mutuality, cooperation and lack trust. Inconsistency is high. Particularity and power are not yet developed.

In the developing stage, the relationship between supplier and customer are growing in the positive way. Supplier may also increase its bargaining power and customer may reduce its bargaining power. The risk of entry by potential competitors is reduced but still a potential risk. Their is vulnerable to substitution by competitors. Competitive rivalry between existing players is increasing. The relationship characteristic of mutuality increases and commitment to each other grows. Cooperation, particularity and trust in each party increases and power may be shared across different domains. Inconsistency is declining.

In the stable stage, supplier has regular business transaction with their customer. Supplier may have strong bargaining power to communicate with their customer and customer's bargaining power is lower than it was. The risk of entry by potential competitors is low. Their relationship is less vulnerable to substitute by competitors. Competitive rivalry between existing players is stable. Both the customer and supplier have strong mutuality, particularity, long-term cooperation, trust in each party and share power across common areas.

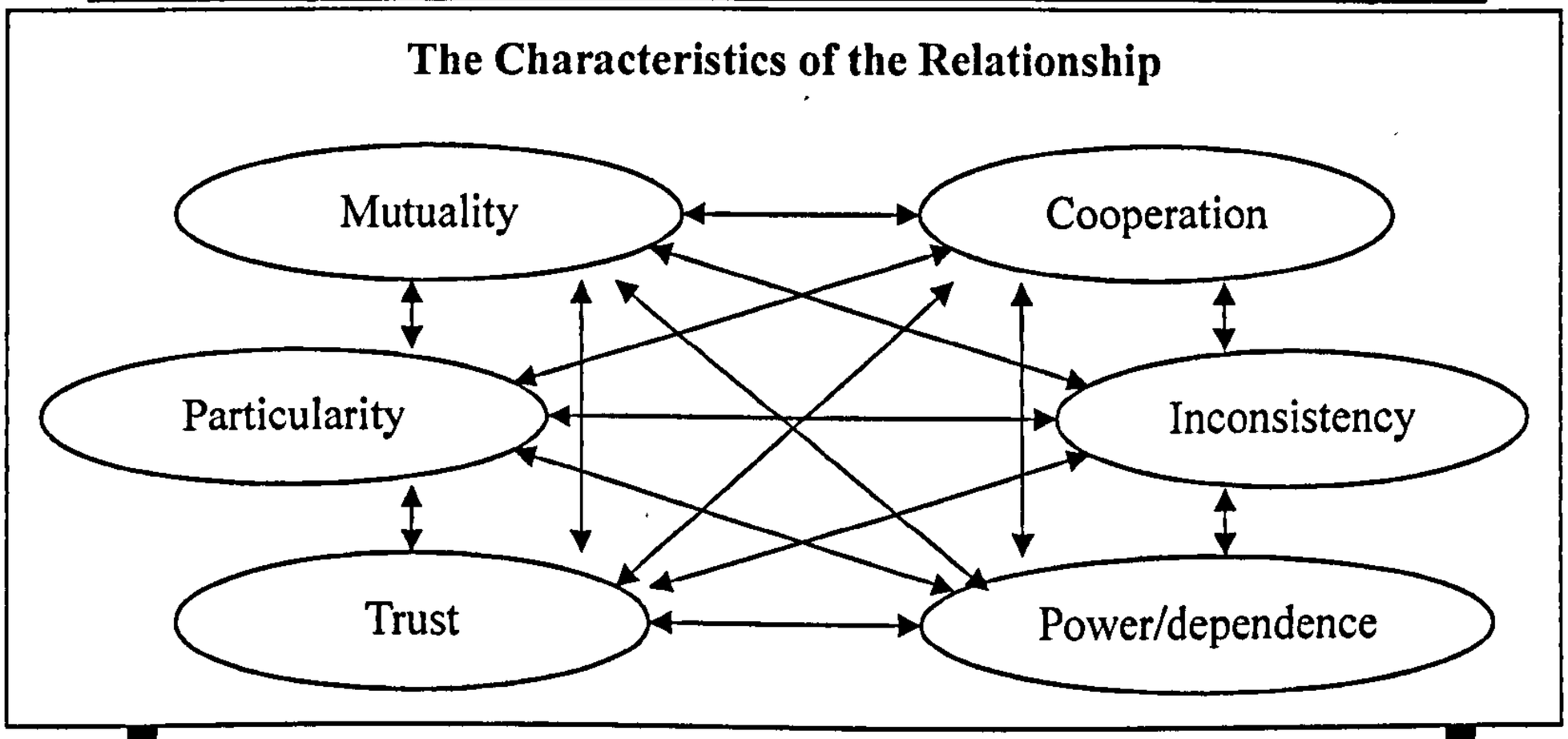
Resource-Based View

The supplier's company core capabilities in the developing stage are low. However, supplier's capabilities are strong when relationship in the stable stage.

The present research model incorporates elements of Leonard-Barton's (1992) view of capabilities, namely employee knowledge and the skills embodied in people, technology systems, managerial systems, and values and norms. These core capabilities are described in more detail in section 4.4.3. The technology systems of core capabilities are different from the technology impacts on the small suppliers (as described in the Porter's value chain theory). The technology systems in the core capabilities are described as professional technology (technical capabilities) and the impacts on the small suppliers' technology described as general technology (technical environment). The technology systems involved in core capabilities is specific and internal to the company and represents one of the assets which give them competitive advantage. By contrast, the technological impact incorporated into Porters value chain theory is external to the company, representing the technological nature of its operating environment, and could be negative, as, for example, when "commoditisation" of product drives prices down and erodes profitability.

4.3 The Development of a Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development

Figure 6: A Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development



The Relationship Development Process between Small Suppliers and Their Larger Customers

Stage One: The Pre-relationship Stage (Awareness)

Companies are seeking new suppliers or customers. They only have communication without commitment. Customer may compare with previous supplier. They both feel uncertainty about current relationship.

Stage Two: The Exploratory Stage (Exploration)

Customers and suppliers engage in discussion and negotiation about a possible first time business. They only have little mutuality, cooperation and lack trust. Inconsistency is high. Particularity and power are not yet developed.

Stage Three: The Developing Stage (Expansion)

Relationship in this stage is growing in a positive way. Mutuality increases and commitment to each other grows. Cooperation, particularity and trust in each party increases and power may be shared across different domains. Inconsistency is declining.

Stage Four: The Stable Stage (Commitment)

This stage also called the mature stage. In this stage both the customer and supplier have strong mutuality, particularity, long-term cooperation, trust in each party and share power across common areas.

Dissolution

Dissolution is easier and more likely in initial stages. Dissolution may be very important in the relationship development process since not every dyadic relationship between customers and suppliers will successful in every stage.

4.4 Identification of the Relationship Development Impacts of Relationship Characteristics on the Development of the Relationship between Small Suppliers and Larger Customers

There are many ways in which relationship characteristics between small suppliers and their larger customers may create relationship development impacts on the small suppliers and affect the relationship development process. The key areas of these relationship development impacts are identified and discussed below.

4.4.1 Supplier's Operations Management

"Operations management is the set of activities that creates goods and services by transforming inputs into outputs" (Heizer and Render, 2001, p.4). Heizer and Render (2001, p.7) further state that "the management process consists of planning, organising, staffing, leading, and controlling". Small suppliers may not have very healthy management systems, due to a lack of specific skills in, for example: production, marketing, or financial management. Small suppliers may have limited human resources and one member of staff may have to be responsible for everything. Also small suppliers may have limited channels to sell and service their products. Some electronic products, such as computers, may be especially demanding in customer service resources, and the lack of such resources implied by the small supplier's operations management may therefore influence the relationship development process between small suppliers and their larger customers. Some of key aspects of supplier's operations management are discussed below.

Operations

Vonderembse and White (1996, p.3) define operations as, "the processes within organisations that acquire inputs (people, capital, and materials) and transform these inputs into outputs (services and goods) consumed by the public". Harrison (1993, p.1) argues that "operations might be defined as a transformational process, which adds value, while operations management is the decision-making and control function associated with it". Some small suppliers may have to apply certain standards for particular customers, due to small suppliers may be controlled in certain way by customers. Thus, the customers dominate the relationship. Therefore, the relationship characteristic of power/dependence may create relationship development impacts on the operations of the small suppliers and may influence the relationship development process between small suppliers and their larger customers.

Technology

Skinner (1982, p.464) has defined technology as "the set of physical processes, methods, techniques, tools and equipment by which products are made or services rendered". Nyström (1990, p.43) suggests technology is "knowledge that is potentially useful for product and company development, even through the immediate implications may not be clear". Some small suppliers may build their technology for one product only for a single customer. Also small suppliers' technology development may be driven by the customer's requirements with limited inputs and involvement expected from the supplier e.g. in terms of cooperation or mutuality. Therefore, the relationship characteristics of mutuality and cooperation may create relationship development impacts on the technology of the small suppliers and may influence the relationship development process between small suppliers and their larger customers.

Innovation

Christensen (1997) defines innovation as the processes by which an organisation transforms labour, materials and information into products and services of greater value. Saren (1984, p.11-12) argues that "innovation is the process by which an invention is first transformed into a new commercial product, process or service". Innovative activity may relate to new products, new services, new methods of production, opening new markets, new sources of supply, and new ways of organising (Ojasalo, 2004). Innovation is characterised by its uniqueness. Innovation that is linked to a firm's objectives and relates to customer needs can make a company competitive, but some small suppliers may not be able to innovate new products to meet customer requirements. Small suppliers may lack experience and skill, and may be unable to produce products that customers require. Thus, the way small suppliers behave towards their customers appears to lack uniqueness and direction. Small suppliers may feel insecure in their relationship with their customers. This will influence the customer's inclination to continue the relationship with the supplier. Therefore, the relationship characteristic of particularity may create relationship development impacts on the innovation of small suppliers and may influence the relationship development process between small suppliers and their larger customers.

Customer Service

Services are defined by Zeithaml and Bitner (2003, p.3) as "including all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced, and provides added value in forms (such as convenience, amusement, timeliness, comfort, or health) that are essentially intangible concerns of its first purchaser". Customer services can be seen as an experience or a

process in which a transaction of ownership of the product takes place. Small suppliers may have to help their larger customers with consumer services such as free phone help lines, or company websites (including consumer complaints). Small suppliers may not be able to offer an excellent customer service system, because of their limited resources, their dependence and their consequently restricted role in the relationship with their customers. Thus, the relationship characteristic of cooperation may create relationship development impacts on the customer service of small suppliers and might influence the relationship development process between small suppliers and their larger customers.

4.4.2 Supplier's Strategy

Johnson and Scholes (1999, p.10) define strategy as "setting long-term direction; strategy as direction or scope of an organisation which achieves advantage for the organisation through its resources and change environment, organisation, capabilities and value". Grönroos (1996, p.9) argues that the role of strategy is "to identify and establish, maintain and enhance relationships with customers and other stakeholders, at a profit, so that the objects of all parties involved are met". From the strategic viewpoint, the business relationships between customers and suppliers influence the nature and the outcome of the firms' actions and are potential sources of efficiency and effectiveness (Håkansson & Snehota, 1995; Wilkinson & Young, 2002). A small supplier may operate in a single, or a limited number, of markets and will probably only have a relatively limited range of products or services. This implies that small suppliers may have less involvement in strategy development compared with larger suppliers. Also the small supplier may have a small services department and less capability in market analysis and research. Therefore, the relationship characteristics such as particularity, trust and power/dependence may create relationship development impacts on the strategy of small suppliers and may influence the relationship development process between small suppliers and their larger customers. Some key areas affected by the supplier's strategy are discussed below.

Price

Price is defined as "a major component in customers' judgment of both product and company" (Blythe, 2003, p.179). Also Brassington and Pettitt (2003, p.391) argue that price is used as a "communicator, as a bargaining tool and as a competitive weapon; and the customer can use price for comparing products, judging relative value for money or judging product quality". Price can also be an important dimension of business-to-business exchange, and may form the basis for long-term and stable

business relationships. Price is an important factor for the success of a company. Small suppliers may have high costs compared with larger suppliers, due to the latter's economies of scale, and they may be unable to compete solely on the basis of price. Thus, the relationship characteristic of mutuality may create relationship development impacts on the prices of the small suppliers and affect the relationship development process between small suppliers and their larger customers.

Distribution Channel

The distribution channel is defined as "the structure linking a group of individuals or organisations through which a product or service is made available to the consumer or industrial user" (Brassington and Pettitt, 2003, p.472). Also Palmer (2004, p.344) has defined the distribution channel as "a system of relationships existing among businesses that participate in the process of buying and selling products and services". Suppliers have to deliver goods on time to their larger customers. Small suppliers need to have excellent goods delivery systems and warehousing, but may not have the resources or economies of scale to maintain buffer stocks, for example. Thus, the relationship characteristic of cooperation could create relationship development impacts on the distribution channel of small suppliers and may influence the relationship development process between small suppliers and their larger customers. For example, if small suppliers cannot offer an adequate goods delivery channel to their larger customers, this will influence their business relationship development and potentially lead to dissolution.

Products

Products are defined as "anything that can be offered to a market for attention, acquisition, use, or consumption and that might satisfy a want or need; it includes physical objects, services, persons, places, organisations, and ideas" (Kotler and Armstrong, 1994, p.276). Every company has its strength and weakness but companies that are consistently successful in the products development are rewarded by increase financial performance and market share. Thus, product development is widely regarded as important for companies. Small suppliers perhaps cannot produce a wide range of product lines, limiting customer product choice. Besides, small suppliers may be weak in product development capabilities and their product development may be driven by customer product specifications rather than truly innovative. Therefore, the relationship characteristics of particularity and power/dependence may create relationship development impacts on the products and may influence the relationship development process between small suppliers and their larger customers.

4.4.3 Supplier's Capabilities

Teece *et al.* (1990, p.28) define capabilities as "a set of differentiated skills, complementary assets, and routines that provide the basis for a firm's competitive capacities and sustainable advantage in a particular business". Leonard-Barton (1992) view core capabilities as having four dimensions; employee knowledge and the skills embodied in people, technology systems, managerial systems, and the values and norms associated with the various types of embodied and embedded knowledge and with the processes of knowledge creation and control. Similarly, Johnsen (2005) identifies four classes of capabilities; knowledge based, technology based, managerial systems based, and culture based. Capabilities development is an important part of the development of a relationship (Wilson and Jantrania, 1994; Walter *et al.*, 2001; Mouzas and Ford, 2006). The present research is focused on the dyadic relationship between small suppliers and their larger customers, which is likely to be influenced by the partner firm's core capabilities. Leonard-Barton's (1992) view of capabilities is described below.

Employee Knowledge and Skills Embodied in People

Human capabilities consist of the knowledge and skills embodied in people (Leonard-Barton, 1992). Khalid (2003) argues that knowledge needs to be shared in an organisational context, so that skills possessed by individuals are connected with those of others engaged in a common activity. Teece (1998) argues that the dimensions of capabilities have often been considered from a knowledge-based perspective. Small suppliers may have limited resources for employee training which may limit the acquisition of specialised knowledge and skills.

Technology Systems

Technology capabilities result from years of accumulating and structuring the tacit knowledge in people's heads (Leonard-Barton, 1992). Johnsen and Ford (2002) argue that technological capabilities are the intangible abilities that may enable a firm to create values and norms associated with the development of a particular area of knowledge. Small suppliers may have difficulty improving their technology capability since a lack of employee training may create weakness in technology systems.

Managerial Systems

Managerial systems involve "formal and informal ways of creating knowledge and controlling knowledge" (Leonard-Barton, 1992, p.3). Small suppliers may have

limited budgets and lack employee training. This may adversely affect the performance of their managerial systems.

Values and Norms

Company culture is concerned with values and norms. Values are associated with the content and structure of knowledge and the means of collecting and controlling knowledge (Leonard-Barton, 1992). Foss (1999) argues values and norms can be described as intangible capabilities, because their social complexity makes them an important and unique capability area in relationships. Small suppliers may be less able to convey their values and norms via a recognisable company image and brand compared with larger suppliers, and may be relatively weak in their company culture due to insecurity and resource limitations.

These reasons can affect the dyadic business relationship between small suppliers and their larger customer. For example, this could mean that small suppliers may not be able to develop new relationships or stifle relationships with current customers. Thus, the relationship characteristic of inconsistency may create relationship development impacts on the capabilities of the small suppliers and may influence the relationship development process between small suppliers and their larger customers. This is because small suppliers' staff may have less knowledge and skills and may misunderstand their customer's needs.

4.5 Conclusions

A conceptual framework has been presented, which has at its centre the set of key relationship development impacts on the dyadic relationship between a small supplier and their larger customer that was identified in the literature review. The framework focuses on how the relationship characteristics may create the relationship development impacts on the small suppliers and may therefore influence the relationship development process between small suppliers and their larger customers.

4.6 Emerging Research Questions

The final part of conceptual developments outlines the research questions that have emerged from the analysis of the current literature on the dyadic relationship development between small suppliers and their larger customers. Following the logic of the conceptual development these are as follows:

- How may the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers?
- What are the different types of relationship development impacts that may influence the relationship development process between small suppliers and their larger customers?
- What influences do the above relationship development impacts have on the relationship development process between small suppliers and their larger customers?

The set of research questions outlined here forms the basis of the empirical data collection. Chapter Five will identify and discuss the most appropriate research strategy for exploring the above questions.

CHAPTER FIVE: RESEARCH PHILOSOPHY AND METHODOLOGY

5.1 Introduction

The previous chapter outlines the topic of this research, presenting a conceptual framework based on a review of the relevant literature available at the time it was undertaken. The literature review and conceptual framework helped shape the research questions. The purpose of this chapter is to provide an overview and justification of the research philosophy and methods in relation to the research propositions discussed in the previous chapter.

Moreover, this chapter sets out to describe the research strategies, empirical data collection, research indicators, question design, data analysis methods, pilot case study, representative case studies, and the credibility of research findings. It begins by discussing the research assumptions and research philosophies perspective adopted, within the context of the relationship between small suppliers and their larger customers in the Taiwanese electronics industry.

5.2 Philosophical Assumptions

Denzin and Lincoln (1998) explain that a paradigm encompasses the three elements epistemology, ontology, and methodology. Denzin and Lincoln (1998, p.185) define a paradigm as "a basic set of beliefs that guide action". The examination of ontology and epistemology can influence the research process (Easton, 1995). Ontology and epistemology will influence the choice of research philosophies and process.

5.2.1 Ontology

The term ontology has multiple definitions, being used in different senses in different disciplines (Guarino, 1998), the main dichotomy being between the fields of philosophy and artificial intelligence. From the former discipline, Webster's dictionary (2008) offers "A science or study of being: specifically, a branch of metaphysics relating to the nature and relations of being; a particular system according to which problems of the nature of being are investigated". Denzin and Lincoln (1998, p.185) note that "ontology raises questions about the nature of reality".

The term "ontology" is used in a less formal sense in the present paper, to describe the (often implicit) assumptions investigators make about the nature of reality, and its influence on their choice of methodology (Easton, 1995). This research assumes that the relationship between small suppliers and their larger customers in a particular industrial environment has identifiable characteristics that are in principle distinguishable from other types of commercial relationships, and that these characteristics influence the further development of the relationship.

5.2.2 Epistemology

Easton (1995, p.420) states that "epistemology may be deemed to include ways of knowing about the world – the nature, derivation, and scope of knowledge, as well as its claims to reliability". Denzin and Lincoln (1998, p.185) argue that "epistemology asks, how do we know the world? What is the relationship between the inquirer and the known?" Easton (1995, p.416), notes that "what we assume about how the world is will clearly affect the methodology we choose to adopt, whether we are aware of this influence or not". The choice of research method is thus a reflection of the assumptions embedded in the prevailing epistemology. In the present investigation, these would include the assumption that meaningful generalisations can be based on a limited sample of case studies, and that a summary of interview responses can be a reasonable approximation of reality.

5.2.3 Research Philosophy

Research philosophy has been defined as "the progress of scientific practice based on people's philosophies and assumptions about the world and the nature of knowledge" (Collis and Hussy, 2003, p.46). Research philosophy is a fundamental concept about the development of knowledge in research areas. Having a consideration of the philosophy of research helps a broader perspective of research project so that researchers may have a clearer purpose. A number of research philosophies have been developed as frameworks to help researchers design appropriate data collection and analysis methodologies. The two main research philosophies, are positivism and phenomenology (Easterby-Smith *et al.*, 2002; Gill and Johnson, 2002; Collis and Hussey, 2003; Saunders *et al.*, 2003). Positivists (positivists are people who believe in, and defend positivism) believe in and seek to establish absolute truth, whereas phenomenologists (phenomenologists are people who believe in, and defend phenomenology) deny the existence of absolute truth, and see truth as context dependent. "The key idea of positivism is that the social world exists externally, and

that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition" (Easterby-Smith *et al.*, 1991, p.22). The statement contains two assumptions: firstly reality is external and objective; secondly knowledge is only of significance if it is based on observations of this external reality. In contrast, the key idea of phenomenology is that "reality is socially constructed rather than objectively determined" (Easterby-Smith *et al.*, 1991, p.24).

As pointed out in the literature review, this research aims to examine the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry. More precisely, the principal goal of this research is to create and impact framework describing how the relationship characteristics may create relationship development impacts on the small suppliers and may influence the process of relationship development between small suppliers and their larger customers. This research focuses on the 'what', 'why', and 'how' questions. For instance:

- How may the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers?
- What are the different types of relationship development impacts that may influence the relationship development process between small suppliers and their larger customers?
- What influences do the above relationship development impacts have on the relationship development process between small suppliers and their larger customers?

In investigating the interaction in the dyadic relationship between small suppliers and their larger customers, this research focuses on process rather than content. The research philosophy chosen is phenomenology using a qualitative approach. Saunders *et al.* (2003) state that the essence of phenomenology is to understand subjective reality in order to be able to make sense of and understand motives, actions and intentions. Remenyi *et al.* (1998) maintain phenomenology aims to provide answers to questions such as 'what', 'why', and 'how', which constitute most of the research questions in this study. Therefore, phenomenology is an appropriate description for this research.

The present investigation takes the work of the IMP Group as a model. These

investigators have traditionally employed in-depth case studies based on face-to-face interviews or larger scale questionnaires, characteristic of the phenomenological approach (Easton, 1998). The reasons for this have been many, but a significant factor has been the practical problems of carrying out this type of research in terms of determining the complexities of the phenomena in question.

Positivism assumes that social reality is independent of and external to the researcher (Burns, 2000). Hence, it may be argued that positivism is not an appropriate description of the present research, which is based on an interpretation of the (to some extent subjective) perceptions of interview participants.

5.3 Research Approach and Process

After identifying the research philosophy applicable to the research process, the next step is to identify the research approach (Saunders *et al.*, 2003). The research approach can be seen as the transition from the choice of philosophical orientation towards the more practical methodological choices. There are two types of research approaches, deductive and inductive (Ghauri *et al.*, 1995; Creswell, 2003). Hussey and Hussey (1997, p.19) define deductive research investigation as "a study in which a conceptual and theoretical structure is developed which is then tested by empirical observation; thus particular instances are deduce from general influences". In inductive research theory is "developed from the observation of empirical reality; thus general inferences are induced from particular instances, which is the reverse of the deductive method since it involve moving from individual observation to statements of general patterns or laws" (Hussey and Hussey, 1997, p.13). Sekaran (2000) and Saunders *et al.* (2003) note that a deductive approach logically is more applicable in positivism and an inductive approach is more applicable in phenomenology.

Qualitative research aims to gain insights concerning attitudes, beliefs, motivations and behaviours, and is usually associated with exploratory research, whereas quantitative research is generally associated with descriptive research involving the collection, analysis and interpretation of data using statistical techniques (Proctor, 1993). The present investigation is inductive and exploratory, and aims to examine and understand how the relationship characteristics may create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers; and why a particular set of relationship development impacts may have an influence on a set of relationship development processes. Therefore, qualitative data collection techniques

are felt to be the most appropriate method for this research.

Van Maanen (1983, p.9) defines qualitative techniques as "an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world". Qualitative research by the IMP Group (Håkansson, 1982; Håkansson and Snehota, 1995; Ford, 1997) suggests that these techniques are applicable to the study of commercial relationships. The purpose of this study is to identify, examine and understand the 'what', 'how', and 'why' of the relationship development impacts of the characteristics of the relationship between small suppliers and their larger customers on the process of relationship development. Therefore an inductive, qualitative approach is applied in this research project.

5.4 Research Strategies

The research strategy is based on the three research questions specified in section 4.6 (Emerging Research Questions). These questions are concerned with the dyadic relationship between small suppliers and their larger customers.

5.4.1 Case Study Methodology

The research strategy is also discussed in this section to help identify issues related to the empirical data collection. Among a number of research strategies, Easton (1998, 2002) argues that case study is perhaps the most appropriate method for research into industrial networks and states that there exists an epistemological defence for case study, which is at once powerful, and appealing. Case study is a useful method for studying processes in companies. This study follows the relationship research approach of the IMP Group (e.g. Ford *et al.*, 2003, in its use of the case study method).

The use of the case study approach is also supported by Remenyi *et al.* (1998), who describes it as "a way of establishing valid and reliable evidence for the research process as well as presenting findings which result from the research". Leonard-Barton (1990) describes case studies as histories of past or current phenomena, drawn from multiple sources of evidence. In addition case studies are considered the most appropriate research strategy in terms of answering "how" and "why" questions (see Table 4), matching the phenomenological focus on "how", "why", and "what" questions. The present research is focused on the relationship

development impacts of small suppliers and their larger customers in the Taiwanese electronics industry. This requires the understanding of business relationships and networks, so case studies are particularly appropriate (Eisenhardt, 1989; Dubois and Gadde, 1999).

5.4.2 Research Design – Multiple Case Studies

For this research, multiple case study and exploratory case study approaches have been chosen. Yin (1993) divides the uses of case study research into three categories: exploratory, descriptive and explanatory. Exploratory research uses a pilot study that can be used as a basis for formulating more precise questions or testable hypotheses. The descriptive case study is an attempt to describe a phenomenon within its context. Explanatory research looks at data in terms of cause and effect relationships. The present research is concerned with defining questions about the relationship development impacts of the characteristics of the relationship between small suppliers and their larger customers on the process of relationship development, so exploratory research is considered appropriate for this study.

There are two main types of case study. A multiple-case approach aims to derive general conclusions from a limited number of cases. A single-case study (Yin, 1993), seeks to arrive at specific conclusions regarding a single case because this "case history" is of particular interest. The research strategy used in this thesis is multiple case studies because the aim of this research is to formulate general conclusions on the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry.

5.4.3 Participant Observation

The main technique used for gathering empirical evidence from the exploratory case studies was participant observation. Waddington (1994, p.108) describes the aim of participant observation as "to enable the observer to study firsthand the day-to-day experience and behaviour of subjects in particular situations and if necessary to talk to them about their feelings and interpretations". Atkinson and Hammersley (1998) suggest that participant observation is not a particular research technique but a mode of being-in-the-world characteristic of researchers.

Participant observation was used because of the level of detail it provides, particularly on the case's interactions and relationships. It can also reveal information that would

not be articulated during a face-to-face interview.

In this investigation the researcher accompanied key staff, such as the president, managing director, or marketing manger of small suppliers in their visits to their larger customer, observing their interaction and asking supplementary questions to collect more detailed data. Audio recording and hand-written notes were employed to record key points. The researcher had worked in the electronics industry for several years, which helped in the recording and interpretation of the subject's interactions.

Representative Case Studies were conducted over a one-year period between November 2005 and November 2006. Participant observation was used over approximately one month for each case, as detailed below.

Case B (Bright Light – Diode)

Case B was observed in January 2006, for six one-hour sessions, five with the marketing manager and one with the assistant manager. During the meetings the researcher also spoke with Diode's purchasing manager and the domestic department's vice-managing director.

During the latter visit Diode's purchasing manager seemed rather offhand with Bright Light's marketing manager. The buyer asked the marketing manger, to report some technology problems to Bright Light. The purchasing manager did not talk much with the marketing manger. This is consistent with the information from 6.3.1 "The marketing manager is the president's son. This is his first permanent job since completing his full-time education with a PhD in chemistry, and he is unusually young and inexperienced for such a role." The researcher also has asked Bright Light marketing manager about this. The marketing manager acknowledged that "*I am still very new in the LED field. I am still learning*". This may suggest a lack of credibility with customer management.

From the session with the assistant manager, the researcher noted that the purchasing manager complained about Bright Light's products, stating that product technology is extremely weak in Bright Light. He bargained aggressively and did not seem very interested in keeping the relationship with Bright Light. This is consistent with Diode's domestic department vice-managing director's statement that "*If an LED's brightness is very high, it sells at a higher price, and vice versa. However, Bright Light's product quality is very weak. Technically weak products, such as relatively low brightness LEDs, command lower prices, since brightness is a very important price*

determinant in the LED market."

From these six observation sessions, the researcher concluded that the relationship between Bright Light and Diode was insecure and vulnerable to dissolution.

Case C (Clean System – Semiconductor)

Case C was observed from March to April 2006, for three sessions of one and half hours, once with Clean System's marketing manager and twice with their president.

The Clean System marketing manger was observed in his meeting with the Semiconductor buyer and production manager in the visitor room. They discussed some component orders and product technology problems.

The following two meetings observed, were between the Clean System president and the Semiconductor purchasing manager. They discussed ordering complete new IC semiconductor mould automatic cleaning systems, components prices, and how to improve product technology. From these two meetings the researcher learned that Clean System's main competitors are based overseas, and that they have better products than Clean System, but is around 20% to 30% more expensive. Clean System is very strong in after sales service, one important reason for Semiconductor to maintain the relationship with them.

From these three observation sessions, the researcher concluded that the relationship status was satisfactory. In addition to Clean Systems acknowledged strength in after sales service, since Semiconductor has to replace some components of the IC semiconductor mould automatic cleaning system every three years, it would be inconvenient and potentially disruptive to seek a new supplier.

Case D (Cooling – Laptop)

Case D was observed from July to August 2006 in four sessions of around one and half hours each, observing Cooling's domestic marketing manager once, the domestic sales person twice, and the vice-managing director once. At these four meetings, the researcher questioned Laptop's purchasing manger, buyer, manufacturing director, and R&D manager.

Cooling's domestic marketing manager, discussed future orders with Laptop's purchasing manager, who complained about Cooling's products. He mentioned that "*The percentage of defective products from Cooling is high*". He also bargained for a

lower price, which the purchasing manager thought should reflect the poor quality of Cooling's products.

Cooling's domestic sales person was observed to have a positive, friendly relationship with Laptop's buyer. They talked about orders and product problems, but. They also exchanged some personal information not directly related to business.

Cooling's vice-managing director discussed their product problems with Laptop's purchasing manager, manufacturing director, and R&D manager. Laptop complained that Cooling had a high percentage of faulty products, and that their product technology was very weak, which meant that Laptop could only use them in their finished goods sold in Mainland China, where weaknesses in product quality and technology were offset by the price advantage.

From these four sessions, the researcher concluded that Cooling had an insecure relationship with Laptop, since it was based solely on price advantage.

Case E (Transformer – Power Supply)

Case E was observed in November 2006 for three sessions of around two hours each, with Transformers managing director twice and their marketing manager once.

Transformer's managing director was observed meeting the Power Supply purchasing manager, component quality control manager, and R&D manager. .They discussed their technical cooperation and order placement. During the meeting, the researcher spoke with all of them such as how do you think Transformer's products, and formed the opinion that Power Supply was happy in their relationship with Transformer.

Transformer's marketing manager was observed meeting Power Supply's buyer. They talked about some future orders and product requirements. Transformer's products are custom-made, so require more liaison to ensure they meet specific customer requirements.

These three observation sessions gave the impression of a strong relationship based on technology capabilities and cooperative product development.

5.4.4 Unit of Analysis

The unit of analysis for this thesis is a specific relationship between small supplier

and their larger customer in the Taiwanese electronics industry. The research aims at identifying the relationship characteristics which create relationship development impacts on the small suppliers and may influence the relationship development process. The first part of the study investigates the characteristics of the relationship between small suppliers and their larger customers. The second part examines the different types of relationship development impacts that may influence the relationship development process between small suppliers and their larger customers. The final part describes the relationship development process and identifies the development status of the individual relationships.

Table 4: Relevant Situations for Different Research Strategies

Strategy	Form of Research Question	Requires Control of Behavioural Events?	Focuses on Contemporary Events?
Experiment	How, Why?	Yes	Yes
Survey	Who, What, Where, How many, How much?	No	Yes
Archival analysis	Who, What, Where, How many, How much?	No	Yes/No
History	How, Why?	No	No
Case study	How, Why? ➢ How the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers? ➢ Why do the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers?	No ➢ This research is focused on the real action and relationship characteristics which create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. It does not require control of behaviour.	Yes ➢ This research aims to examine relationship characteristics and relationship development impacts on small suppliers and any influences on the relationship development process between small suppliers and their larger customers. It focuses on contemporary events.

Source: COSMOS Corporation, Adopted from:

Yin, R. K., (2003), *Case Study Research: Design and Methods*, 3rd ed. Thousand Oaks, Calif.; London: Sage Publications, pp. 5.

5.5 Data Collection Methods

This research acquires data from both secondary and primary sources. Secondary data is obtained through en extensive literature review. Primary data is collected through in-depth interview with small suppliers and their larger customers in the Taiwanese electronics industry.

5.5.1 Secondary Sources

A through review of secondary sources helped to finalise the research questions and set the framework for primary data collection and analysis. The principal literature focus is the dyadic relationship between small suppliers and their larger customers. The main sources used in secondary data collection included books, journals, conference proceedings, thesis, company's annual reports, government reports, and the Internet.

There are many relevant books, journals, and conferences papers in the area of dyadic relationships between small suppliers and their larger customers. Industrial Marketing and Purchasing Group (IMP Group) is the major research source for this topic area. IMP Group has traditionally investigated the network and relationship. Therefore, the relevant books, journal articles and conference papers produced by the IMP Group were reviewed and analysed as important secondary data.

The key academic journals investigated for published research on the relationship characteristics and relationship development process included Industrial Marketing Management, Journal of Business and Industrial Marketing, Journal of Marketing, and Journal of Business Research. For example, the work of Chen and Chen (2002) was a significant network view of asymmetric strategic alliances in a specific area. A list of articles, which proved useful in the development of this research and its conclusions, is to be found in the Bibliography section at the end of this thesis.

Table 5: Summary of Secondary Data

Secondary Research	Sources	Key Findings
Books	IMP relevant books General management books	Relationship characteristics and relationship development process (e.g. Ford *et al.*, 2003) Relationship development impacts on the small supplier (e.g. Heizer and Render, 2001)
Journals and PhD thesis	Industrial Marketing Management Journal of Business and Industrial Marketing Journal of Marketing Journal of Business Research	Relationship characteristics and relationship development process (e.g. Chen and Chen, 2002; Johnsen, 2005)
Conference papers	IMP website: www.impgroup.org	Relationship characteristics and relationship development process (e.g. Ford *et al.*, 1986)
Government reports and company reports websites	Government report: Small and Medium Enterprise Administration, Ministry of Economic Affairs, Taiwan, R.O.C. http://www.moeasmea.gov.tw/mp.asp?mp=2 Company report: http://www.everohms.com/	Definition of SMEs Company background

5.5.2 Primary Data Collection

Primary research data is collected from real life. Primary data was collected after the secondary research data, and is a core part of the research. The "field work" was carried out on small suppliers and their larger customers in the Taiwanese electronics industry. Fieldwork is synonymous with the collection of data using observational

methods. Robson (2002) noted that observation is commonly used in an exploratory phase, typically in an unstructured form. It aims to find out what is going on in a given situation.

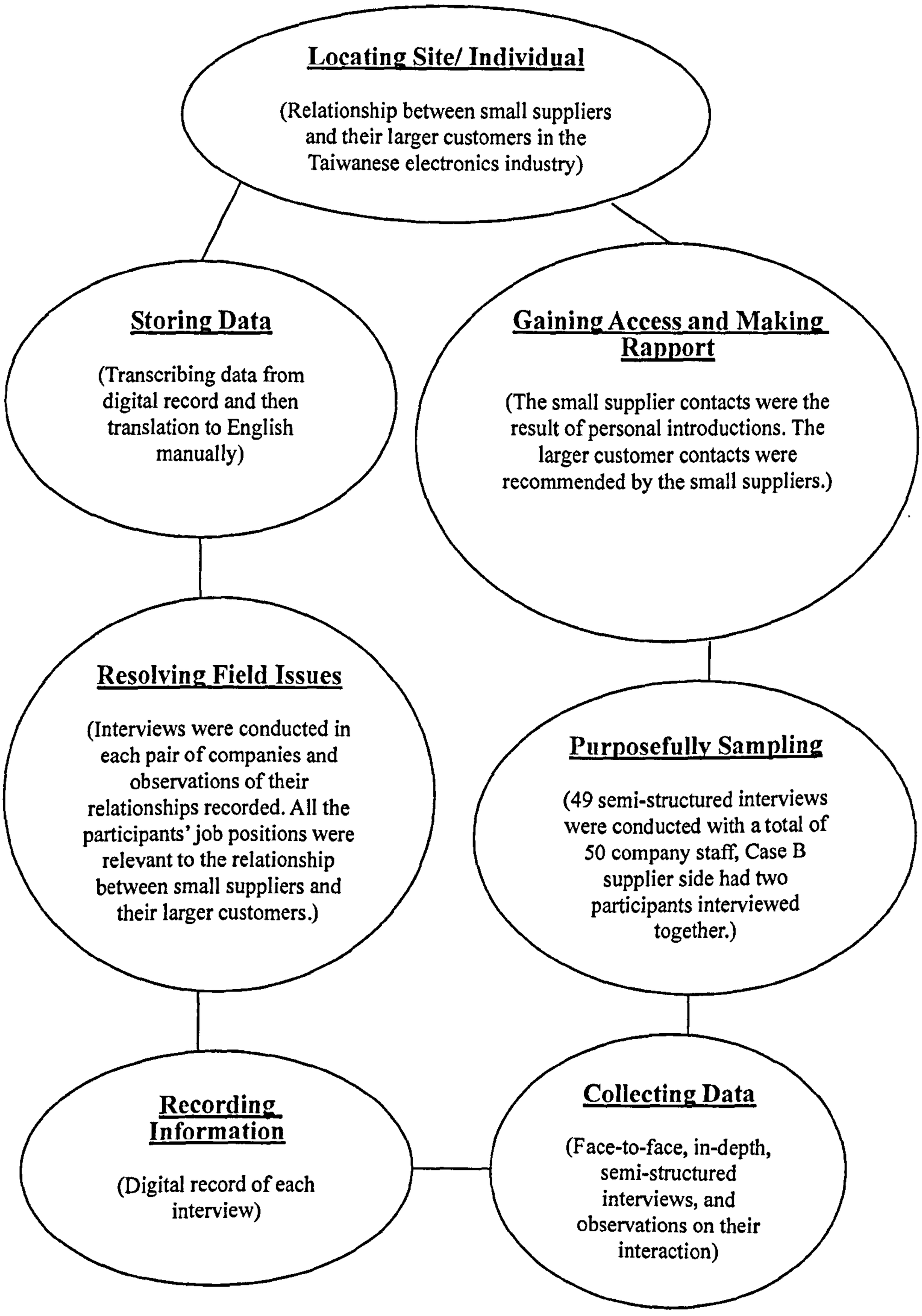
Primary data collection can take place once the research questions are confirmed and a theoretical framework is defined following the literature review. Primary data collection as used in this research involves five small supplier and their larger customer pairs from the Taiwanese electronics industry. For each case, five customer staff (e.g. vice-managing director, purchasing manager, and others involved in supplier relationship) and five supplier staff (e.g. president, managing director, and marketing manager) participants were interviewed. There are in total 50 participants in 49 semi-structured interviews with the company personnel, since Case B supplier side had two participants interviewed together. All the participants are relevant to the maintenance of relationships. 10 participants were interviewed in the pilot case study (Case A), whereas another 40 participants were interviewed in the other four cases.

Easton and Yin (1998, 2003) believes that multiple-case designs are preferable to a single-case design, and he argues that interviewing is one of the most important and essential sources of case study information. Hussey and Hussey (1997) argue that questions focused on the identification and explanation of critical incidents are widely used during in-depth interviews to generate qualitative data. Chia (2005) argues that semi-structured in-depth interviews are useful research methods in qualitative case studies on relationships. In order to be able to claim that a scientific investigation approach has been used, there needs to be clear evidence that the research has been carried out in a systematic, through, and rigorous manner. Therefore, the multiple case designs, face-to-face interviews (Moore, 2000), in-depth interviews, semi-structured interviews and participant observations (Robson, 2002; Yin, 2003) are have all been incorporated in the present investigation. These interview methods are often very useful if sensitive or complex questions need to be asked, since there is an opportunity to provide further explanation if the respondent is unsure of the questions meaning.

As this research aims to evaluate the relationship development impacts on small suppliers and their larger customers in the Taiwanese electronics industry, the focus is on evaluate the relationship development impacts of the relationship characteristics on the further development of the relationship. This research purposes to examine the balance between small suppliers and their larger customers' relationships, defining company size on the basis of the number of employees and turnover rather than paid-in capital.

The following figure (Figure 7) shows how a qualitative researcher engages in a series of activities in the process of collecting data.

Figure 7: Data Collection Activities



Source adapted from:

Creswell, J. W., (1998), *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*, Thousand Oaks, Calif.; London: Sage Publications, pp. 110.

5.6 Research Indicators

Wengraf (2001, p.61) suggests that, "theory questions are not interview questions". The theory questions create and influence how interview questions are developed and expressed in the theoretical language of the research community, whereas the interview questions should be expressed in the language of interviewee (Wengraf, 2001). Huberman and Miles (2002) argue that the initial definition of the research questions is important for building theory from case studies. Research questions (theory questions) need to be clearly distinguished from any interview questions. Wengraf (2001, p.53) also note that "an empirical indicator is a measurement, an observation, a datum, which is taken to be evidence for a particular theoretical concept being in one state or another".

The research indicators (Appendix 1) for this study have been derived from the literature and the research questions (Chapter Four of section 4.6). Subsequently, the interview questions have been designed to help supply answers to the research questions (Wengraf, 2001). The aim is to design effective interview questions.

Following the development of the research indicators, the questions are mainly open-ended with the exception of tactical questions about the company and personal details. Open-ended questions offer the advantage that the respondents are able to give their opinions but they can be difficult to analyse (Hussey and Hussey, 1997; Collis and Hussey, 2003). This research requires the opinions of individuals about the relationship between small suppliers and their larger customers. Following the formation of the interview questions, the researcher used the British Council in Taiwan to provide formal translation of the interview questions as a source of verification (Appendix 4, 5 and 6).

5.7 Designing Questions

Hussey and Hussey (1997) and, Collis and Hussey (2003) argue that a phenomenological approach suggests unstructured or semi-structured interview questions that are likely to be open-ended and may require follow-up exploration in more depth. McCrossan (1985, p.27) states that "open-ended questions require the informant to answer the question in his or her own words". Open-ended questions seek opinions either through focus groups or interviews. For example, interview theme questions C and D (see Appendix 2) are open-ended questions. Open-ended questions offer the advantage that the respondents are able to give their opinions but

they can be difficult to analyse. Closed questions not only give the question but also present response alternatives; the respondent is encouraged to pick the answer(s) that best represent(s) his or her situation (Mangione 1995). Closed questions are very convenient for collecting factual data and are usually easy to analyse.

In this research, some of the questions are likely to be factual, such as the respondent's position and responsibility in the company. Some of the questions asked could be a personal response or personal view such as what is communication like between you and your customer/ supplier? These questions may be described as open-ended questions. Open-ended questions were chosen for use in this research, since staff opinions were the focus of interest.

As all the respondents are located in Taiwan and the interviews are conducted in Taiwanese, the researcher used the British Council in Taiwan to provide formal translation of the interview questions as a source of verification. The questions were written in English and translated to traditional Chinese as used in Taiwan by the researcher. The British Council in Taiwan was used to translate from traditional Chinese into English. This was used by the researcher to compare against her own version (Appendix 4, 5, and 6).

5.7.1 Interview Themes

The interviews were semi-structured with a list of specific questions around which a discussion took place. The interviews were structured on themes based on the conceptual model Figure 6 (A Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development) in Conceptual Development Chapter Four: The discussion areas were as below:

A. Company Background
B. Relationship Background
C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers
D. Relationship Development Impacts on the Small Suppliers

Interview theme (A) provides the general information about the company's background and specialised business, such as when the company was established, what their major products are, etc. This section discussion aims at an understanding of company history.

Interview theme (B) examines the background of the relationship. The interview questions, (such as, how long have you been working together with your supplier/ customer?) aim to understand the background of the relationship between small suppliers and their larger customers.

The purpose of interview theme (C) is to investigate the relationship characteristics, using questions like, "What is communication like between you and your supplier/ customer".

The object of interview theme (D) is the identification of relationship development impacts on the small suppliers. It examines the relationship development impacts on the small suppliers and how these relationship development impacts influence the relationship development process, using questions, such as, "What aspects of the relationship have been influenced by your customer's technology expectations".

The conceptual model as presented in Chapter Four (Figure 6) depicts the relationship development impacts of the relationship characteristics on the process of relationship development. This concept is used to analyse the relationship between small suppliers and their larger customers as well as any relationship development impacts on the small suppliers. Interview themes C and D examine the relationship characteristics between small suppliers and their larger customers, and the relationship development impacts on the small suppliers.

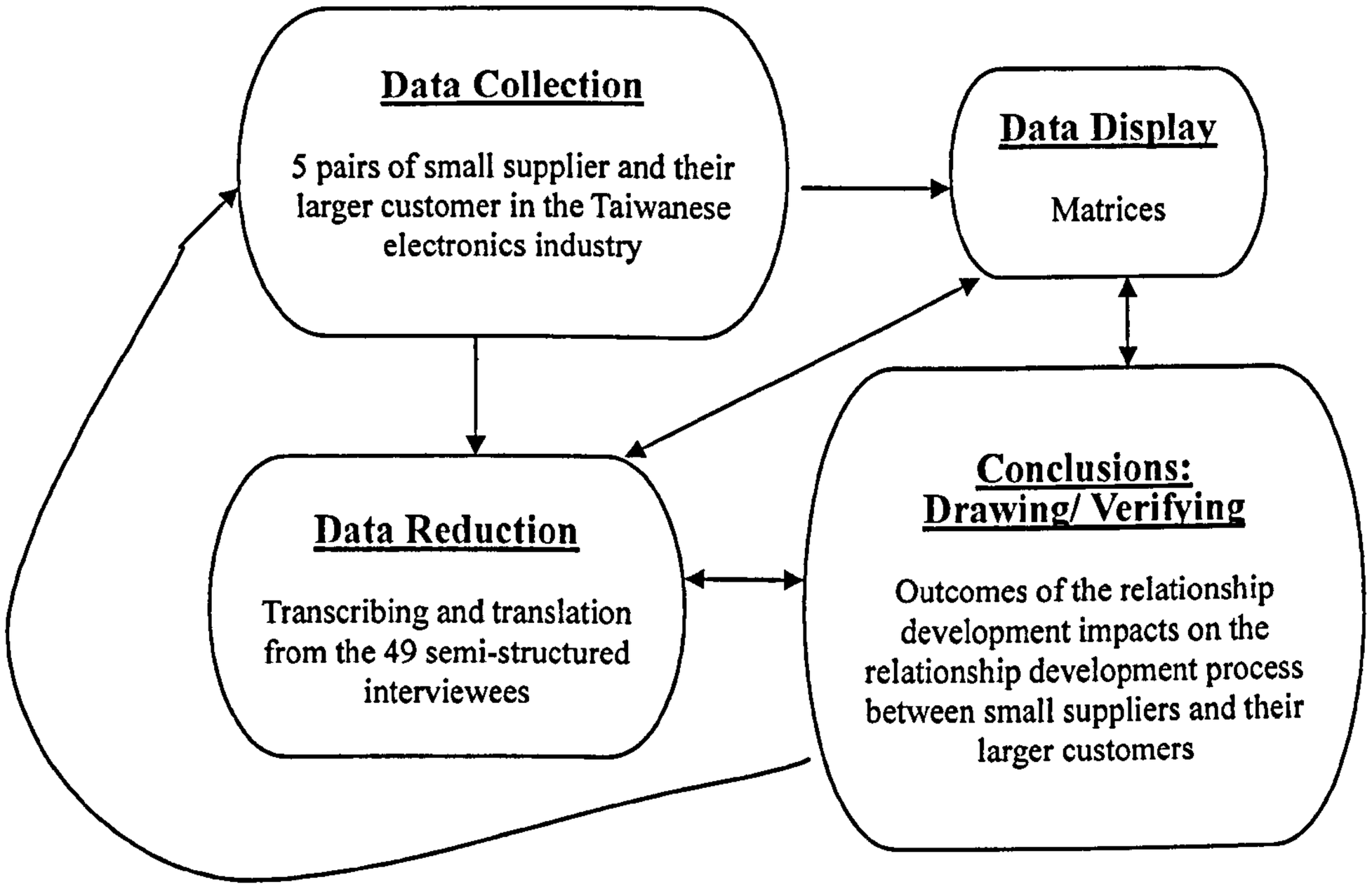
From an examination of these themes it is hoped to determine the small suppliers' success in the process of the development of their business relationship with their larger customers.

5.8 Data Analysis Methods

The data analysis technique used for the case study analysis in support of theory-building was selected to reflect the research philosophies. Miles and Huberman (1994) have outlined specific techniques for analysing and displaying qualitative data, which involve coding for key ideas, and tabular displays and graphs, which present qualitative data without destroying its meaning. In this thesis, data from the exploratory interviews are processed by transcription, validation of the transcripts with respondents, translation of the transcription to English, and analysed and interpreted by matrix construction.

Miles and Huberman (1994) argue that qualitative data analysis is a continuous, iterative enterprise that includes data collection, data reduction, data display, and conclusion drawing and verifying. Figure 8 below illustrates the interacting component activities of the data analysis employed in the present study.

Figure 8: Components of Data Analysis: Interactive Model



Source adapted from:
Miles, M. B., and Huberman, A. M., (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed. Thousand Oaks, Calif.; London: Sage Publications, pp. 12.

5.8.1 Data Collection

Five pairs of small supplier and their larger customer in the Taiwanese electronics industry were investigated. Five participants were interviewed from each supplier (e.g. president, managing director, and marketing manager) and customer (e.g. vice-managing director, purchasing manager, and others involved in supplier relationship). There are in total 50 participants in 49 semi-structured interviews, because Case B supplier side had two participants interviewed together. All the participants are relevant to the maintenance of the relationship. The small supplier contacts used to initiate "snowball sampling" were via personal introductions. The researcher was introduced to the larger customers by their small supplier counterparts.

5.8.2 Data Reduction

Miles and Huberman (1994, p.10) point out that "data reduction refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes or transcriptions". Data reduction is not something separate from analysis. It is part of analysis. Data reduction comes from the researcher's decisions, which are shaped by the conceptual framework. Data reduction can therefore have an important influence on the final conclusions. In this research, the 49 semi-structured interviewees were transcribed by the interviewer and then translated into English.

5.8.3 Data Display

Miles and Huberman (1994, p.11) describes data display as "an organised, compressed assembly of information that permits conclusion drawing and action". There are many types of displays, such as matrices, graphs, charts, and networks. All the information is organised into an easily accessible format. A display helps us easily understand what is happening and aids further analysis or action. In this thesis, the researcher uses a matrix to display the data. The columns represent individual respondent's respective job positions. The themes are shown in rows. The themes include company background, relationship background, relationship characteristics, and relationship development impacts on the small suppliers.

5.8.4 The Drawing of Conclusion and Verification

Miles and Huberman (1994, p.11) maintain that to draw and verify conclusions is to decide what things mean, by recording the "regularities, patterns, explanations, possible configurations, causal flows, and propositions". In this thesis the researcher draws conclusions on how the relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers, thus contributing to theory in the context of IMP research. Moreover, the researcher would like to understand what types of relationship development impacts on the small suppliers influence the relationship development process between small suppliers and their larger customers, and what these influences are, in the hope of helping small suppliers in the management of their relationships with their larger customers in the Taiwanese electronics industry.

A model of the iterative data analysis process is presented above. The coding of data (data reduction) leads to new ideas on what should go into the matrix (data display). The researcher will fill up the matrix and draw preliminary conclusions, which will be analysed and compared with the literature.

5.8.5 Cross-Case Analysis

Miles and Huberman (1994) argue that cross-case analysis enhances generalisability, and deepens understanding and explanation. In this thesis cross-case analysis is presented in the Chapter Seven and the matrix interpretation in Appendix 19. The columns represent case pairs while the themes are shown as rows. The themes include relationship duration, relationship characteristics, and relationship development impacts on the small suppliers. Every relationship characteristic is interpreted from supplier's viewpoint, the customer's viewpoint, with an overall summary of each case. The cross-case analysis chapter examines the comparisons and theoretical implications of the five case studies.

5.9 The Pilot Case Study

This section reports on the findings from the exploratory in-depth pilot case study that formed the initial investigation. Pilot interviews are more concerned with getting the questions right rather than getting the interview right (Gillham, 2000), as pilot case study can provide information about relevant field questions and about the logistics of the field inquiries. Yin (2003) argues that the pilot case study is not a pre-test; the pilot case is more formative and assists researchers to develop relevant questions by providing some conceptual clarification for the research design. Pilot case study could be add value (Yin, 2003, p.79), by increasing the yield of information from the cases. The pilot case study is an empirical data collection which helps examine the characteristics of the relationship between small suppliers and their larger customers, and predict the relationship development impacts on the small suppliers in the Taiwan domestic electronics market.

Ten pilot interviews were conducted across five participants from small supplier and five participants from their larger customer in the Taiwanese electronics industry.

5.9.1 Interview Methods

As the respondents are all based in Taiwan and the researcher is based in the UK, webcam technology was adopted to create a more face-to-face environment for the interviews. A simulation of the interview process, through the webcam was initially conducted, with the supervisor acting as one of the respondents in order to help identify any areas for improvement including clarity of content in the questions, physical posture, and eye contact during the interview. As a result of this review some questions were altered in their wording and delivery. The researcher found this test run very beneficial in helping to prepare for the actual interviews. Each interview of small supplier staff was approximately one hour, while each larger customer interview was approximately 20 minutes. The pilot case study was based in the UK and carried out from June 2005 to August 2005.

Arksey and Knight (1999, p.101) stress that "the quality of data is dependent on the quality of the relationship built up between the interviewer and the interviewee". As the researcher was previously employed by the organisation (supplier A) used in this pilot study it was possible to quickly establish a positive rapport with the respondent. This proved beneficial during the interview process. The researcher's experience in the company and acquaintance with the respondents helped ensure complete answers, which were digitally recorded, after the respondents confirmed this was acceptable. The researcher also used hand-written notes to record key points. Arksey and Knight (1999, p.105) state that audio-taping is the most popular method of recording qualitative interviews. There are advantages (e.g. interviewers can concentrate on what is said) and disadvantages (e.g. transcribing the tapes can be a lengthy process).

To protect confidentiality the researcher has assigned an alias for each organisation and used the respondent's position for each interviewee in the pilot case study (Case A).

5.10 The Representative Case Studies

After the pilot case study the interview questions were revised (Appendix 7 and 8) to eliminate repetition or ambiguity.

Semi-structured interviews were conducted over a one year period between November 2005 to November 2006. In total, 39 interviews, with 40 participants, were conducted. For each relationship pair, there were 5 small supplier participants, and 5 larger customer participants. Two participants were interviewed together in Case B, which accordingly only involved 9 interviews.

The researcher was introduced to the small supplier companies by Mr. Hsieh (the president of Taiwan Sangpuu Corporation), who provided the initial personal contacts necessary to start "snowball sampling".

5.10.1 Interview Methods

The representative case studies were conducted by face-to-face interview, in-depth interview, semi-structured interview and participant observations. The interviews were recorded, transcribed, the transcripts were validated with the respondents, and translated into English. Key points were also recorded in handwritten notes. Each small supplier interview took approximately one and half hours, while each larger customer interview took approximately 40 minutes. Due to commercial confidentiality, the names of the companies and interviewees remain undisclosed. The former are identified by aliases, the latter by their job titles.

Researcher has also accompanied small supplier staff such as the president, managing director, or marketing manager on visits to their larger customer, to observe their relationship and collect detailed observations using audio or handwritten records.

5.11 The Credibility of Research Findings

Both qualitative and quantitative researchers need to test and demonstrate that their studies are credible. While the credibility in quantitative research depends on instrument construction, in qualitative research, "the researcher is the instrument" (Patton, 2002, p.14). Thus, the credibility of a qualitative research depends on the ability and effort of the researcher. A credible source of information makes for quicker and firmer decisions. Yin (2003) describes the four tests of case study credibility as construct validity, internal validity, external validity, and reliability.

5.11.1 Construct Validity

King (1994, p.32) argues that "in qualitative research the concern is for the validity of interpretations – whether a researcher's conclusion that x is the main theme to emerge from an interview is valid". Yin (2003) suggests that evidence for case studies may come from six sources: documents, archival records, interviews, direct observation, participant observation, and physical artifacts. This research involves the collection of data from multiple cases (five case studies) using in-depth, semi-structured

face-to-face interviews and participant observations. The interviews were recorded, transcribed, the transcripts were validated with the respondents, and translated into English. Key points were also recorded during the interviews and observations in handwritten notes. Conclusions were validated by respondent feedback.

5.11.2 Internal Validity

Sykes (1991, p.10) suggests "internal validity as the internal coherence of the findings; the snugness of the fit between the data and the findings or conclusions". Internal validity is the approximate truth about inferences regarding cause and effect relationships. Internal validity is only relevant in studies that try to establish a causal relationship. This research examines how the relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers. The aim of the pilot case was partly to ensure internal validity by enabling the researcher to examine the initial research and provide the opportunity to adjust the research instruments prior to the representative case interviews.

5.11.3 External Validity

Yin (2003) describes external validity as establishing the domain to which a study's findings can be generalised, and points out the requirement for replication to strengthen claims for generalisability. External validity is related to generalisability. In the present study, the use of multiple case studies is felt to support generalisability within the Taiwan domestic electronics industry. There are in total 50 participants in 49 semi-structured interviews. All the participants are relevant in the relationship between small suppliers and their larger customers. The researcher sought any emerging patterns that occurred during the analysis in order to provide stronger support for the conceptual framework as reported in Chapter Seven (CROSS-CASE ANALYSIS COMPARISONS AND THEORETICAL IMPLICATIONS).

5.11.4 Reliability

Stenbacka (2001, p.551) describes the notion of reliability as one of the quality concepts in qualitative research which "to be solved in order to claim a study as part of proper research". Seale (1999, p.266) states that the "trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability". Reliability is the consistency or repeatability of the measures. Reliability has to do

with the quality of measurement. The researcher attended IMP Conference, workshops, and doctoral colloquiums. This provided opportunities to gain feedback from other professionals and researchers from similar areas. The investigator has accessed peer review of the works reliability by discussion with supervisors and feedback from an IMP Conference Doctoral Consortium presentation. The IMP Group specialise in customer and supplier relationships and networks, and are therefore well placed to provide critical review of the reliability of the findings of the thesis.

Additionally, the researcher has used government information (Small and Medium Enterprise Administration Ministry of Economic Affairs, R.O.C.) to verify the representativeness of the sample of SMEs used in the study sample. The interview questions were verified by the provision of formal translations by the British Council in Taiwan. The questions were written in English and translated to traditional Chinese as used in Taiwan by the researcher. The British Council in Taiwan was used to translate from traditional Chinese into English. This was used by the researcher to compare the two English versions.

5.12 Conclusions

This chapter presents and discusses the philosophical assumptions, research approach and process, research strategies, data collection methods, research indicators, designing questions, data analysis method, the pilot case study, and representative case studies which comprise the present research. The next two chapters (Chapter Six and Chapter Seven) examine the five set case analysis and then the cross-case analysis in some detail.

CHAPTER SIX: FINDINGS FROM THE FIVE IN-DEPTH CASE STUDIES

6.1 Introduction

Chapter six reports on the findings from the five case studies. Case Study A is a pilot study, and the other four studies form the core dataset for the empirical work of this thesis.

The first section of the chapter discusses the findings of the pilot Case Study A, on which the conceptual framework is based. Researcher then describes the findings from the subsequent four cases. Each case is discussed in terms of an outline of the company profiles, the characteristics of the relationship, relationship development impacts on the small supplier, and the development of the relationship between the small supplier and their customer. Conclusions, and a revised conceptual model of the impacts of relationship characteristics on the process of relationship development, are drawn from each case in the series. As stated in Chapter Five (Research Philosophy and Methodology), for the purpose of this study the identification of the interviewees and the participating companies are kept confidential.

6.2 Findings: Case Study A (Pilot Study)

6.2.1 Case A Company Profiles

Table 6: Case A Company Profiles

Company Profiles	Established	Employees	Turnover	Products
Supplier A (Chip)	1988	100	Around NT$ 50 million per year (Around £0.83 million per year)	Chip resistors
Customer A (Resistor)	1993	410	Around NT$ 288 million per year (Around £4.8 million per year)	Resistors

Supplier A (Chip)

Interviewees: managing director, domestic marketing manager, R&D manager, manufacturing director, and supply chain manager

Case A focuses on the small supplier Chip and their larger customer Resistor. Chip was established in 1988. The company specialises in manufacturing chip resistors. There are 100 full-time staff. Sales are equally divided between the export and domestic markets, with 20% of exports going to European countries, 40% to the U.S.A., and 40% to Asia. Turnover last year (January 2006 to December 2006) was around £0.83 million. The company adheres to the principle "quality first, customer supreme" and believe they provide their customers with excellent service. From raw material to finished goods, the company operates an intensive quality inspection programme. In 1996, they applied for ISO 9002 approval and received the certificate in 1997. However, Chip continues to strive to improve their performance and company image reflecting customer demands and expectations.

Chip's president is the managing director's uncle. He lives in the U.S.A. and he visits the company once a year. However, he maintains an awareness of the business. The managing director has to report to the president by telephone once a week.

The managing director selected customer A (Resistor), as the larger customer for the case study, because "*Resistor is one of Chip's biggest customers and we would like to enhance our business relationship with them*".

Customer A (Resistor)

Interviewees: vice-managing director, purchasing manager, buyer, quality control manager, and supply chain manager

Resistor was founded in 1993 and specialises in manufacturing a variety of resistors. Its products are mainly used in information technology (IT) related industries especially in uninterruptible power supplies, and in the photoelectronics industry. There are 410 employees. The revenue is around £4.8 million per year, on a total production (general use and specialised resistors) of over five billion units. The company operates a research, design and sales centre in Taiwan, manufacturing in Mainland China. The company has been accredited with ISO 9001:2000 approval and

electronics safety standards by the U.S. Underwriters Laboratory (UL). 10% of its sales are in the Taiwanese market, 50% in Mainland China market, and 40% are exported globally.

There are ten interviewee participants in Case A, five from Chip and five from Resistor. All the participants are closely involved in, and relevant to the maintenance of this relationship.

6.2.2 The Relationship Characteristics of Case A

The matrices with analysis of the findings from Case A (Chip and Resistor) are presented in Appendix 9 and 10 and discussed below.

Mutuality

Case A relationship appears to be long-term, since both parties have given up individual goals or intentions for the sake of the other firm. Chip concedes on price and gives up its insistence on minimum order size in order to maintain the relationship with Resistor. Resistor makes concessions on its preferred price and delivery date to keep the relationship with Chip.

However, Case A appears not to be founded on similar goals and common interests yet. The interaction in Case A seems to be dominated by the self-interests of Resistor. The main goals and interests of Resistor are that Chip provides low price, good product quality, good customer service, accepts small orders, and delivers goods on time. On the other hand Chip's notion is of a strategic alliance between the two parties, with both companies obtaining mutual benefit from the relationship. Resistor seems more interested in gaining unilateral benefits from this relationship. Chip seems more focussed on mutual growth.

Chip's managing director, domestic marketing manager and R&D manager all mention that Chip contributes most and Resistor gains most in this relationship. On the other hand all the respondents from Resistor agree that Chip contributes most and gains most in this relationship. This may be a result of Resistor's major market and manufacturing centre being in Mainland China. The Taiwan facility is only responsible for maintaining the business relationship with its currently existing customers, doing R&D and taking orders for goods. Resistor seems not to pay much attention to the Taiwan domestic market.

Thus, in Case A both parties have made concessions in order to maintain the relationship, but they lack shared goals and common interests to guide their future development.

Particularity

Case A appears to show a high degree of direction and uniqueness by virtue of the low cost of the interaction between Chip and Resistor. This is because Chip's products are cheaper than those of other suppliers for similar technical and product quality standards.

Chip and Resistor tend to behave in an individual way towards each other. They negotiate on price and other conditions such as logo, packaging, quality and service standards in every transaction, but both parties feel very secure in their business relationship. Notably, in some cases Resistor shows a positive bias towards Chip, as illustrated by the reply quoted from Resistor's purchasing manager:

"*Even if Chip offers the same price as other suppliers, we always consider Chip first. This is because Chip's product quality is similar to that of other suppliers and we have a long-term relationship.*"

Chip's managing director and domestic marketing manager believe that Chip has a secure relationship with all of their customers. However, Resistor's buyer emphasises that cheap products, good quality and customer service, are the reasons to maintain the relationship with them. Resistor does not focus on the domestic market in Taiwan and does not appear to regard the relationship with Chip as of strategic importance.

Thus, the way in which Chip behaves towards Resistor appears to be highly adapted and unique, but based largely on low product price. The relationship is secure between Chip and Resistor.

Trust

In Case A it appears that Chip trusts Resistor because Resistor has a good reputation in this area of business, and Resistor trusts Chip to provide low product prices. These findings indicate that the trust in the relationship is based on goodwill and price competence.

"*Resistor has a positive reputation in this area of business and we also have long-term business relationship with Resistor. We trust Resistor's goodwill, due to our*

long-term business relationship." (Chip managing director)

"*Chip's product price is lower than other suppliers and their product quality is good. Besides, we have had no serious problems during these several years relationship. Thus, we trust Chip.*" (Resistor purchasing manager)

Both parties sign contracts covering every business transaction. However, this is a company policy. It does not mean that they use the contract to enforce their agreement.

Cooperation

Case A appears to show few distance coordinated actions taken by both to achieve mutually beneficial outcomes or unilaterally beneficial outcomes with expected reciprocity over time. Resistor seems more interested in unilateral advantage rather than cooperation with Chip. This can be shown by the Resistor purchasing manager:

"*If Chip continues to cooperate with us, we will continue to place orders with them. This is because their product price is lower and their product quality is similar to other suppliers. They have good customer service, stable product quality, and deliver goods on time.*"

However, Chip seems more anxious to cooperate than Resistor. Chip selectively favours Resistor's requirements and always prioritises Resistors orders for goods. Besides, both parties appear to understand that positive cooperation can bring both companies' growth in business.

Thus, Case A appears to show a little distance cooperation in their relationship. However, Resistor seems more interested in taking advantage from the relationship rather than investment in it.

Inconsistency

Case A appears not to show serious ambiguity or lack of clarity in interaction, though small conflicts and misunderstandings have occurred over urgent deliveries. Chip seems to have an internal conflict between the domestic marketing department and other departments. In some cases, the domestic marketing manager has been unclear in internally communicating the results of sales negotiations, resulting in misunderstanding of Resistor's requirements. There have been cases where this has caused errors in product labelling as suggested by Resistor purchasing manager:

"Sometimes our customers suddenly need components. Therefore, we will ask Chip to send them directly to our customers. However, Chip sometimes forgets to change the label. We have complained many times, but it still happens. Nevertheless we do not really mind, because this is not very important to us."

Thus, inconsistency in Case A appears to be restricted to Chip's internal communication problems, and does not show serious conflict between the two parties. Chip may need to consider improving its domestic marketing department employee's knowledge and skills.

Power/dependence

Chip appears to have few significant problems in dealing with power and dependence in its relationship with Resistor. Chip seems to control product price, product quality, product design, and customer service. Resistor controls order placement.

All the respondents from Chip and Resistor believe that the business relationship is unaffected by the relative size of the two companies. They both feel Resistor is the most influential in this relationship through its control of the placing of orders. Especially, Resistor's vice-managing director, purchasing manager, buyer, and quality control manager all point out that the most important advantage from this relationship to Resistor is buying cheap, good quality products from Chip.

Thus, power/dependence in Case A appears to show slight interdependence through control of different aspects of the relationship by the two partners. However, Resistor's power seems a little greater than that of Chip, since it controls order placement. Chip provides Resistor with low priced, good quality, well designed product, and good customer service.

6.2.3 Relationship Development Impacts on the Small Supplier A (Chip)

Supplier's Operations Management

Operations

Chip does not run relationship development programmes with any suppliers or customers. However, the Chip managing director has visited Resistor once a year to discuss the year plan, and the domestic marketing manager has regular meetings with Resistor. The R&D manager only participates when product technology problems

need to be resolved.

All the interviewees from Chip have the same opinion that the company needs to meet the particular standards for Resistor. Chip does not apply just-in-time methods, and they always keep safety stocks. Chip has efficiency metrics in place for each department.

Chip appears not to have serious product quality problems with their automated production system. Resistor appears to have high expectations for product quality, and Chip seems to understand that quality control is very important to the long-term business relationship with Resistor.

The relationship characteristic of mutuality creates relationship development impacts on the operations of Chip and influence the relationship development process between Chip and Resistor.

Mutuality	has impacts on operations since Chip always keeps safety stocks and concedes no minimum order in order to maintain the relationship.

- Mutuality: Chip gives up its insistence on minimum order in order to maintain the relationship. Chip does not apply just-in-time methods, and they always keep safety stocks.

Technology

Resistor controls the technical development direction in the relationship, since Chip develops products to meet the customer's needs. Chip appears to recognise that technology is very important to the relationship with Resistor. In addition, Resistor seems to have high expectations in technology development, as shown by this statement from the Chip domestic marketing manger:

"*Technology development is very important to keep the long-term relationship with Resistor. Moreover, Resistor hopes Chip will continue to improve technology and understand their needs.*"

Thus, Resistor appears to dominate technology development in this relationship. Resistor's power seems larger than Chip's, who are dependent in the area of technology development.

The relationship characteristic of power/dependence creates relationship development impacts on the technology applied by Chip, and has influence on the relationship development process between Chip and Resistor.

Power/dependence	has impacts on technology since Resistor's requirements determine the direction of technology development in the relationship.

- Power/dependence: Resistor's requirements determine the direction of Chip's technology development. Thus, Chip seems dependent in the area of technology development.

Innovation

Chip appears to show weakness in marketing innovation, since the domestic marketing department relies on the domestic marketing manager to develop new customers, collect marketing information, and maintain a long-term relationship with existing customers.

Furthermore, Chip's product design innovation reacts to the customer's expressed needs, and tends to be adaptive rather than innovative. Chip appears to understand that Resistor has high expectations in product innovation, as they believe innovation can increase customer's reliance on them and increase their competitiveness. Therefore, Chip perhaps needs to re-consider their product innovation and marketing policy.

These observations suggest the relationship characteristic of power/dependence creates relationship development impacts on innovation by Chip.

Power/dependence	has impacts on innovation through Resistor's dominance in the area of product innovation.

- Power/dependence: Chip's product innovation is driven by customer's needs and wants. Thus, Resistor seems dominant in this relationship in the area of product design.

Customer Service

Chip appears to have good customer service, since they deal with customer's problems immediately. Chip recognises that a long-term stable relationship

contributes to consistent customer service development, and the domestic marketing manager strongly believes that the level of customer service will influence the relationship with Resistor.

Resistor has high customer service expectations in the area of product quality, product design, and delivery of goods on time. Thus, customer service seems to have an important impact on Chip.

These findings are consistent with the relationship characteristic of cooperation having relationship development impacts on the level of customer service provided by Chip and an influence on the relationship development process between Chip and Resistor.

Cooperation	has impacts on customer service, promoting Chip's cooperation with Resistor, as Chip prioritises Resistor's orders.

- Cooperation: Chip shows cooperation with Resistor. Chip selectively favours Resistor's requirements and always prioritises Resistors orders for goods. This is because Chip recognises customer service development to have grown in this long-term relationship through development of cooperation.

Supplier's Strategy

Price

It appears that Chip's pricing strategies are similar to those of other suppliers. Chip's pricing strategies involve the relevant departments giving information such as the material, production, R&D, packing, and delivery costs to the finance department, who calculate the selling price after referring to the prices of competitors in the same area of business. In general, Chip's pricing strategy aims to undercut other suppliers of similar quality. Chip domestic marketing manager pointed out "*If our price is too high, Resistor will tell us, and ask us to reduce the price. However, in general our price is cheaper than other suppliers and our product quality is similar. Resistor trusts our low prices.*"

This is reflected in the relationship characteristics of particularity and trust which create relationship development impacts on Chip's prices and influence the relationship development process between Chip and Resistor.

Particularity	has impacts on price through the uniquely low prices offered by Chip to Resistor.
Trust	has impacts on price, since Resistor trusts Chip's pricing competence.

- Particularity: The way in which Chip behaves towards Resistor appears to show uniqueness in the low prices offered by Chip to Resistor.
- Trust: Chip appears to have lower product price compared with other suppliers and their product quality is similar with that of other suppliers. Thus, in Case A it appears that Chip trusts Resistor's goodwill which is based on Resistor's good reputation in the market place, and Resistor trusts Chip's pricing competence.

Distribution Channel

It appears that Chip has similar distribution strategies with those of other suppliers. Chip has a fixed contract with a delivery company. Chip delivers goods from a fixed location and keeps safety stocks in the warehouse.

From observation and communication with them, Chip appears not to have problems in the distribution channel. Chip appears to realise that delivery of goods on time is very important to the maintenance of a long-term relationship with Resistor. Delivery on time may influence the process of the relationship development between smaller suppliers and their larger customers, because timely delivery is expected by the customer.

The relationship characteristic of mutuality creates relationship development impacts on the distribution channel of Chip and influences the relationship development process between Chip and Resistor.

Mutuality	has impacts on distribution channel through Resistor offering concessions on delivery date to keep the relationship with Chip.

- Mutuality: In some cases, Resistor would like to have a short delivery date. However, Chip at times has problems producing and delivering the goods within Resistor's preferred timescale, and Resistor gives up its insistence on delivery deadlines to keep the relationship with Chip.

Products

It appears that Chip's product strategies are to develop high standards and high values. Their product strategies are similar to those of other suppliers. The domestic

marketing manager collects market information and reports to the R&D manager. Then the R&D manager develops the products that customer's needs.

From observation of Resistor (later confirmed by Chip), it appears that Resistor has high product expectations. Resistor hopes Chip will develop new products continuously.

The relationship characteristic of inconsistency creates relationship development impacts on Chip's product range and quality, and influences the relationship development process between Chip and Resistor.

Inconsistency	has impacts on products through Chip's domestic marketing department passing ambiguous information to the production department causing uncertainty about Resistor's product requirements.

- Inconsistency: In some cases, Chip's domestic marketing manager has passed unclear or ambiguous information on to relevant departments within Chip, causing misunderstanding of Resistor's requirements. In particular, there have been instances of miss-labelling of products supplied directly to Resistors customers, because of unclear information from the domestic marketing department at Chip.

Supplier's Capabilities

Capabilities

Chip appears weak in the core capabilities of lower level staff in the areas of employees' knowledge and skills, technology systems, managerial systems, and values and norms. Chip has lacked specialised employees training for lower level staff which has probably contributed to weakness in lower level employees' knowledge and skills.

The technology systems seem to depend on some key staff such as the R&D manager and manufacturing director. Product technology development seems to depend on the customer's needs.

Chip does not have a programme to develop managerial capabilities yet, and limited finance means Chip cannot offer many employees training. The Chip managing

director emphasises that, in order to develop its managerial capabilities, Chip is actively recruiting specialised management employees.

It appears that awareness of company culture in Chip is weak in their lower level staff, as employees, with a few exceptions, show limited commitment to the company. Thus, Chip may need to consider improving the perception of company culture in their lower level staff.

The relationship characteristic of inconsistency creates relationship development impacts on the capabilities of Chip and influences the relationship development process between Chip and Resistor.

Inconsistency	has impacts on capabilities through Chip sometimes misunderstanding Resistor's requirement, as Chip lacks employee training.

- Inconsistency: In some cases, Chip domestic marketing manager has misunderstood Resistor's requirements and this has caused some problems. This is because Chip has lacked employee training and the employees' knowledge and skills are not always strong.

6.2.4 Relationship Development Process in Case A

It appears that Chip's initial contact with Resistor was based on a close personal friendship between the two company presidents, who played golf together in the U.S.A. This contact gave access to Chip's domestic marketing manager, who visited Resistor regularly and tried to build a business relationship with them.

In a typical business relationship, after first contact, both parties have little business experience of working with each other, and no clear idea of what they hope to gain from the relationship in the early stages. They only have a little mutuality. Cooperation and particularity has not yet been established, and there is a lack of trust and cooperation. Chip was the dependent partner in this early stage of the relationship.

Chip has been involved with Resistor for approximately three years. At present, the Case A relationship appears to show reduced uncertainty. Both parties make concessions to maintain the relationship. However, shared goals and common interests do not seem to be clearly established as yet. Resistor seems not to pay much

attention to Chip in the domestic market, as their main markets are in Mainland China and overseas. Thus, the future benefits of the relationship with Chip are perhaps perceived as marginal and uncertain. Case A appears to show a high degree of particularity based on lower product price at the same quality as other suppliers. Mutual trust in Case A is based on Chip's reliance on Resistor's goodwill, and Resistors reliance on Chip's price competence. Case A seems to show a little cooperation. Inconsistency in Case A appears to be limited to minor problems originating in internal communication difficulties between Chip's domestic marketing department and its other departments. The dependence relationship in Case A could be described as showing slight interdependence. Resistor's power as the customer is naturally greater than Chip's, since they control order placement. As the relationship develops between the two parties, their mutual adaptations increase and their commitment to each other grows, but the continued development of the Case A relationship is not inevitable, and Resistor may cause development to slow or cease, since Resistor has limited interest in their domestic market and are primarily interested in the unilateral benefits to be obtained from the relationship, rather than developing it as a strategic partnership. Therefore, the relationship development in Case A can be classified as stage three, i.e. the developing stage.

Case A appears to show a long-term and stable relationship. However, continued relationship development does not appear to be inevitable and could revert to the pre-relationship stage with another counterpart. If Chip can improve their core capabilities, such as employees' knowledge and skills, technology systems, managerial systems, and values and norms, their relationship may be enhanced and develop to the next stage, i.e. the stable stage.

The relationship in Case A would not be very difficult for the dominant partner, Resistor, to dissolve, since its advantage to them is largely based on the price competence of the supplier, Chip. The product is essentially a widely available commodity, which Resistor could easily source elsewhere with a small sacrifice in price advantage. Since Chip's products are not unique, it's also quite likely that a cheaper source of supply could become available in the future.

6.2.5 Conclusions on Case A

Chip finds it difficult to recruit high calibre specialist employees. This is because Chip does not have an attractive promotion system for their employees and they are not able to provide them with competitive welfare and other benefits. Therefore, there

is a lack of skills in each department.

All the respondents of Chip agree that the company is very weak in R&D and management. The company is very often not in a position to do the R&D to meet customers' product requirements, and provides very little employee training.

Chip may need to seek outside support to enhance their ability to develop products, and to manage their development.

Chip may need to improve employees' appreciation of the interdependence of their departments within the company, and their customers outside the company, linking them more specifically with Resistor. At present employees are rather narrowly focussed on their own department. It is suggested that Chip may need to run a teamwork system and also have a systematic programme of employee training. This would be a central part of a general drive to improve company culture.

The findings suggest that Chip may need to consider developing its core capabilities in lower level staff and may particularly focus on employees' knowledge and skills, technology systems, managerial systems, and values and norms. With these developments of core capabilities, Chip will be able to understand and manage the relationship with Resistor better. This is an important finding, as it will enable the researcher to investigate some specific relationship development impacts of capabilities on small suppliers in the subsequent case research more fully, being able to identify them more specifically due to the knowledge and experience gained from pilot findings.

6.2.6 Reflections on Case A

On reflection, the relationship characteristics in Case A are apparently those of a long-term and stable relationship. Both parties sacrifice individual goals and benefits for the relationship. Chip has made concessions on price and minimum order quantity. Resistor has conceded on price and delivery date. However, Case A seems not to have developed similar goals and common interests yet. Resistor seems more interested in unilateral benefits rather than investment in this relationship. Chip's relationship with Resistor appears to show uniqueness in the low product price. Their relationship appears to be secure. They show mutual trust: Chip trusts Resistor's goodwill and Resistor trusts Chip's price competence. Case A appears to show positive cooperation in the relationship. Inconsistency in the relationship appears to be limited to some

internal conflicts between the domestic marketing, and other departments. Power/dependence appears to show slight interdependence. However, Resistor's power seems greater than Chip's since they control order placement.

The relationship development impacts on the small supplier are reflected in price, since Chip's product price is lower than those of other suppliers. Their operations, technology, and customer service are effective. The distribution channel performance and product strategies are similar to those of other suppliers. The downside is in innovation and core capabilities. Chip appears to show weakness in marketing innovation and product innovation. It appears that Chip lacks lower level employee training and this causes weakness in core capabilities, such as employee knowledge and skills, technology systems, managerial systems, and values and norms.

The relationship development process in Case A is considered to be in stage three "developing stage". Their mutual adaptations are increasing and their commitment to each other is growing. However, the continued development of the Case A relationship is not inevitable and either party may cause the relationship development to slow or revert to the pre-relationship stage.

The revisions made original interview Appendix 2 and 3. It can be seen that these revision did not result in any changes to the original interviews themes (5.7.1 Interview Themes). The revisions made for the main body of data collection can be seen in the revised interview guide in Appendix 7 and 8. Overall the experiences gained from the pilot case study proved very valuable:

Approach to the interview process:

During the pilot case interviews, the researcher experienced that in some instances, some interview questions needed to be further explained to help the respondents' understanding of the question. The extent of explanation varied between respondents according to their area of expertise and level of knowledge.

Reviewing interview questions:

This resulted in identifying some areas of improvement where questions were amended to address areas of repetition or ambiguity.

Interview structure:

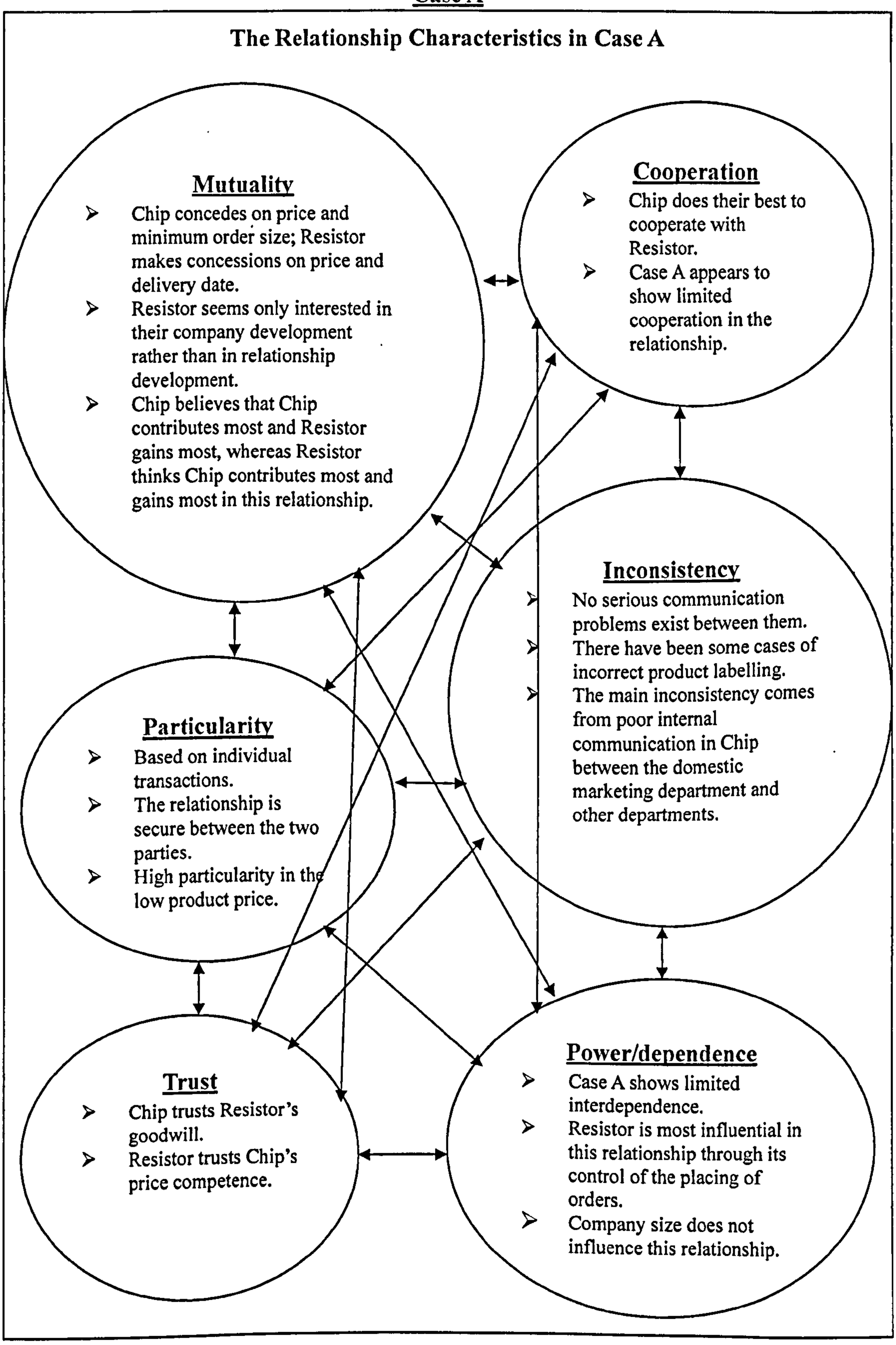
The experience of the pilot interviews showed that although it was important to ensure all the interview questions were dealt with, the nature of face-to-face

interviews would need to accommodate for a more nature way of conversing. Therefore, the order of the questions was not always followed sequentially as per the interview question sheet in order to allow the interviewee to provide a richer response. The researcher ensured that the results of each interview were interpreted based on the relevant areas of the primary data design.

More significantly the pilot case study provided the opportunity to review the conceptual framework. It appears from the findings of the pilot case study that there are different types of relationship development impacts on the relationship characteristics of small suppliers and their larger customers corresponding to different stages of the process of relationship development. The relationship development impacts on the small suppliers affect areas such as operations, technology, innovation, customer service, price, distribution channel, products, and capabilities. Therefore, the conceptual framework has been revised as in Figure 9. In addition the researcher has found that the relationship development impact of capabilities is of particular importance in the areas of employee knowledge and skills, technology systems, managerial systems, and values and norms.

Thus, the next stage of this research involved a set of interviews between small suppliers and their larger customers in which this revised conceptual framework was applied in the collection of a larger body of data.

Figure 9: A Revised Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development in Case A



Relationship Development Impacts on Chip

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Chip's operations, technology, and customer service are good.
- Chip feels that the company is weak in innovation and in the core capabilities of lower level staff.
- Chip's product price is lower than those of other suppliers and their product quality is similar.
- Chip's distribution channel and product strategies are similar to other suppliers.

The Relationship Development Status in Case A

Stage One: The Pre-relationship Stage (Awareness)

In this stage, no transactions have yet taken place between customer and supplier. They have communicated, but without commitment to business transactions. The Case A organisations have been involved in business transactions, so the Case A relationship has progressed beyond this stage.

Stage Two: The Exploratory Stage (Exploration)

In this stage two parties may have little experience of working with each other, and no clear idea of what they hope to gain from the relationship for themselves. However, Chip and Resistor have grown up in a positive way. Their relationship appears to be long-term and stable. Therefore, Case A can be not classified in this stage.

Stage Three: The Developing Stage (Expansion)

The relationship in this stage is growing in a positive way. Case A appears to have a long-term and stable relationship. They are increasing mutuality, particularity, and cooperation in both organisations. They show mutual trust. Chip trusts Resistor's goodwill, whereas Resistor trusts Chip's price competence. Inconsistencies are reduced between them. Case A appears to show limited interdependencies. However, Resistor's power seems greater than Chip's since they control order placement. For these reasons, Case A can be classified in this interim stage.

Stage Four: The Stable Stage (Commitment)

In this stage, both the customer and supplier have reached long-term stability in their learning about each other and in their investments and commitment to the relationship. This mature stage in a relationship development has positive advantage for the companies. Uncertainty is low and the companies have low costs in handing the relationship. Given the outstanding issues noted above, Case A is not considered to have reached this stage.

Dissolution

Case A still has business transactions between the two parties. Thus, Case A has not reached this stage.

6.3 Findings: Case Study B

6.3.1 Case B Company Profiles

Table 7: Case B Company Profiles

Company Profiles	Established	Employees	Turnover	Products
Supplier B (Bright Light)	2000	53	Around NT$ 60 million per year (Around £1 million per year)	Light emitting diodes (LEDs) chip
Customer B (Diode)	1995	270	Around NT$ 1 (U.S.) billion per year (Around £15.1 million per year)	Semiconductor chips, light emitting diodes (LEDs)

Supplier B (Bright Light)

Interviewees: president, managing director, assistant manager, marketing manager, manufacturing director

Case B focuses on the small supplier Bright Light and their larger customer Diode. Bright Light was set up in 2000. There are currently 53 employees in the company. Bright Light is a designer and manufacture of light emitting diodes (LEDs) which have various applications in mobile phones and other electroluminescence products.

In 1973, the current president of Bright Light founded a company to produce and sell galvanised wire. In order to add value and promote quality, the initial plant A was expanded, and started producing spheroidised wire for screws in 1989. In 1992, they were established as a publicly listed company. To integrate upstream and downstream industries, stabilise raw material supply, and respond to the demands of the developing domestic economy, an additional plant was opened in 1994, with an annual capacity of 600,000 metric tons of hot rolled steel wire rods. The establishment in 2000 of a new venture, the Bright Light Company, reflected the company president's belief in the commercial opportunities of LEDs, and his wish to diversify to operations outside of the declining steel industry. There are around 60 LEDs producers in Taiwan. The LEDs market can be divided into three segments

upstream, midstream, and downstream. The Bright Light Company belongs to the downstream segment in such a classification.

With more than 30 years experience in steel, the president feels he has a good management team with accumulated professional knowledge and the ability to provide value-added products and service to their customers. He acknowledges, however, that they do not have the same level of knowledge and experience with LEDs, and that there is a need for improvement before the LEDs operation is soundly based.

The marketing manager is the president's son. This is his first permanent job since completing his full-time education with a PhD in chemistry, and he is unusually young and inexperienced for such a role. The assistant manager has worked in the steel industry for ten years with the president, and transferred to the LEDs operation after its establishment. He does not have specialised knowledge or experience of the LEDs industry.

Bright Light mainly sells to the domestic market in Taiwan. There is only one overseas customer, in Mainland China. The turnover of the company is approximately £1 million per year.

The president proposed customer B (Diode), as the larger customer in the study, because "*Diode is our biggest customer. We have had a relationship with Diode for nearly five years, and we are now unsure whether to keep, or give up, this relationship with Diode.*"

Customer B (Diode)

Interviewees: managing director, domestic department vice-managing director, purchasing manager, manufacturing director, product design manager

Diode started manufacturing semiconductor chips and light emitting diodes (LEDs) in 1995 and their products have a variety of applications, mostly in mobile phones. Diode is in the midstream of the LEDs market. They produce up to 20 million LEDs per month. They mainly sell to overseas customers, in Asia, the U.S.A., and Europe. There are currently 270 employees in the company. The company obtained ISO 9002 certification in 1999, QS 9000 certification in 2002, and ISO 14001 certification in 2003.

The managing director is a skilled manager with more than twenty years experience in the area of LEDs. Diode is a leading manufacturer of surface mount chip LEDs in Taiwan.

The mobile-phone market has expanded continuously since 2000 (Strategy Analytics, 2006), and the impending European ban on components containing mercury will require the replacement of Cold Cathode Fluorescent Lamps (CCFLs) with white LEDs (LEDs Industry News, 2006), Diode's main product. Diode therefore believes their future prospects are good.

There are ten interviewee participants in this case, five from Bright Light and five from Diode. All the participants are closely involved in, and relevant to the maintenance of this relationship. However, in total four interviews were conducted at Bright Light as the managing director and assistant manager were interviewed together. Other participants were interviewed individually, giving a total of nine interviews for Case B.

6.3.2 The Relationship Characteristics of Case B

The matrices with analysis of the findings from Case B (Bright Light and Diode) are presented in Appendix 11 and 12, and discussed below.

Mutuality

The Case B relationship appears not to be long-term and not founded on similar goals and common interests. Price remains a central issue in the relationship, and is discussed and compared in every business transaction. It is not, however, the only factor considered, and in some transactions Diode maintains the price, and provides technological solutions to Bright Light, following personal negotiation by Bright Light's president, as shown by Bright Light's managing director's comments:

> "*Diode always compares our price with other suppliers, but sometimes they concede price concessions after discussions with our president.*"

Bright Light seems not to have developed shared goals or common interests with Diode, and may consider their focus on price and benefit comparison to be selfish and potentially untrustworthy. Bright Light's president and Diode's domestic department vice-managing director both felt that they contributed most to the relationship, and

that the other party gained most. They thus have not developed the concept of growing up together in a mutually beneficial relationship. Diode hopes to gain most of the benefits from the relationship, requiring Bright Light to provide stable quality, cheaper prices, enhanced product specifications, and delivery on time. On the other hand, Bright Light's goals and interests are increasing orders and company profits. Thus, the participants in Case B appear not to build on similar goals and common interests as they only focus on their individual benefit.

Particularity

Case B shows a relatively low degree of particularity in the relationship. The interaction between two parties does not show uniqueness or exclusivity. The parties in Case B behave in an individual way, as they discuss their business on an individual transaction basis. Bright Light is uneasy about its relationship with Diode, as shown by their president's comment "*I do not feel very secure in this relationship.*" Diode appears to make few special concessions to Bright Light, and does not seem to regard the relationship as unique, since they compare prices for every contract, and do not necessarily buy from Bright Light. To quote Diode's purchasing manager:

"*We put suppliers who are able to meet our requirements for quality, specifications, price, service and delivery time on our preferred supplier list. We do not necessarily regard Bright Light as our key supplier. For example, when their price is too high or the delivery is too urgent. I will find other alternative companies.*"

Bright Light seems to have great uncertainty about their future benefits, as shown by comments from Bright Light's president:

"*It is a very similar relationship to other customer relationships. None of them are very secure.*" (Bright Light president)

Bright Light is still in its infancy, and lacks experience in the area of LEDs Chips. They are trying to find better tools for performance measurement and efficient control of their activities in a turbulent market.

Trust

The limited trust was reflected in a routine need for written contracts, as shown by the following comments:

"*We have signed a contract with Diode in every business transaction. Our trust of*

Diode is based on the contract." (Bright Light managing director and assistant manager)

"*I ask our purchasing department to sign contracts with suppliers every time we make a deal. In this way, the company's interests are secured.*" (Diode managing director)

Case B appears to show a lack of trust and a lack of concern about the other company's level of commitment. Bright Light and Diode have not convinced each other that they are seriously interested in the relationship and the other party. Diode personnel speak well of Bright Light's service attitude and delivery performance. Diode has a good reputation in the industry, but both companies, as a matter of policy, rely on binding contracts, rather than trust in the competence and goodwill of the other, to protect their interests during business transactions. The relationship is thus characterised by contractual trust, and both companies have doubts about the extent of the others commitment to the relationship.

Cooperation

Bright Light seems to do their best to meet customer's requirements and to improve the relationship with their customers. However, on the surface, Diode does not appear to have significant interest in maintaining cooperation with Bright Light, being primarily interested in cheap prices, enhanced product specifications, and ensuring that the specified quality standards are met. The relationship is dominated by Diode need for low prices.

Diode's managing director mentioned that Bright Light may be replaced if they cannot completely cooperate with Diode. Nevertheless, they both agree that good cooperation can bring both companies' growth in business.

Case B appears to show little cooperation and there appears to be considerable separation between the companies' interests. Bright Light has a restricted view of what Diode requires of them and Diode only hopes to gain from this relationship.

Inconsistency

Case B seems not to involve serious conflicts or misunderstandings, yet the parties in Case B appear to have great inconsistency in their goals. Communication in Case B is mainly concerned with price negotiation, and the companies do not demonstrate their commitment to the relationship in a concrete way.

Bright Light has limited technical and product innovation skills, which, together with ambiguous specifications, sometimes result in a misunderstanding of Diode's requirements. This can be shown by:

"*In some cases, the director does not communicate the customer's requirement clearly and this causes me to misunderstand the customer's needs.*" (Bright Light president)

"*The Company does not offer much staff training for us. Marketing departments lack product knowledge and as a result we have communication problems with customers in technical areas of product specification and so on. Also I have experienced personal credibility problems with Diode. This is because I do not have enough product knowledge and I am still young for this position. I am still learning.*" (Bright Light marketing manager)

Bright Light's problems are compounded by a high staff turnover, and a lack of effective communication between individual departments and upper management.

Power/dependence

Bright Light appears to have significant problems in dealing with relative power and dependence in the relationship with Diode. Diode seems to control and has the most influence in the relationship in the areas of product price, product specifications, and order placement.

Case B appears to show minimal interdependencies. The relationship is fairly easy to break off. Diode's power seems to be greater than Bright Light, who are in a dependent position. This is because Diode attempts to dominate or coerce Bright Light without providing sufficient rewards to lead Bright Light to perceive that compliance is worthwhile. Despite this, respondents from both parties state that the difference in size of the two companies did not influence this relationship.

Therefore, Diode has the dominant influence on this relationship and Bright Light depends on Diode in the area of order placement.

6.3.3 Relationship Development Impacts on the Small Supplier B (Bright Light)

Supplier's Operations Management

Operations

Bright Light does not have any plan for relationship development programmes with any suppliers or customers, though they make regular visits to customers in order to understand their needs. All the respondents from Bright Light concur that they need to apply special standards for Diode, suggesting a dominant role for the latter.

Bright Light does not have any efficiency measures for the relationship with any customers, and only measure the efficiency of internal operations, suggesting a weakness in operations management may aggravate the weaknesses in product quality and R&D acknowledged by the Bright Light marketing manager as follows:

"*We hope we can improve our business performance. We need to improve R&D and quality control. If we cannot reduce our percentage of faulty product, it will reduce our sales. We have problems stemming from customer requests for higher quality and special standards, which we cannot meet.*"

Further support for this view of Bright Lights as operationally weak is provided by their president's statement:

"*The company has only been established for a few years; we are still learning.*"

However, Bright Light understands that efficient operations would reinforce their relationship with customers. Thus, the relationship characteristic of mutuality creates relationship development impacts on the operations of Bright Light and influences the relationship development process between Bright Light and Diode.

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Mutuality	has impacts on operations since their relationship does not show similar goals and common interests, as Diode is only interested in its own benefits.

- Mutuality: Bright Light seems not to have access to Diode in order to develop shared goals or common interests. Diode only hopes to gain unilateral benefits from the relationship.

Technology

Bright Light respondents all acknowledge the company's technical weakness, and recognise that it may have a negative influence on the relationship development process with Diode, as suggested by the following comments:

"*Customers hope we can have higher technology, especially in meeting their brightness requirements.*" (Bright Light president)

The manufacturing director suggests that the company should buy new machines, since the present equipment is very old and productivity is very low. The president, however, thinks that the company's current limited customer base (ten domestic and one overseas) doesn't justify such a large-scale investment.

The relationship characteristics of mutuality and inconsistency create relationship development impacts on the technology applied to Bright Light, and have influence on the relationship development process between Bright Light and Diode.

Mutuality	has impacts on technology via Diode's provision of technological solutions to Bright Light.
Inconsistency	has impacts on technology via Bright Light's misunderstanding of Diode's technological requirements.

- Mutuality: The Bright Light's marketing manager points out that in some cases, Diode contributes technological solutions to Bright Light's problems.
- Inconsistency: Sometimes Bright Light's ambiguous internal communication of product specifications causes misunderstanding of Diode's technical requirements.

Innovation

Bright Light is receptive to customer's needs and suggestions, and understands that innovation is important, but management innovation is limited. The lack of a company website is considered to be symptomatic, perhaps even symbolic, of this, as shown by:

"*We have done some innovation in management, but not much. (We do not have a company website, for example), but I am always hearing customer's needs, complaints and other information on the industry, which I report back to the company.*" (Bright Light marketing manager)

Bright Light does not seem to show much product innovation, as their R&D is very weak. Their products development often fails to meet customer's needs. These observations are compatible with the relationship characteristic of particularity

creating relationship development impacts on innovation by Bright Light and influencing the relationship development process between small suppliers and their larger customers.

Particularity	has impacts on innovation through Bright Light behaviour towards Diode showing little uniqueness and direction, reflecting Bright Light's weakness in product innovation and the competitive nature of its markets.

- Particularity: The way Bright Light behaves towards Diode appears to lack uniqueness and direction. Bright Light feels insecure in its relationship with Diode, due to its weakness in product innovation, and the competitive nature of its markets.

Customer Service

It seems Bright Light has reasonably good customer service, provided 24/7.

"*We always keep in touch with customers, whether customers give us an order for goods or not. Customers are always right. Even when customers phone us and ask for delivery of goods on Saturday or Sunday, we still ask the warehouse to despatch the goods. We accept customer service 24 hours a day, every day.*" (Bright Light marketing manager)

Bright Light thus apparently understands the importance of customer service, and especially of maintaining customer contact, for the maintenance of the relationship with customers.

These findings are consistent with the relationship characteristic of trust having relationship development impacts on the level of customer service provided by Bright Light and an influence on the relationship development process between Bright Light and Diode.

Trust	has impacts on customer service through Diode's trust in Bright Light's customer service and appreciation of their willingness to accept small orders.

- Trust: Diode trusts Bright Light's customer service attitude, since Bright Light is able to accept small orders. However, both companies have a policy on written contracts. Therefore, it appears their trust of each other is based on the contract.

Supplier's Strategy

Price

Bright Light's pricing strategies depend on production costs and reference prices for comparable products in the same area of business, with final decision making by the president. The manufacturing director provides information on production costs but is not directly involved in, or aware of, external pricing negotiations. Sales are very price-sensitive in this industry, so pricing is critical. Diode negotiates especially aggressively on price, and pricing is a dominant influence on their relationship with Bright Light.

"*We sign a contract in every business transaction. Sometimes, Diode requests a price that is too low, lower than our cost. In these cases, we will give up the order. Diode always compares the price in every business contract. They did not value our relationship. This gives me a very big headache.*" (Bright Light president)

Thus, price seems to show significant impacts on Bright Light. This is reflected in the relationship characteristics of mutuality, inconsistency, and power/dependence which creates relationship development impacts on Bright Light's prices and influences the relationship development process between Bright Light and Diode.

Mutuality	has impacts on price because Diode is not felt to have a strong mutuality-based relationship with Bright Light, and low prices are a specific problem for Bright Light.
Inconsistency	has impacts on price, since conflict is involved in the discussions and negotiations of price bargaining.
Power/dependence	has impacts on price, since Diode controls of the relationship with Bright Light in the area of pricing and benefits.

- Mutuality: The Case B relationship appears not to show similar goals and common interests. Bright Light bargains with Diode over the price in every business transaction.
- Inconsistency: The main inconsistencies in Case B arise during price negotiation and the two companies have inconsistent objectives on price.
- Power/dependence: Diode controls the relationship with Bright Light in the area of pricing and benefits, since Bright Light is dependent on Diode's orders.

Distribution Channel

Bright Light's distribution channel is similar to other larger suppliers, with distribution via express delivery service, or in person. However, bigger companies tend to carry more stock than Bright Light, who are sometimes unable to meet large, urgent orders.

"*It is the same; all is through express delivery or personal delivery. However, big companies have stronger financing and carry more stock than us. Sometime Diode has an urgent request for a big order, but we do not have enough stock. This puts us at a disadvantage, due to lack of finance. We are a small company.*" (Bright Light marketing manager)

Bright Light always delivers goods on time, as they recognise that delivering goods on time is very important to their relationship with customers. These findings signify that timely product delivery may influence the process of relationship development between smaller suppliers and their larger customers.

The relationship characteristics of mutuality and trust create relationship development impacts on the distribution channel of Bright Light and influence the relationship development process between Bright Light and Diode.

Mutuality	has impacts on distribution channel through they not to have similar goals and common interests, as Diode is only interested in punctual delivery.
Trust	has impacts on the distribution channel because Case B appears to show limited trust, as Diode trusts Bright Light to deliver goods on time.

- Mutuality: Case B appears not to build on similar goals and common interests as they only focus on their individual benefit. For example, Diode is only interested in Bright Light offering timely delivery.
- Trust: Case B appears to trust show limited, contract-based trust, as there is lack of trust and lack concern about the other companies commitment. For example, Diode only trusts Bright Light for punctual delivery and service attitude.

Products

It appears that product strategies are very weak in Bright Light. Bright Light's products specifications often fail to meet customer's requirements, leading to a loss of orders.

These findings suggest that improving production and research capability may increase the product range and quality and positively influence the process of the relationship development between smaller suppliers and their larger customers.

The relationship characteristics of cooperation and power/dependence create relationship development impacts on Bright Light's product range and quality, and influence the relationship development process between Bright Light and Diode.

Cooperation	has negative impacts on products, since Case B shows little cooperation, as Diode is only interested in enhanced products specifications and ensuring the specified quality standards.
Power/dependence	has impacts on products through Diode's dominant influence on this relationship in the area of product standards.

- Cooperation: Case B appeared to show little cooperation and considerable distance between the two parties. Diode only hopes to gain unilateral benefit from this relationship. For example, they are primarily interested in enhanced product specifications and ensuring the specified quality standards are met.
- Power/dependence: Diode is most influential in the relationship with Bright Light through their control of product standards.

Supplier's Capabilities

Capabilities

It appears that Bright Light is very weak in employee knowledge, technology, managerial systems, and company culture. All the respondents from Bright Light concur that the company is weak in product and production technologies, and R&D capability, in comparison with larger suppliers. This is reflected in a general lack of training for employees, and a lack of plans to develop managerial capability. Employees' specialised knowledge and technical abilities are very weak.

Bright Light has consulted industry experts and academics on technological development, but feels this has not been very productive. Bright Light's future technical development is uncertain. They currently produce lots of products that do not conform to Diode's required standard, but according to Bright Light's marketing manager, Diode is expected to exert a controlling influence on their technical development:

"An LED chip's characteristics are wavelength and brightness. The wavelength can be adjusted at will, but we are currently unable to produce the high intensity sources required by some customers in the high technology sector. This is an important R&D focus at present."

The managing director, assistant manager, marketing manager, and manufacturing director all agree that the company needs to improve its internal culture. Staff morale is poor, and staff turnover is high.

This suggests that improving the company's core capabilities such as employee knowledge, technology systems, managerial systems and company culture may reinforce the relationship with customers. A company's core capabilities include knowledge, technology, managerial systems, and culture.

The relationship characteristics of inconsistency and power/dependence create relationship development impacts on the capabilities of Bright Light and influence the relationship development process between Bright Light and Diode.

Inconsistency	has impacts on capabilities through Bright Light sometimes misunderstanding Diode's needs, since Bright Light lacks employee training.
Power/dependence	has impacts on capabilities, Diode is most influential in this relationship. Bright Light is weak in its employee knowledge, managerial systems, technology systems, and company culture.

- Inconsistency: In some cases, Bright Light's staff release ambiguous information about their products and misunderstand Diode's needs. This is because Bright Light lacks employee training.
- Power/dependence: The observations suggest that Bright Light is not in control of the relationship, which is dominated by Diode. The reason is that Bright Light is weak in employee knowledge, managerial systems, technology, and company culture.

6.3.4 Relationship Development Process in Case B

The initial contact was instigated by a phone call and follow-up visit from Bright Light marketing manager, who found Diode in industry directories. Based on my observation and their conversations, it is concluded that Bright Light promotes their

goods by using personal selling. Bright Light has limited technical knowledge and a limited marketing budget, which restricts their use of other means of promotion such as placing advertisements in the trade press, attending trade fairs, etc. Furthermore, they do not have a company website for reference by potential customers. These limitations cause an emphasis on personal selling in the promotion of their products. In the beginning stage of a relationship, the parties are acquainted with each other and have two-way communication without commitment. Bright Light initially recognised Diode as a potential exchange partner, contact was initiated by Bright Light's marketing manger. However, Diode's interest in a relationship with Bright Light was limited, based on personal friendship between the Bright Light president and Diode managing director, as shown Diode's purchasing manager's comment: "*Bright Light is cheaper than the previous supplier and our managing director is friendly with their president.*"

Bright Light has been involved with Diode for approximately five years. At present, the relationship investigated as Case B appears to be potentially short-term and unstable. Bright Light may not have access to Diode in order to develop shared goals and common interests. Bright Light only has a restricted view of what Diode requires of them. On the other hand Diode only hopes to gain unilaterally from this relationship. Neither party feels secure in the relationship. Their relationship lacks particularity and unique direction. Case B appears to have show little cooperation and considerable distance between the parties. There are some instances of cooperative behaviour, but in general goals are inconsistent, and Diode as the dominant partner, are generally unwilling to make concessions to maintain the relationship. Trust, as manifested by cooperation and coordinated planning between buyer and seller, is lacking, and business transactions are contract-based. Therefore, the relationship development of Case B can be classified as stage two, i.e. the exploratory stage.

Case B appears to show a relationship which will be difficult to enhance into the developing stage and stable stages. This is because Bright Light is very weak in their core capabilities such as employee knowledge and skills, technology systems, managerial systems, and company culture. Their relationship focuses on comparing price and benefits, with price bargaining the central feature of every business transaction.

The relationship in Case B may very easy to terminate. This is because Bright Light seems to have great uncertainty about their future benefits and Bright Light is uneasy about its relationship with Diode, as shown by their president's comment "*I do not*

feel very secure in this relationship." In addition, Diodes managing director mentions that Bright Light may be replaced if they cannot completely cooperate with Diode. Thus, Case B relationship is very vulnerable to dissolution.

6.3.5 Conclusions on Case B

Bright Light's employees' knowledge and skills appear very weak. Bright Light does not train its employees. Their product knowledge is insufficient, and there is a lack of talent in the R&D department resulting in a lack of innovation. A long-term cooperation with academic researchers has failed to address these deficiencies.

Bright Light's is weak in internet visibility and production technology. They have no company website, their production equipment is old and unreliable, and they have limited R&D capability. As a result, they are not always able to meet Diode's product standards. In particular, they can not produce high-intensity LEDs. Therefore, Diode can only use Bright Light's goods in completed products which are sold in underdeveloped countries.

It seems Bright Light has weak managerial systems. Sales people do not have real power. When they face customer problems, they have to report back to the company and ask for solutions every time. The reason, according to them, is that only the president has the power to make final decisions. Authority is largely retained by the president, who has resisted delegation to managers or other staff. The managing director's authority is largely nominal, and limited to executing the president's decisions. The company also has deficiencies in vertical and interdepartmental communications which compound the problems caused by this over-centralised control.

Bright Light appears to have a weak corporate image, both with customers, and with its own staff. Neither appear have an awareness of any specifically articulated company values or culture, and the high staff turnover suggests that their commitment to the company is weak.

This investigation suggests that, in order to improve, and better manage its relationship with Diode, Bright Light will have to develop its capabilities in employee knowledge, managerial systems, technology, and foster a positive company culture.

6.3.6 Reflections on Case B

On reflection, the relationship characteristics in Case B reflect the apparently short-term and unstable nature of their relationship. They engage in discussions and negotiations on price and conditions in every business transaction. They do not have similar goals and common interests. Diode is only interested in gaining price advantage from the relationship. Both of them feel insecure and trust is only contract based. Case B appears to have great inconsistency and serious conflicts. Their communication is mostly concerned with price negotiation. The relationship in Case B shows minimal interdependencies. Diode seems most influential and dominant in the relationship in the areas of product price, product specifications, and order placement; while Bright Light has a correspondingly dependent role in the area of order placement. Bright Light always makes effort to cooperate with Diode.

Bright Light shows strong customer service. However, they are very weak in the areas of operations, technology, innovation, price, products, and capabilities. Their distribution channel is similar to those of other suppliers. Bright Light accepts customer service 24 hours a day, every day. Bright Light does not have any plan for relationship development programmes with any suppliers or customers, and they seem to lack strength in operations management. Bright Light appears weak in technology as their equipment is very old and productivity is very low. Innovation in Bright Light appears limited. The company does not have company website. Bright Light's product strategies are very weak. Technically weak products, such as relatively low brightness LEDs, command lower prices, since brightness is a very important price determinant in the LEDs market. If an LED's brightness is very high, it sells at a higher price, and vice versa. It appears that Bright Light is very weak in core capabilities such as employee knowledge and skills, technology systems, managerial systems, and company culture. There is a lack of training for employees and there is no plan for the development of managerial ability. This reflects and contributes to the company weaknesses in technology systems and company culture.

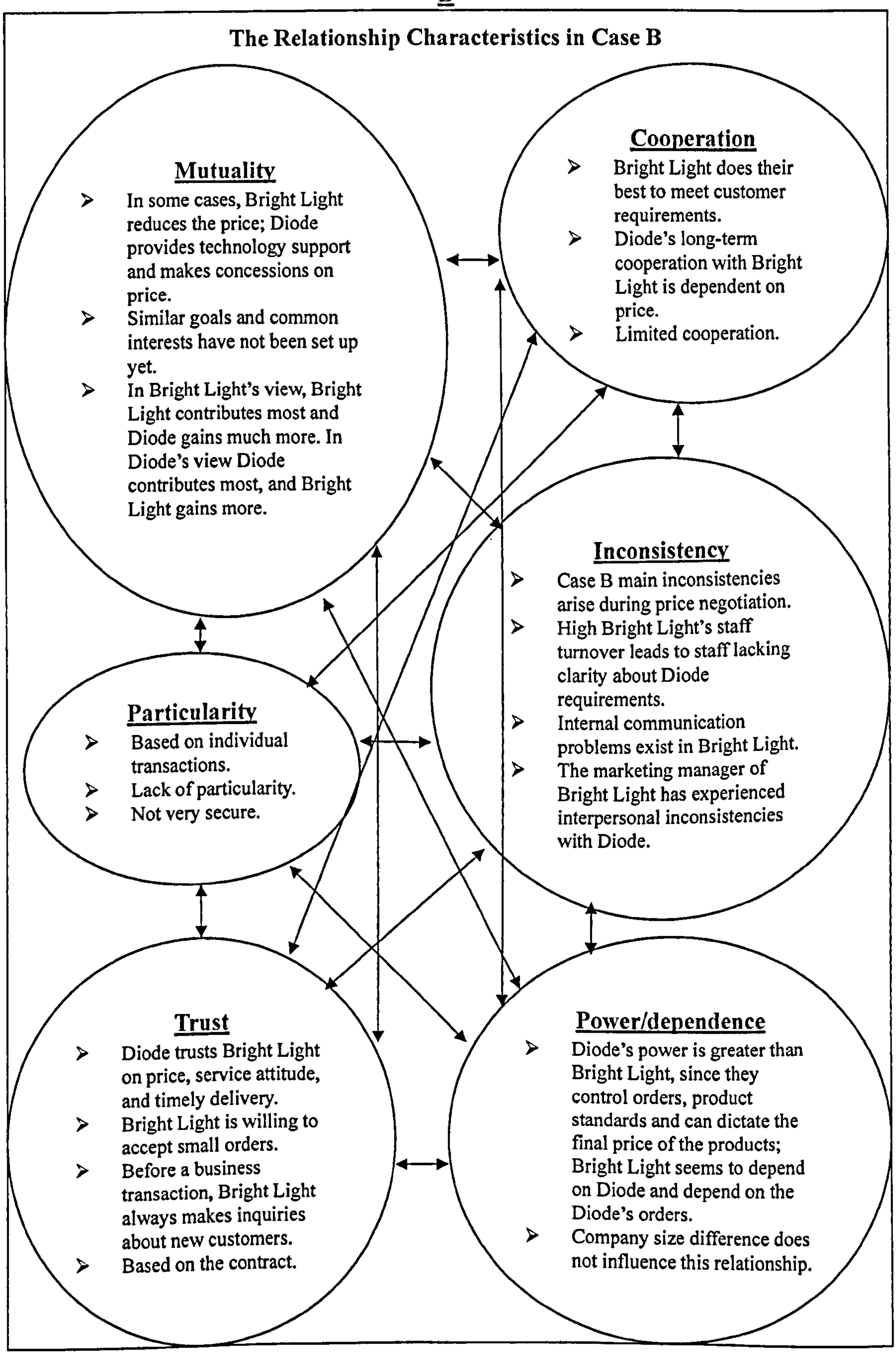
The relationship development process in Case B is classified as stage two (The Exploratory Stage). This is because Case B appears not to be long-term and stable. Diode only wants to gain benefits in this relationship. There is little mutuality and cooperation, and large inconstancy. Diode's power is greater than Bright Light in the areas of product price, product specifications, and order placement.

From the observation of Case B, it appears that the core capabilities of Bright Light

could be a key influence on the relationship development process in Case B. This is because improving employee knowledge and skills, technology systems, managerial systems and company culture will help the process of relationship development with Diode.

The analysis of Case B has revealed some of the ways in which the relationship characteristics of mutuality, particularity, trust, cooperation, inconsistency, and power/dependence create relationship development impacts on the operations, technology, innovation, customer service, price, distribution channel, products, and capabilities of the small supplier Bright Light, and influence the relationship development process in the exploratory stage between Bright Light and Diode (see Figure 10).

Figure 10: Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development in Case B



Relationship Development Impacts on Bright Light

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Bright Light feels that the company is weak in operations, technology and innovation.
- Customer service is strong in Bright Light.
- Diode often requires Bright Light to reduce the price to secure an order.
- Case B relationship interactions are mainly concerned with price negotiation.
- Bright Light's distribution channel is similar to other larger suppliers.
- Bright Light is not always able to meet Diode's product requirements.
- Bright Light is weak in the core capabilities.

The Relationship Development Status in Case B

Stage One: The Pre-relationship Stage (Awareness)

In this stage, no transactions have yet taken place between customer and supplier. They have communicated, but without commitment to business transactions. The Case B organisations have been involved in business transactions, so the Case B relationship has progressed beyond this stage.

Stage Two: The Exploratory Stage (Exploration)

In this stage two parties may have little experience of working with each other, and no clear idea of what they hope to gain from the relationship for themselves. However, Bright Light and Diode are engaged in discussions and negotiations about prices and conditions in every business transaction. They have little mutuality, cooperation and large inconsistency. Particularity is low in their interaction. Their trust has not yet developed into commitment to the other firm. Thus, their trust is confirmed by contractual trust. Diode seems to dominate this relationship in the areas of product price, product specifications, and order placement. The relationship in Case B has not been shown to be long-term and stable. Therefore, Case B can be classified as this stage.

Stage Three: The Developing Stage (Expansion)

Relationship in this stage is growing in a positive way. However, Case B's relationship is not stable. Hence, Case B does not fit in this stage.

Stage Four: The Stable Stage (Commitment)

In this stage both the customer and supplier have reached long-term stability in their learning about each other and in their investments and commitment to the relationship. However, Case B does not have strong and long-term relationships. Hence, this relationship has not reached this stage.

Dissolution

Case B still has business transactions between the two parties. Thus, Case B has not reached this stage.

6.4 Findings: Case Study C

6.4.1 Case C Company Profiles

Table 8: Case C Company Profiles

Company Profiles	Established	Employees	Turnover	Products
Supplier C (Clean System)	1978	98	Around NT$ 200 million per year (Around £3.3 million per year)	Integrated circuit (IC) semiconductor mould automatic cleaning system
Customer C (Semiconductor)	1984	19000	Around US$ 1 billion per year (About £500 million in 2005)	Integrated circuit (IC) semiconductor, IC packaging, IC test equipment, and various kind of integrated circuit

Supplier C (Clean System)

Interviewees: president, managing director, marketing manager, R&D manager, manufacturing director

Case C focuses on the small supplier Clean System and their larger customer Semiconductor. Clean System was founded in 1978 and operated originally as a manufacturer of specialised CNC engraving machines and sand blasting equipment.

In 2000, Clean System discontinued their original product line and shifted to producing various kinds of IC semiconductor mould automatic cleaning systems. At present, Clean System is the largest IC semiconductor mould automatic cleaning system supplier in Taiwan.

There are 98 members of staff, with a turnover of approximately £3.3 million per year. Clean System has two plants; one co-located with the head office, in Taiwan, and the other in Mainland China. The company have ISO 9001 and CE certification for service and quality. Clean System marketing focuses on local customers, who account for 60% of its sales, with the remaining 40% of sales being exported.

The managing director is the president's wife. She is responsible for supervision of production, finance, and operations management, carrying out the policy of the president. The marketing manager, R&D manager and manufacturing director have each worked in Clean System for approximately twenty years. They do not have university degrees, but they have specialised knowledge and experience in this area of business.

Clean System has been involved with Semiconductor for more than ten years. The relationship with Semiconductor evolved from initial contact at an electronics exhibition. The president selected customer C (Semiconductor), as the larger customer for the case study, because "*Semiconductor is the largest integrated circuit company in Taiwan, and our biggest domestic customer*".

Customer C (Semiconductor)

Interviewees: production manager, purchasing manager, buyer, module-manufacturing director, equipment engineer, all based in the head office plant

Semiconductor was established in 1984 and is a member of the Semiconductor Group. Semiconductor is one of the world's leading providers of semiconductor manufacturing services. Semiconductor is the flagship company in the Semiconductor Group, which has a head office plant in the south of Taiwan and a second plant in the north.

Semiconductor claims a strong company culture, a strong employee training system and excellent employee benefits. All the staff understand their role. Departmental managers are experienced professionals with relevant expertise. The company is committed to provide employees with the best working environment. Semiconductor had 19,000 employees and sales of approximately £500 million in 2005. They have obtained ISO/TS 16949:2002 Edition, ISO 9001:2000 Edition. ISO 14001:2004 Edition, SONY Green Partner, OHSAS 18001:1999 Edition.

There are ten interviewee participants in Case C, five from Clean System and five from Semiconductor. All the participants are closely involved in, and relevant to the maintenance of this relationship.

6.4.2 The Relationship Characteristics of Case C

The matrices summarising the findings from Case C (Clean System and Semiconductor) are presented in Appendix 13 and 14, and discussed below.

Mutuality

Case C appears to show a long-term relationship between Clean System and Semiconductor. The relationship seems to be more based on the price of the goods rather than the technology of the products. This is enhanced by a strong after sales service. In some cases, they made mutual concessions on price, in order to maintain the relationship. This was noted by Clean System's president, and confirmed by Semiconductor's purchasing manger.

"*In some cases, Semiconductor gives up insistence on its preferred price to keep the relationship with us.*" (Clean System president)

"*Sometimes Clean System concedes lower prices in order to maintain the relationship with us. If the price is too high, our company may consider buying from overseas companies. Clean System's products are better than those of other domestic suppliers but worse than some overseas suppliers. However, Clean System's prices are cheaper than those of overseas suppliers about 20% to 30%. Furthermore, Clean System's after sales service is often better.*" (Semiconductor purchasing manager)

Although Case C seems to show a long-term relationship, but the parties appear not to have developed shared goals and common interests. The interaction in Case C seems to be dominated by the self-interest of Semiconductor. The main goals and interests of Semiconductor are that Clean System provides cheap, effective products. On the other hand Clean System's declared interest is in the continued profitability of both companies. Semiconductor seems to be only interested in gaining the benefits from this relationship. Moreover, Clean System may consider that Semiconductor is acting in a selfish manner.

In particular, the purchasing manager and buyer of Semiconductor say that Clean System contributes most and Semiconductor gains most in this relationship. This may be due to the high level of customer service provided by Clean System. This is discussed in more detail in the section dealing with impacts on the small supplier C (Clean System) under "customer service", below. Clean System appears to handle the relations with Semiconductor very well, devoting a lot of attention to this relationship.

Case C therefore appears to be a long-term relationship, which is developing in a positive way, although they do not have similar goals and common interest yet.

Particularity

Case C shows a relatively high degree of particularity in the relationship, since Semiconductor replaces some components of the IC semiconductor mould automatic cleaning system every three years, and it would be inconvenient and potentially disruptive to seek a new supplier. The relationship is sustained and strengthened by these regular transactions. Thus, the way in which Semiconductor behaves towards Clean System appears to show uniqueness.

Case C relationship shows individuality, since business is based on individual transactions. All Clean System respondents stated that they have a secure relationship with Semiconductor and their other customers, as exemplified by their managing director's comment:

"*We have built good and long-term relationships with Semiconductor and our entire customer base. We continuously research and develop new products and improve product quality. Semiconductor always buys IC semiconductor mould automatic cleaning systems and components from us when they have a need.*"

The purchasing manager and buyer of Semiconductor both believe that the relationship with Clean System is secure compared with other suppliers. This is because Clean System has good customer service and punctual delivery. Thus, Case C appears to have a secure and stable relationship.

Trust

It appears that Clean System trusts Semiconductor's goodwill and Semiconductor trusts Clean System customer service competence, as shown by following comments:

"*We have a long-term business relationship with Semiconductor. Semiconductor is the biggest IC semiconductor company in Taiwan. They have a very good reputation in this area of business. We trust Semiconductor.*" (Clean System president)

"*Clean System has good after sales service. We have a long-term business relationship with Clean System. If there is something wrong with a Clean System's products, they will assign a technician to handle it immediately. They are good in customer service.*" (Semiconductor production manager)

The company's mutual business transactions are covered by written contracts, but this is a matter of general company policy, and does not imply any specific lack of trust in the relationship.

Cooperation

Both parties in Case C appear to understand that cooperation is very important for the relationship and their mutual benefit, as suggested by the following statements:

"*Principally, we help each other. If Semiconductor makes a profit, we also make a profit. We offer Semiconductor better and cheaper products, and good customer service. Semiconductor gives us an order for goods.*" (Clean System marketing manager)

"*Good cooperation can improve both companies' profits and maintain the long-term relationship. Good cooperation offers us better products and customer service. Clean System meets our requirements, and therefore, we cooperate with Clean System.*" (Semiconductor purchasing manger)

Thus, Case C seems to show positive cooperation and a shared interest in working together towards a mutual goal. Both organisations understand that cooperation improves mutual profitability and maintains a long-term relationship.

Inconsistency

Case C seems not to involve serious conflicts or misunderstanding. However, there appears to be some instances of communication problems between Clean System's lower level staff, their management, and their customers, as suggested by:

"*In some cases, we have partial inconsistencies. This is because administrative personnel have sometimes caused communication problems with Semiconductor. They misunderstand the customer's meaning and report wrong information to me.*" (Clean System managing director)

According to the module-manufacturing director of Semiconductor:

"*In some cases, when products broke down, I tried phoning Clean System for some information to help us interpret and resolve the failure, but was unsuccessful. This might be due to a lack of product knowledge among their lower level staff, and also to*

the ambiguities of telephone communication."

Thus, inconsistency in this relationship derives from instances of poor communication internally between Clean System's lower level staff and management and externally with Semiconductor. Management inconsistency is an important influence on the communication and hence on the customer-supplier relationship. Clean System may need to consider improving their lower level staff's knowledge, which may reduce communication problems between their lower level staff, management and Semiconductor.

Power/dependence

Clean System appears to be facing some problems in dealing with power and dependence in the relationship with Semiconductor. Semiconductor seems to control this relationship and exercises control in the area of customer service. This is illustrated by the following:

"*When they meet problems in our products, Semiconductor requires us to resolve them promptly. We usually communicate with Semiconductor by phone for an initial appreciation of the problem. Then we will send technical personnel to deal with it.*" (Clean System president)

"*When we face problems with Clean System's products, they have to assign technical personnel to solve them immediately.*" (Semiconductor equipment engineer)

The Clean System R&D manager points out that his R&D tends to aim at providing Semiconductor's needs and wants. However, Clean System seems to have a little influence in this relationship, since Semiconductor replaces some components of the IC semiconductor mould automatic cleaning system every three years. Since, the IC semiconductor mould automatic cleaning system was originally supplied by Clean System, Semiconductor might find it difficult to purchase the components from other suppliers and so is likely to consider Clean System first. Furthermore, all respondents from both Clean System and Semiconductor agree that company size does not influence this relationship.

Thus, Case C appears to show slight interdependence. Semiconductor's power is larger than Clean System's, as manifest in the area of customer service and product development, but Semiconductor is to some extent "locked in" to the relationship, depending on Clean System for replacement components.

6.4.3 Relationship Development Impacts on the Small Supplier C (Clean System)

Supplier's Operations Management

Operations

Clean System runs relationship development programmes with their customers. The participants are the president, marketing manager, and R&D manager. They have regular meetings with customers to offer product information and understand their customer's needs.

"*Yes, we do have relationship development programmes with all of our customers. We have meetings with customers regularly to offer our company information and plan for customers. We gain understanding of customer's needs and wants at the same time.*" (Clean System marketing manager)

All the interviewees from Clean System agree that they need to achieve certain standards for Semiconductor. This suggests that Semiconductor has a dominant role in this relationship. Besides, Semiconductor does not expect Clean System to adopt any efficiency measures for the relationship. However, Clean System has internal efficiency measures for their own company, and they apply just-in-time manufacturing methods. All departments have to report their efficiency measures to the managing director every month.

"*Semiconductor did not require efficiency measures for the relationship. However, we have efficiency evaluation within our company. Every department has a different efficiency evaluation and they have to report to me every month. For example, the production department reports production performance. We have also applied just-in-time methods.*" (Clean System managing director)

Clean System appears to have precise quality control and their product quality is very stable. They also understand that operational efficiency is very important for the company.

"*The operations methods of the company will influence the company's future development direction, and help to build good relationships with our customers at the same time. Business information is very important for the running of the company. If we are unable to research and develop new products to offer the market, our company*

will not grow. Good operations methods can grasp the latest commercial information." (Clean System president)

The relationship characteristics of cooperation and power/dependence create relationship development impacts on the operations of Clean System and influence the relationship development process between Clean System and Semiconductor.

Cooperation	has impacts on operations through cooperation creating maximum profits for both sides.
Power/dependence	has impacts on operations through Semiconductor's dominance of the relationship in the area of applying certain standards for Semiconductor.

- Cooperation: Both parties believe that cooperation creates maximum profit for both companies and improves the relationship.
- Power/dependence: Semiconductor's power appears larger than Clean System and Clean System needs to apply certain standards for Semiconductor.

Technology

Clean System interviewees all recognise that improving technology is very important to keep the relationship with customers and increase company's profits, as suggested by the following comments:

"*Technology development is very important for our company. Improving technology can help our company build good relationships with customers and raise customers trust in us.*" (Clean System president)

Clean System appears to understand that customers expect continuous improvement in technology, as shown by this statement from the manufacturing director of Clean System.

"*Semiconductor hopes for constant improvement in technology and a sustained supply of good products.*"

Thus, technology seems to have an important impact on Clean System. The relationship characteristic of trust creates relationship development impacts on the technology applied to Clean System, and has influence on the relationship development process between Clean System and Semiconductor.

Trust	has an impact on technology, since the degree of trust in the continuity of the relationship and the competence of the partner justifies investment in further technical development.

- Trust: The Clean System manufacturing director points out that technology developments are increased by customer trust, as each counterpart has proved their ability to fulfil their obligations to the other in past technology projects.

Innovation

Clean System's marketing innovation relies on the managing director's business sense, as suggested by her comment below:

"*We continuously study new commercial developments. The direction of company innovation relies on my sense of where the market is going, to anticipate the situation that the company may face in the future.*"

Clean System's product innovation tends to Semiconductor's needs and wants. Clean System does not seem to have much innovative capacity in their lower level staff, who lack technical knowledge. Clean System appears to understand how important product and production efficiency innovations are in this relationship.

These observations are compatible with the relationship characteristics of cooperation and power/dependence creating relationship development impacts on innovation by Clean System.

Cooperation	has impacts on innovation, as cooperation can help Clean System and its counterpart collect business information, and research and develop new products.
Power/dependence	has impacts on innovation through Semiconductor's dominance in this relationship and in the area of product innovation.

- Cooperation: Clean System's R&D manager points out that cooperation may influence his R&D of new products. The managing director of Clean System indicates that cooperation may help the company collect business information.
- Power/dependence: Clean System's R&D tends to aim at providing Semiconductor's needs and wants. Thus, Clean System seems dependent on this relationship in the area of product innovation.

Customer Service

It seems that Clean System has strong customer service and deals with customer's problems promptly. Clean System realises that customer service is very important to consolidate the relationship with Semiconductor, as Semiconductor replaces some of the components of its IC semiconductor mould automatic cleaning system every three years. Building a positive relationship with Semiconductor can help secure a continuing revenue stream.

"*We maintain regular contact, and build positive relationships with customers. This will result in customers' continued dependence on us. When they need a new IC semiconductor mould automatic cleaning component or system, their staff will suggest that their purchasing manager buy our products.*" (Clean System managing director)

These findings are consistent with the relationship characteristics of trust and power/dependence having relationship development impacts on the level of customer service provided by Clean System and influencing the relationship development process between Clean System and Semiconductor.

Trust	has impacts on customer service through Clean System dealing with problems immediately, as Clean System has built trust and reputation with customers by dealing with problems immediately i.e. competence trust in the area of customer service.
Power/dependence	has impacts on customer service through Semiconductor's control of the relationship with Clean System in the area of after sales service.

- Trust: Semiconductor trusts Clean System to address problems promptly when Semiconductor meets problems with Clean System's products. Thus Semiconductor trusts Clean System customer service competence whereas Clean System trusts Semiconductor's goodwill.
- Power/dependence: Semiconductor controls the relationship with Clean System in the area of customer service, since Clean System depends on the placement of orders by Semiconductor.

Supplier's Strategy

Price

Clean System refers to other companies' product prices, calculates its production costs and then decides the price. Clean System's pricing strategy is to be a little cheaper than larger suppliers, as shown by Clean System's managing director's statement below:

"*Our price is decided based on the reference of our production cost and other market prices. Our pricing strategy is to have cheaper prices than larger suppliers about 20% to 30%.*"

Generally, Clean System's prices are cheaper than those of larger suppliers, which is a positive influence on the relationship with Semiconductor. Price is not the sole, or preponderant influence on the relationship, however, since both parties are known to have made price concessions in order to maintain the relationship.

This is reflected in the relationship characteristics of mutuality and inconsistency, which creates relationship development impacts on Clean System's prices and influences the relationship development process between Clean System and Semiconductor.

Mutuality	has impacts on price since both parties have offered concessions on price in order to maintain the relationship.
Inconsistency	has impacts on price through price negotiation, as sometime Semiconductor's purchasing manger has conflicts during price negotiation with Clean System.

- Mutuality: In some cases, both parties give up the insistence on their preferred price to maintain the relationship with the other organisation.
- Inconsistency: The purchasing manager of Semiconductor points out that in some cases they have conflicts during price negotiation, but this does not cause serious problems in this relationship.

Distribution Channel

Clean System is the largest IC semiconductor mould automatic cleaning system supplier in Taiwan, as their larger competitors are located overseas. Clean System's domestic distribution channel is through fixed consignments and overseas through sea or air transportation. As Clean System's larger competitors are abroad, they often use sea transportation to deliver their goods.

"*We have signed contracts with companies for our fixed consignment sea and air transportation to deliver goods to our domestic and overseas customers. As our larger competitors are overseas, they often use sea transportation to deliver goods to their customers.*" (Clean System managing director)

From observation and their conversations, Semiconductor does not have any complaint about Clean System's distribution channel. Clean System always delivers goods on time, as they recognise that punctuality is very important to their relationship with customers. Thus, Clean System appears to have strong distribution channel strategies.

The relationship characteristic of particularity creates relationship development impacts on the distribution channel of Clean System and influences the relationship development process between Clean System and Semiconductor.

Particularity	has impacts on the distribution channel, Clean System's behaviour towards Semiconductor seems be unique, especially since Clean System has good customer service and punctual delivery.

- Particularity: Clean System's behaviour towards Semiconductor seems to be unique. Clean System has good customer service and punctual delivery. Thus, Clean System appears to have a secure relationship with Semiconductor.

Products

It appears that the product strategies of Clean System are a little behind those of some larger suppliers. Clean System's larger competitors are overseas, and their size, financial strength, internationalisation, number of customers and specialised knowledge is stronger than Clean System.

"*The size, financial situation, internationalisation and number of customers are weak in comparison with those of larger suppliers. We are also slightly worse than larger suppliers in product design. Sometimes we are unable to produce the product which customers require.*" (Clean System president)

It seems that Clean System develops their products to meet customer requirements. They always collect information from the market and understand customer's needs. These findings suggest that developing new products to meet customer requirements

is a very important influence on the relationship development process between smaller suppliers and their larger customers.

The relationship characteristics of particularity and power/dependence create relationship development impacts on Clean System's product, and influence the relationship development process between Clean System and Semiconductor.

Particularity	has impacts on products since Clean System develops products in response to Semiconductors unique requirements.
Power/dependence	has impacts on products through Semiconductor's control of product development specifications with Clean System.

- Particularity: Semiconductor replaces some components of the IC semiconductor mould automatic cleaning system every three years. Thus, the way in which Semiconductor behave towards Clean System appears to be a directed and unique interaction.
- Power/dependence: Clean System appears to develop products to meet customer needs. Thus, Semiconductor dominates this relationship in the area of product development, and Clean System is dependent in this relationship in the area of product innovation.

Supplier's Capabilities

Capabilities

It appears that Clean System is weak in core capabilities in the areas of lower level staff knowledge and skills, technology systems, managerial systems, and values and norms. According to the Clean System president, Clean System's management have good technical knowledge but lower level employees do not, due to lack of employee training. Only management level staff are sent to participate in job related training.

"*Our company has lacked specialised employee training for lower level staff, so their specialised knowledge is deficient. However, we offer training for all departmental managers. We send them on some training courses which are related their job.*" (Clean System president)

The technology systems in Clean System seem excessively dependent on a few key individual staff members. For example, the R&D department relies on its manager, the finance department on the managing director and the production and product

quality control department on the manufacturing director for technical knowledge, since lower level staff's technological abilities are weak.

Similarly, it appears that Clean System's managerial systems are weak, since, although the management is skilled, lower level staff lack training.

Clean System seems weak in their company culture, according to Semiconductor respondents, who have the impression that Clean System's lower levels are not committed to the company culture. All the interviewees from Clean System agree that management level staff have strong belief in the company culture, but that lower level staff lack commitment to, and belief in, the company culture.

The relationship characteristic of cooperation creates relationship development impacts on the capabilities of Clean System and influence the relationship development process between Clean System and Semiconductor.

Cooperation	has impacts on capabilities. Clean System is weak in product technology, and addressing this mandates product development in cooperation with Semiconductor.

- Cooperation: Semiconductor concludes that long-term cooperation depends on better products, cheaper price, and good customer service. Thus, Clean System may be concerned about the relationship with Semiconductor, because Clean System is weak in product technologies.

6.4.4 Relationship Development Process in Case C

It appears that Clean System makes initial contact with potential new customers via existing customers, trade exhibitions, and internet selling. After first contact, they promote their products through personal selling. Clean System initially recognised Semiconductor as a potential partner at an electronics exhibition in Taiwan. After first contact Clean System's president and marketing manager was very enthusiastic about the plan to build relationship with Semiconductor.

The organisations have limited experience of working with each other in the initial relationship, involving sample deliveries and a few business transactions. They have little mutuality, limited cooperation, and lack mutual trust. Particularity has not been established. Power is unequally distributed, with Semiconductor dominant in the early

stage of their relationship.

Clean System has been involved with Semiconductor for more than ten years. At present, the relationship investigated as Case C appears to be potentially long-term and stable. The business relationship between the two companies is growing in a positive way. They make mutual concessions on their preferred price to maintain the relationship with the other organisation. However, they have not built shared goals and common interests yet. Semiconductor seems only concerned with their unilateral benefits gained from the relationship. The particularity in Case C appears to be high, as Semiconductor replaces some components of the IC semiconductor mould automatic cleaning system every three years. Their relationship appears to show positive cooperation and to be secure. In addition, they trust each other and their inconsistency is low. There is mutual trust in Case C, since it appears that Clean System trusts Semiconductor's goodwill, whereas Semiconductor trusts Clean System's customer service competence. They sign contracts for each business transaction, but this does not imply a lack of trust, since it is a formal observance of company policy. There is a little inconsistency in communication between Clean System's lower level staff, management, and their customers Semiconductor's power seems larger than Clean System in the areas of customer service and product development, but Semiconductor currently depends on Clean System's replacement components. Clean System depends on the relationship for cooperation in product innovation. Thus, mutuality, particularity, cooperation, trust, and commitment is increasing in both organisations and inconsistency is being reduced. The relationship is not completely customer-dominated in the short-term, but the supplier is dependent on the customer for strategic direction. Mutual adaptations and mutual commitment is increasing, but uncertainty remains, as the purchasing manager of Semiconductor points out, "*If Clean System's product price is too high, we may look at overseas companies.*" Therefore, Semiconductor may cause the relationship development process to slow or reverse. The relationship developmental stage in Case C can be classified as stage three, i.e. the developing stage.

The relationship of Case C appears to be long-term and stable. However, the continuation of the relationship is not felt to be inevitable by the respondents. If Clean System can improve core capabilities such as human capabilities, technology, managerial systems, and company culture, the Case C relationship may improve the positive advantages for the companies and develop to the next i.e. stable stage.

The relationship in Case C would be moderately difficult to terminate because

Semiconductor depends on Clean System for replacement components for their existing system. In addition, Clean System has strong customer service and their price is cheaper than those of larger suppliers.

6.4.5 Conclusions on Case C

Clean System's lower level employee's knowledge and skills appear weak, due to a lack of training, which is only provided for management level employees. Their lower level staff's expert knowledge may be insufficient, due to a lack of employee training.

Clean System is weak in product technology compared with overseas suppliers. This is because their company's size, financial situation, internationalisation, the quantity of customers and specialised knowledge are weaker than those of overseas competitors. Their limited R&D capabilities means they may not be able to meet Semiconductor's expectations for faster and more reliable IC semiconductor mould automatic cleaning systems, so Semiconductor can only trust Clean System in the way of customer service competence.

It seems Clean System lower level staff have limited expertise. They are often unable to resolve customer's problems in the field, and have to report back to the company and ask for solutions. Their lack of expertise has caused inconsistency when they report to their department manager and communicate with customers.

Clean System appears to have a weak allegiance to company culture in their lower level employees. The company is over-dependent on certain key personnel, such as the president, managing director, marketing manager, R&D manager, and manufacturing director. These key employees have higher bonuses every year, whereas the lower level staff do not.

The managing director of Clean System is imperturbable and deals with difficult and complicated situations efficiently, employing her interpersonal skills to resolve interdepartmental conflicts. The managing director is responsible for company internal management. The president is responsible for dealing with company external business, such as seeking new customers and building relations with customers. The R&D manager and manufacturing director of Clean System seem to have a narrow view and only focus on their job.

Clean System is looking for business agents to expand their markets. Due to intensely

competitive nature of the IC semiconductor fabrication market, Clean System is trying to find new ways to promote their goods. Clean System hopes that the use of agents will help them promote their goods, and extend their business.

This investigation suggests that, in order to improve, and better manage its relationship with Semiconductor. Clean System may need to make improvements in lower level employee's training, in its managerial and technical systems, and in fostering a positive company culture.

6.4.6 Reflections on Case C

The relationship characteristics of Case C reflect the long-term and stable nature of the relationship. Both parties have on occasion conceded on price in order to maintain the relationship. However, they have not developed shared goals and common interests yet. Their relationship appears to be growing in a positive way and shows positive cooperation between them. Case C shows a high degree of particularity in the relationship and the relationship appears to be relatively secure. The way in which Semiconductor behaves towards Clean System appears to show high uniqueness of interaction. They show mutual trust: Clean System trusts Semiconductor in the area of goodwill, whereas Semiconductor trusts Clean System in the area of customer service competence. Case C appears to show little inconsistency between Clean System's lower level staff, management and customers. Semiconductor's power seems a little greater than Clean System in the area of customer service and product development, but Semiconductor currently depends on replacement components. Clean System depends on this relationship for product innovation.

The relationship development impacts on the small supplier are reflected in the strong customer service shown by Clean System. They always deal with customers' problems immediately. Their distribution channel performance is similar to those of larger suppliers, and their prices are lower. The downside is that their operations, technology, innovation and product strategies appear weaker than those of their overseas competitors, which are better financed, with more customers, more specialised knowledge, and a more international outlook. Clean System therefore has relatively limited resources for product development. It appears that, due to a lack of training, Clean System is weak in core capabilities such as employee knowledge and skills, technical and managerial systems, and the values and norms.

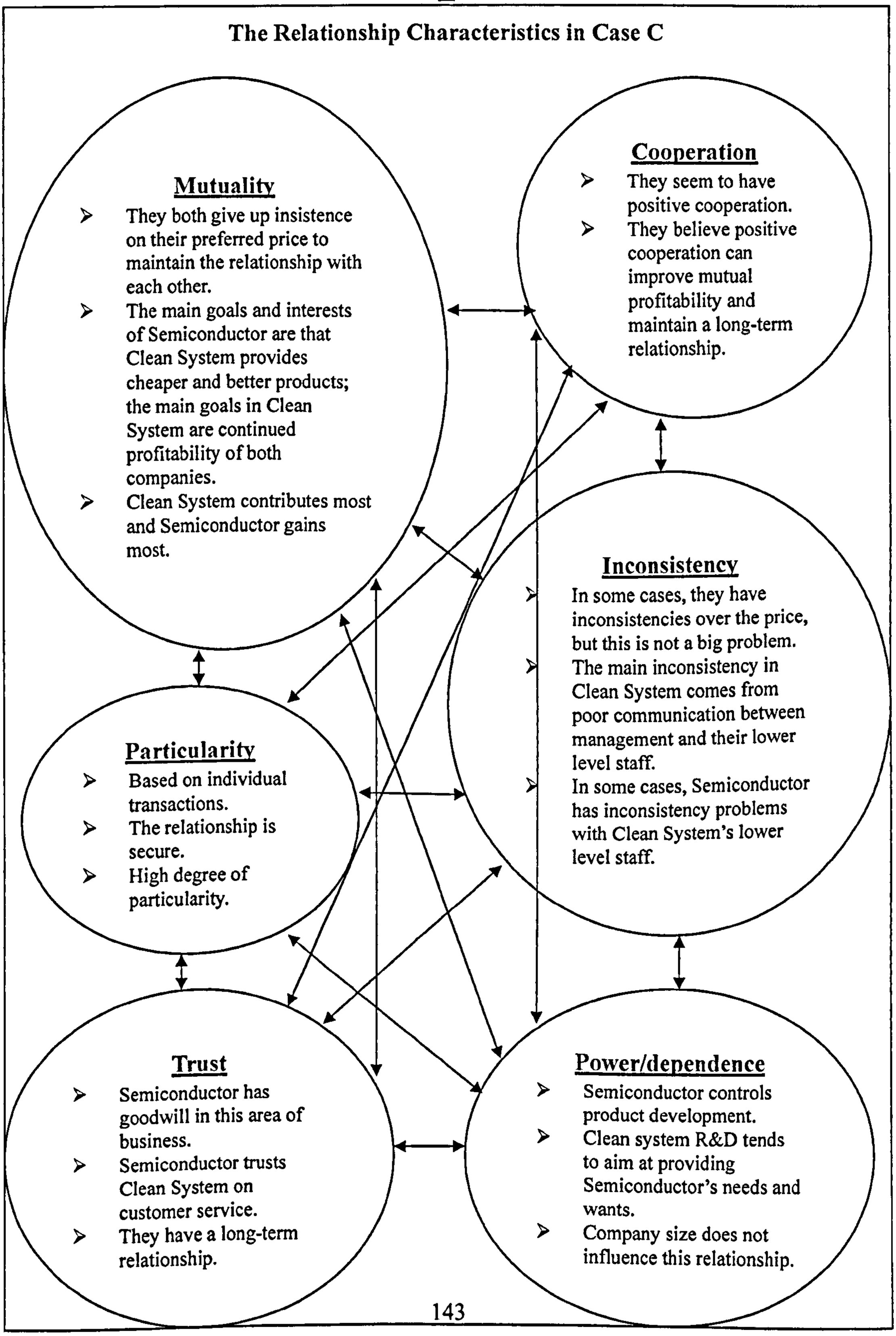
The relationship development process in Case C is classified as stage three,

"developing", since the relationship appears to be long-term and stable. There are increasing mutual adaptations and mutual commitment is growing. However, the continued positive development of the relationship is not regarded as guaranteed, since it is acknowledged that Semiconductor may cause the relationship development process to slow or terminate.

From these observations on Case C, it appears that the core capabilities of Clean System could be a key influence on the relationship development process. Improvement in employee knowledge and skills, technology and managerial systems and an allegiance to a positive company culture among lower level staff, will foster positive development of the relationship with Semiconductor.

The analysis of Case C has revealed some of the ways in which the relationship characteristics of mutuality, particularity, trust, cooperation, inconsistency, and power/dependence create relationship development impacts on the operations, technology, innovation, customer service, price, distribution channel, products, and capabilities of the small supplier Clean System, and influence the relationship development process in the developing stage between Clean System and Semiconductor (see Figure 11).

Figure 11: Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development in Case C



Relationship Development Impacts on Clean System

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Customer service is very strong in Clean System.
- The price strategy of Clean System is to be cheaper than other suppliers.
- Clean System's distribution channel is similar to that of larger suppliers.
- Clean System's operations, technology, innovation and products strategies appear weaker than those of their overseas competitors.
- Clean System is weak in the core capabilities of lower level staff.

The Relationship Development Status in Case C

Stage One: The Pre-relationship Stage (Awareness)

In this stage, no transactions have yet taken place between customer and supplier. They have communicated, but without commitment to business transactions. The Case C organisations have been involved in business transactions, so the Case C relationship has progressed beyond this stage.

Stage Two: The Exploratory Stage (Exploration)

In this stage two parties may have little experience of working with each other, and no clear idea of what they hope to gain from the relationship for themselves. However, Clean System and Semiconductor have grown up in positive way. Their relationship appears to be long-term and stable. Therefore, Case C can be not classified in this stage.

Stage Three: The Developing Stage (Expansion)

Relationships in this stage are growing in a positive way. Case C appears to have a long-term and stable relationship. They are increasing mutuality, particularity, cooperation, and commitment in both organisations. They show mutual trust. Clean System trusts Semiconductor's goodwill, whereas Semiconductor trusts Clean System's customer service competence. Inconsistencies are reduced between them. Case C appears to show slight interdependencies. Semiconductor's power seems a little greater than Clean System's in the areas of customer service and product development. Semiconductor currently depends on replacement components for their existing Clean System equipment, and Clean System depends on this relationship for cooperative product innovation. Clean System are not entirely secure in this relationship, since their products are not as good as those of larger suppliers, and they are weak in the core capabilities of lower level staff. For these reasons, Case C can be classified in this interim stage.

Stage Four: The Stable Stage (Commitment)

In this stage, both the customer and supplier have reached long-term stability in their learning about each other and in their investment in, and commitment to, the relationship. This mature stage in a relationship development has positive advantage for the companies. Uncertainty is low and the companies have low costs in handling the relationship. Given the outstanding issues noted above, Case C is not considered to have reached this stage.

Dissolution

Case C still has business transactions between the two parties. Thus, Case C has not reached this stage.

6.5 Findings: Case Study D

6.5.1 Case D Company Profiles

Table 9: Case D Company Profiles

Company Profiles	Established	Employees	Turnover	Products
Supplier D (Cooling)	1987	198	Around NT$ 1 billion per year (Around £16.67 million per year)	Home electronic appliances, and electronics cooling fans
Customer D (Laptop)	1983	2000	Around NT$ 12 billion per year (About £200 million per year)	Tablet personal computers (PCs), liquid crystal display (LCD) PCs, laptops, and information appliances

Supplier D (Cooling)

Interviewees: managing director, vice-managing director (who is concurrently also the manufacturing director), domestic marketing manager, domestic sales person, and R&D manager. All interviewees are from the Electronics Cooling Division except the managing director

Case D focuses on the small supplier Cooling and their larger customer Laptop. Cooling Corporation is divided into two divisions, the Home Appliance Division and the Electronics Cooling Division, which is the small supplier in this case study.

Cooling Corporation was established in 1987. Cooling Corporation engages in the manufacturing and selling of small home appliances. In 1993, Cooling Corporation indirectly transferred its investment to Mainland China and established Shanghai Cooling Home Appliances and Industrial Company Limited in Shanghai. In 1997, Cooling Corporation established a division of thermal management and production called Electronics Cooling Division, engaging in the buying, selling and manufacturing of the cooling parts and assemblies of the relevant computer products. The Home Appliance Division manufactures home appliances, such as toasters,

electric fans, hot and cold wet towel makers, carbon and halogen heaters, bottled water coolers, vacuum cleaners, and far-infrared radiant dish and bowl dryers. The Electronics Cooling Division manufactures cooling fans for electronic equipment. The products are mostly used in personal computers (laptops and desktops). The company currently employs 200 employees in Taiwan and the turnover for the last year was approximately £16.67 million. Cooling Corporation manages and operates a research and design centre in Taiwan, and manufactures in Mainland China. Its major markets are Japan, U.S.A., Mainland China, and Taiwan. In 1997, Cooling obtained the ISO 9002 international quality assurance certificate.

Cooling Corporation is a family business. Most important management personnel are relatives of the president. For example, the financial manager is the president's wife, the managing director is the president's brother-in-law, and the domestic marketing manager is the president's cousin-in-law. The president has ambitions to become a successful entrepreneur. He seems to recognise that the family dominated organisation structure and shareholding centralisation of the company is counterproductive, but apparently has found it difficult to change.

The managing director has worked in other similar areas of business in the home electronics appliance sector for approximately ten years and transferred to Cooling in 1997. He has specialised knowledge and experience of the home electronics appliance market, but he does not have specialised knowledge and experience in the area of electronics cooling.

Cooling has been involved with Laptop for approximately five years. The relationship with Laptop evolved from a contact arising from a listing in an industry directory. The vice-managing director identified customer D (Laptop), as the larger customer in this case, because "*Laptop is a large laptop manufacturer in Taiwan. We would like to increase our business relationship with Laptop.*"

<u>Customer D (Laptop)</u>

Interviewees: vice-managing director, purchasing manager, buyer, manufacturing director, R&D manager

Laptop was established in 1983 with a capital of NT$ 5.6 billion. Currently the company employs about 2000 full-time workers, and has a turnover of approximately £200 million. The major products of the company are tablet personal computers (PCs),

liquid crystal displays (LCDs) PCs, laptops and other information appliances. Laptop is one of the world's highest volume Original Equipment Manufacturer (OEM) and Original Design Manufacturer (ODM) partners. The company's major markets are Europe, U.S.A., Mainland China and Taiwan, and they have established service centres in the U.S.A., Germany, U.K., Mainland China, and Taiwan. Laptop has two manufacturing plants, one is co-located with the head office in Taiwan, and the other is in Mainland China. The firm obtained ISO 9002 certification in 1994, ISO 9001 certification in 1998, and ISO 140001 certification in 2001. Laptop has approximately 200 staff employed in a very strong R&D team.

There are ten interviewee participants in Case D, five from Cooling and five from Laptop. All the participants are closely involved and relevant to the maintenance of this relationship.

6.5.2 The Relationship Characteristics of Case D

The matrices with analysis of the findings from Case D (Cooling and Laptop) are presented in Appendix 15 and 16, and discussed below.

Mutuality

The relationship in Case D appears to lack mutuality. Both companies have the goal of increasing their own profitability, resulting in opposite goals on price for buyer and seller. Case D therefore seems not to be very long-term, since both parties main interest lies in taking unilateral advantage from this relationship. It appears that Laptop gives up individual product standard goals to maintain the relationship, while Cooling reduces the price to maintain the relationship.

Cooling appears to recognise that the goals developing in this relationship are to improve their R&D, and product technology abilities. The managing director and domestic marketing manager of Cooling both felt that Cooling contributes most to the relationship and the other party gains most. On the other hand, the vice-managing director and purchasing manager of Laptop both felt that Laptop contributes most and Cooling gains most in this relationship. This may be a result of the low level of product innovation and product technology provided by Cooling. This is discussed in more detail in the sections on impacts on the smaller supplier D (Cooling) under "innovation and products". These different assessments of relative benefit suggest that the parties do not have a common view of the sacrifices made for the sake of the relationship. They may consider that the other party is selfish and potentially

untrustworthy as the other party is only interested in their benefits. Thus, Case D appears not to build on shared goals and common interests, as the parties are only interested in taking unilateral advantage from this relationship.

Particularity

It appears that Case D has a low degree of particularity. The interaction between the two parties is not unique or exclusive since their activities are not directed solely towards each other. The business transactions in Case D are performed in an individual way, as each business transaction is negotiated independently. The relationship is primarily based on price, since, although Cooling's products are technically less advanced than those of larger suppliers, they are also cheaper. Cooling's components are used in Laptop's finished goods which are sold in Mainland China, an especially price sensitive, but arguably less technically demanding market than Taiwan, the U.S.A. or Europe.

Cooling's managing director and vice-managing director agree that Cooling has an insecure relationship with all of their customers. The Electronics Cooling Division is still in the start-up phase, since it was only established in 1997. Cooling has limited knowledge and experience in the area of electronic cooling fans, and is still learning and developing a business relationship with their customers.

Trust

Cooling appears to trust Laptop since there have been no serious problems over the several years duration of the relationship, and Laptop gives Cooling orders regularly. On the other hand, Laptop trusts Cooling to deliver goods on time, to supply cheap products, and to accept small orders. However, from respondents' comments, the level of mutual trust is limited, and business is still conducted on the basis of written agreements. This is reflected in Laptop's purchasing manager's comment below.

"*We have signed contracts in every business transaction due to the company's policy. Signed contracts safeguard our company. We only have a few years' relationship and the Electronics Cooling Division of Cooling Corporation is still in its infancy, making signed contracts with Cooling essential.*"

Thus, Case D can be characterised as an example of contractually based trust, in that the parties rely on written contracts to ensure that promises are kept. Case D is mainly based on contractual trust rather than competence or goodwill trust. This is due to the fact that Cooling's products do not always use the highest standard of technology.

However, the price of their products seems to be attractive to their customers who seem to have a stable relationship with Cooling.

Cooperation

Case D appears to show little cooperation where this is taken to mean a shared interest to work together towards a mutual goal. Although Cooling appears to make efforts to cooperate with Laptop and to improve the relationship with all of their customers, Laptop seems not to reciprocate. While Laptop recognises that positive cooperation can in principle be very important for both companies, in practice Laptop seems to be only interested in their benefits and makes little effort to maintain long-term cooperation with Cooling, as shown by comment from Laptop's purchasing manager:

"*Certainly, good cooperation is beneficial for both companies. Cooling can obtain regular order placements from us, and at the same time we can increase our business. However, long-term cooperation depends on Cooling, and Cooling is responsible for our cooperative developments. This is because we are only interested in Cooling continuing to offer us cheap products, better product quality, and delivery of goods on time.*"

Thus, Case D seems to show a one-sided investment in the relationship, with cooperation being primarily the responsibility of the small supplier Cooling.

Inconsistency

Case D seems to show no serious inconsistencies but there have been some inconsistencies related to price negotiation and product specifications. In some cases, Laptop's requirement specifications have been misunderstood by Cooling's staff many of whom lack detailed product knowledge.

Although Cooling feels that there is no serious inconsistency in its relationship with Laptop, they have experienced some instances of internal communication problems between Cooling's domestic marketing manager, domestic sales person, and other departments, as suggested by:

"*Sometimes, we have inconsistencies with our manager, when he has not clearly informed us of the customer's requirements following discussion and agreement with the customer. This leads to us reporting wrong information to the relevant department and causes difficulties in handling the work.*" (Cooling domestic sales person)

"*In some cases, I misunderstand Laptop's requirement and have disputes with our marketing department, because of ambiguous or inaccurate requirement reporting by the marketing department.*" (Cooling R&D manager)

Thus, Cooling appears to have internal conflicts and ambiguity arising between their domestic marketing manager, domestic sales person, and other departments. This can cause Cooling to misunderstand Laptop's requirement and not meet the exact demand.

Power/dependence

Cooling appears to have experienced difficulties in dealing with power and dependence in its relationship with Laptop. Laptop is influential mostly in the areas of order placement and product specifications; while Cooling is responsible for product quality, delivery of goods on time, and catering to the customer's wants and needs, as shown by comments from the vice-managing director of Cooling:

"*Laptop controls the order placement and product specifications; we are responsible for the development of products that the customer needs and wants, punctual delivery, and product quality. We do everything to satisfy our customers.*"

Case D seems to show slight interdependence, although Laptop has a dominant role in this relationship in the areas of order placement and product specifications. Cooling's product technology is weaker than that of larger suppliers, but this is compensated for by lower prices, which conforms to the requirements of Laptop's market in Mainland China. All the interviewees in Case D agree that the relationship is not affected by the relative size of the two companies.

Thus, Laptop has more power and influence in this relationship via order placement and product specifications. Cooling seems relatively powerless and its product innovation is dependent on meeting Laptop's requirements.

6.5.3 Relationship Development Impacts on the Small Supplier D (Cooling)

Supplier's Operations Management

Operations

Cooling does not run relationship development programmes with any customers. Cooling's vice-managing director annually discusses the approximate volume of Laptops orders for the next year. The domestic marketing manager has regular

meetings with Laptop to discuss price and product specifications. All the interviewees from Cooling strongly believe that they need to meet and apply any particular standards for customers. Cooling does not have any efficiency measures for the relationship and Laptop does not expect them, but they have implemented ISO certification and just-in-time manufacturing methods. Departments have different internal efficiency measures.

Cooling appears weak in their operations and in the area of quality control, as suggested by their vice-managing director's statement:

"*The percentage of bad products in our company is high and customers always complain about this. We know that it is impossible to achieve zero-defects, but we will try our best to reach this goal. The operation strategies of our company are to reduce costs, increase profits, and improve the added value of our products.*"

Thus, improving Cooling's operations strategies in the area of quality control may improve the relationship with Laptop.

The relationship characteristic of cooperation creates relationship development impacts on the operations of Cooling and influence the relationship development process between Cooling and Laptop.

Cooperation	has impacts on operations through positive cooperation creating benefits for both sides.

- Cooperation: Both parties believe that positive cooperation creates benefits for both companies.

Technology

It appears that Cooling does not have strong technical abilities. The relationship seems to be more based on the price of the goods rather than the technology of the products. Cooling recognises that product technology is very important for their type of customers, as suggested by the following comments:

"*Our products are used in hi-tech industries, so development of the technology is very important for our company. Improving technology can improve the relationship with our customers.*" (Cooling vice-managing director)

Thus, technology appears to be very important for Cooling's relationship with Laptop. Improving technical abilities may strength the quality of its products.

The Relationship characteristic of particularity creates relationship development impacts on the technology applied to Cooling, and has influence on the relationship development process between Cooling and Laptop.

Particularity	has impacts on technology, with low uniqueness and exclusivity solely due to Cooling's technological weakness.

- Particularity: Case D appears to have a low degree of particularity. There is limited uniqueness and exclusivity, since the relationship seems to be based on the price of the goods rather than the technology of the products.

Innovation

Cooling appears not to have proactive product innovation, since the R&D of new products tend to the customer's expressed needs and wants, as shown by Cooling's domestic sales person comments below:

"*The company does not itself originate product innovations, which react to requests from customers to research and develop new products.*"

Cooling has compiled a basic budget for the R&D department for developing new products. They recognise that continuous R&D of new products is very important for Cooling to maintain long-term relationships with their customers. Cooling's products are used in the various kinds of laptops and computers, which have short product life cycles, so their customers must always have new products to introduce into the market.

These observations are compatible with the relationship characteristics of mutuality, inconsistency, and power/dependence creating relationship development impacts on innovation by Cooling.

Mutuality	has impacts on innovation , since the relationship development goals in this relationship are focused on improving Cooling's R&D abilities.
Inconsistency	has impacts on innovation, caused by Cooling's R&D manager misunderstanding of Laptop's requirements.

Power/dependence	has impacts on innovation, since Cooling's R&D depends on Laptop's needs and wants.

- Mutuality: The mutual goals developing in this relationship are focused on improving Cooling's R&D abilities.
- Inconsistency: In some cases, the Cooling R&D manager does not very clearly understand Laptop's requirements, because of ambiguous or inaccurate reporting by their marketing department. This will influence his R&D direction.
- Power/dependence: Laptop appears to have more power in the areas of order placement and product specifications than Cooling, and Cooling's R&D depends on Laptop's expressed needs and wants.

Customer Service

Cooling appears to have good customer service and they deal with customer complaints immediately.

"*When customers meet problems, customers will tell me and I will pass this information to the relevant department at once. If the customer service can not be done well, this will seriously influence the relationship with customers and their order placements.*" (Cooling domestic marketing manager)

Thus, Cooling appears to do their best to offer good customer service, which they feel can improve the relationship with customers.

These findings are consistent with the relationship characteristic of cooperation having relationship development impacts on the level of customer service provided by Cooling and an influence on the relationship development process between Cooling and Laptop.

Cooperation	has impacts on customer service since positive cooperation improves Cooling's service to their customers.

- Cooperation: Positive cooperation can help Cooling to better understand their customers' needs and wants and improve their service to their customers.

Supplier's Strategy

Price

Cooling's pricing strategies depend on their costs and reference prices in the same market sector. In principle, Cooling's pricing strategy is to be cheaper than other suppliers. Pricing strategies appear to be very important for Cooling. If Cooling's price is too high, Laptop may buy goods from other suppliers. Laptop always compares the price with other suppliers when they place orders. The important reason for Laptop to keep the relationship with Cooling is that Cooling's prices are generally lower than those of other suppliers. This can be shown by Laptop's purchasing manager's comment:

"*The most important advantage for us from this relationship is that the product price from Cooling is generally lower than from other suppliers and their product quality is fine. Therefore, we purchase cooling fans from Cooling.*"

This is reflected in the relationship characteristics of mutuality, trust, and inconsistency, which create relationship development impacts on Cooling's prices and influence the relationship development process between Cooling and Laptop.

Mutuality	has impacts on price through Cooling making price concessions in order to maintain the relationship.
Trust	has impacts on price through Laptop trusts Cooling because of its cheaper prices.
Inconsistency	has impacts on price, since they have conflicts during price negotiation.

- Mutuality: In some cases, Cooling gives up insistence on their preferred price to maintain the relationship with Laptop.
- Trust: Laptop trusts Cooling, because Cooling's product price is cheaper than other suppliers. Case D appears to show contractually based trust.
- Inconsistency: In some cases, conflicts arise during price negotiation.

Distribution Channel

Cooling uses fixed consignment delivery of their goods. Cooling's distribution channel stock levels are less than those of larger suppliers. This is because Cooling has only contracted with one consignment company to deliver their goods and they only collect goods at fixed intervals, but larger suppliers may have signed more consignment companies to deliver their goods and have more flexible collection and delivery schedules.

Cooling always delivers goods on time, as they recognise that delivery of goods on

time is very important to their relationship with customers. However, their distribution channel is limited. Sometimes, to meet a customer's urgent requirement, if the customer is located near Cooling, the domestic marketing manager will deliver them in person. If the customer is located faraway from Cooling, they may need time to deliver it.

Thus, distribution channel performance and punctual delivery are a very important to Cooling. The relationship characteristic of trust creates relationship development impacts on the distribution channel of Cooling and influence the relationship development process between Cooling and Laptop.

Trust	has impacts on distribution channel, since Laptop trusts Cooling to deliver goods on time.

- Trust: Case D appears to show relatively limited trust between Cooling and Laptop, as Laptop's trust in Cooling is limited to Cooling's delivery of goods on time. Case D appears to show contractually based trust.

Products

The product strategies of Cooling are to collect market information first. The products then go through the R&D process to meet customer requirements. Their product technology and quality are both weaker than those of larger suppliers, and their product development efforts could be described as product adaptations rather than innovations.

"*Our company is small, and larger suppliers have more resources than us, so our products cannot compete technically, and larger suppliers can certainly develop higher quality, more advanced products which command a higher unit price.*" (Cooling managing director)

Cooling thus appears to have weak product strategies compared with larger suppliers and their product strategies are to develop products that directly supply customers' explicitly expressed requirements, rather than lead by innovation.

The relationship characteristics of inconsistency and power/dependence create relationship development impacts on Cooling's products, and influence the relationship development process between Cooling and Laptop.

Inconsistency	has impacts on products since they have experienced inconsistency in developing product specifications.
Power/dependence	has impacts on products of the supplier as Laptop controls product development strategies.

- Inconsistency: In some cases, they have experienced inconsistency in the product specifications.
- Power/dependence: Laptop appears to show most influence in this relationship and controls the product specifications. Cooling seems relatively powerless to influence product specifications, as reflected in its customer-led product strategies.

Supplier's Capabilities

Capabilities

Cooling appears not to have strong human capabilities in relation to its product development, technological activities, and management. This reflects a lack of development of human resources in relation to the firm's needs. This can be shown by:

"*We do not have good employee training. We have only occasional training at management level, and then management explain what they have learned to their department staff. Therefore, in general the professional knowledge of the staff is limited.*" (Cooling vice-managing director)

Cooling's technical knowledge and product development skills are weak, but Laptop does not complain and accepts their products. This is because Laptop uses the goods from Cooling in their finished goods sold in Mainland China. Thus, the product quality and product development are not strict requirements for the relationship.

Cooling appears to lack planning for new developments or initiatives, which leads to lack of foresight and an inability to predict problems. Cooling does not appear to have placed great emphasis on the development of its managerial capabilities. Cooling has only occasionally required management to attend outside training programmes and courses related their jobs.

Values and standards appear weak within Cooling and do not seem to be greatly influenced by Laptop. Much emphasis seems to be placed on Cooling's history as a

family business. Cooling is run by family members, with the important positions held by relatives of the president. This means there are limited promotion opportunities for staff who are not family members, which may contribute to the high staff turnover noted, especially in the domestic marketing department of the Electronics Cooling Division. Thus, Cooling does not appear to have strong company culture, due to the fact that this is a family run business. However, Cooling has a strong family culture.

The relationship characteristic of mutuality creates negative relationship development impacts on the capabilities of Cooling and negatively influences the relationship development process between Cooling and Laptop.

Mutuality	has impacts on capabilities, since the mutual goals developing in this relationship are the improvement of Cooling's R&D and product technology capabilities, as Cooling has lacked employee knowledge and skills.

- Mutuality: Cooling appears to recognise that the goals developing in this relationship are improved R&D and product technology capabilities, as Cooling has lacked employee knowledge and skills.

6.5.4 Relationship Development Process in Case D

It appears that Cooling's initial contact with Laptop was through industry directories. Cooling posted their product catalogue and made phone calls to contact and make appointments with Laptop's purchasing manager. Cooling promoted their goods through personal selling. Cooling's domestic marketing manager spent a long time establishing an initial relationship with Laptop. However, Laptop seemed initially reluctant to commit to a relationship with Cooling, since Cooling was a start-up company and Laptop had limited confidence in them. Cooling's domestic marketing manager reported this situation in his monthly meeting with department heads. Cooling's vice-managing director established a friendly relationship with Laptop's purchasing manager and made many visits to Laptop with his domestic marketing manger, delivering samples and gaining a little experience of working together in a business relationship.

The relationship investigated as Case D appears to be potentially short-term, but is currently acceptable to both parties. They both hope to gain from the relationship themselves, but future benefits are uncertain. In some cases, Cooling concedes their

preferred price; Laptop gives up individual product standard goals to maintain the relationship. In general, this relationship lacks particularity, but is acceptable to both the supplier and customer. This is because Laptop only uses the goods from Cooling in their finished goods sold in Mainland China, where Cooling's weaknesses in product quality and technology are offset by their price advantage. Cooling feels insecure in its relationship with all of the Electronics Cooling Division's customers, because they are not well established in this market and are still developing their company. The trust in Case D can be defined as contractual trust. Cooperation in this relationship seems a rather one-sided investment, since, while Cooling appears to make effort to cooperate with Laptop. Laptop seems to have a restricted view of the benefits that Cooling offer them. Case D appears not to show serious inconsistency; nevertheless, Cooling appears to have internal inconsistency between their domestic marketing manager, domestic sales person, and other departments. Cooling seems powerless and dependent in the area of product innovation; Laptop plays a dominant role in the areas of order placement and product specification. Therefore, the relationship development of Case D can be classified as stage two, i.e. the exploratory stage.

Cooling may reach the developing stage or stable stage if they can develop their core human, technical, and managerial capabilities, and their company culture. If Cooling can develop their core capabilities, this may result in the relationship with Laptop growing in a positive way and may have positive advantages for both companies. They will increase their mutuality, particularity, cooperation, and trust. Inconsistency will be reduced and power will become more balanced.

The relationship in Case D appears potentially short-term and may be easily broken, yet it is currently acceptable to both parties. Although the quality of Cooling's products is not to the higher of some larger suppliers, their prices are lower. This is the balance that Laptop has accepted. In this case, investment in development of the relationship is based on price rather than product quality.

6.5.5 Conclusions on Case D

Cooling's employee knowledge and skills appear very weak especially for lower level staff. Cooling has occasional training for management but has lacked training for its lower level employees, whose expert knowledge is insufficient. This is because Cooling's financial resources are insufficient for employee training.

The Electronics Cooling Division of Cooling is in its infancy and is weak in production efficiency, product technology, and R&D capabilities compared with larger suppliers. However, Laptop appears not to have strict requirements for Cooling's product quality and product development. This is because Laptop only uses Cooling's goods in completed products, which are sold in Mainland China. Thus, product technology and product quality are not primary considerations for Laptop but a low price is required.

Cooling appears to lack planning in its managerial systems. Cooling is a traditional family business with shares held by family members. This affects Cooling's ability to keep talented staff and inter-departmental communication is difficult.

Cooling appears to have a weak company culture. Almost all the important positions are held by relatives of the president. This causes Cooling not to have good promotion prospects for able staff and reduces their commitment to the company, resulting in high staff turnover, especially in the domestic marketing department of the Electronics Cooling Division.

This investigation suggests that, in order to improve, and better manage its relationship with Laptop, Cooling may need to develop its capabilities in employee knowledge, managerial systems, technology and foster a positive company culture.

6.5.6 Reflections on Case D

On reflection, Case D demonstrates a situation in which relationship characteristics create relationship development impacts on the small supplier and influence the relationship development process between the small supplier and their larger customer.

The relationship characteristics in Case D are potentially short-term but this is acceptable to both parties in the relationship. Both parties only interest is to gain the benefits from this relationship, but they are willing to make concessions in order to maintain it. Cooling concedes their preferred price, and Laptop gives up individual product standard goals. Case D seems not to show similar goals and common interests. Their relationship appears not to be growing in a positive way and cooperation appears to be a one-sided investment on the part of the supplier. The relationship is based on the relatively low price of the products supplied in individual transactions, with trust defined contractually. Case D appears to show little inconsistency between

the parties, but there are greater internal inconsistencies between Cooling's domestic marketing manager, domestic sales person, and other departments. Laptop is most influential in this relationship, principally in the areas of product development and order placement; while Cooling has a relatively powerless and dependent position in product innovation.

Cooling's shows strong customer service. However, they are weak in the areas of operations, technology, innovation, distribution channel, product strategy, and capabilities. Their price is generally lower than that of larger suppliers. Cooling always deals with customers' problems immediately and makes an effort to cooperate with Laptop. Cooling does not have any plan for relationship development programmes with any suppliers or customers, and they appear weak in their operations and in the area of quality control. Cooling appears weak in technology though the company is still developing. Innovation in Cooling appears limited to directly tending to the customer's expressed requirements. Product strategies appear weaker thán those of larger suppliers. However, Laptop accepts this, because Cooling's goods are used in completed products, which are sold in Mainland China. Cooling's distribution channel seems less capable than those of larger suppliers, because Cooling has only one consignment company to deliver their goods on a fixed schedule, but larger suppliers have more consignment companies and have more flexible deliveries. It appears that Cooling is weak in the core capabilities such as employee knowledge, technology systems, managerial systems, and company culture. There is a lack of training for employees and a resultant company weakness in technology systems. Cooling is a family business. This reflects and contributes to the company weaknesses in managerial systems and company culture.

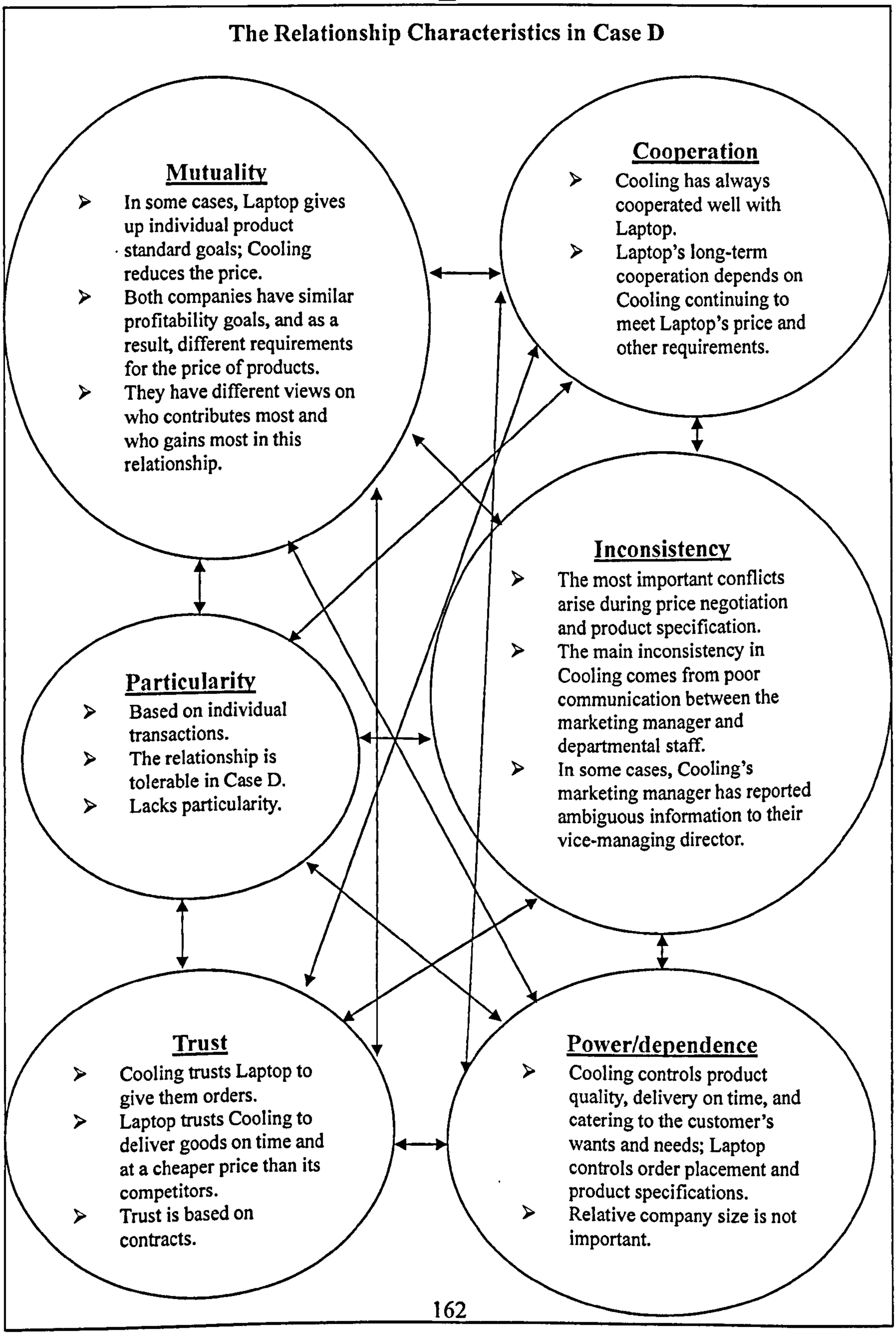
The relationship development process in Case D is classified as being in the stage two exploratory stage. This is because it appears to be potentially short-term but acceptable to both parties. Laptop only hopes to gain from the relationship themselves, and future benefits are uncertain. There is little mutuality and cooperation. Internal inconsistencies exist between Cooling's domestic marketing manager, domestic sales person, and its other departments. Trust between Cooling and Laptop is contractually based. Laptop's power is greater and more influential in this relationship especially in the areas of order placement and product specifications.

From the observation of Case D, it appears that Cooling's core capabilities could be a key influence on the relationship development process, since improving employee knowledge, technology systems, managerial systems and company culture should

promote the development of the relationship with Laptop.

The analysis of Case D has revealed some of the ways in which the relationship characteristics of mutuality, particularity, trust, cooperation, inconsistency, and power/dependence create relationship development impacts on the operations, technology, innovation, customer service, price, distribution channel, products, and capabilities of the small supplier Cooling, and influence the relationship development process in the exploratory stage between Cooling and Laptop (see Figure 12).

Figure 12: Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development in Case D



Relationship Development Impacts on Cooling

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Cooling's operations, technology, and innovation are weak.
- Cooling's customer service is strong.
- Cooling's price strategy is to be cheaper than other suppliers.
- Cooling's distribution channel is less capable than other suppliers.
- Cooling's product technology is weaker than that of larger suppliers, but Laptop accepts this.
- Cooling is weak in core capabilities as they are family business.

The Relationship Development Status in Case D

Stage One: The Pre-relationship Stage (Awareness)

In this stage, no transactions have yet taken place between customer and supplier. They have communicated, but without commitment to business transactions. The Case D organisations have been involved in business transactions, so the Case D relationship has progressed beyond this stage.

Stage Two: The Exploratory Stage (Exploration)

In this stage, two parties may have little experience of working with each other, and no clear idea of what they hope to gain from the relationship for themselves. Case D appears to show little mutuality and cooperation. Inconsistency has existed and occurs between Cooling's domestic marketing manager, domestic sales person, and its other departments. Their trust is based on contract. Laptop seems to dominate this relationship in the areas of order placement and product specifications. The relationship in Case D is generally acceptable to the parties involved. Therefore, Case D can be classified as this stage.

Stage Three: The Developing Stage (Expansion)

The relationship in this stage is growing in a positive way. However, Case D is not so clearly positive. Hence, Case D does not correspond to this stage.

Stage Four: The Stable Stage (Commitment)

In this stage both the customer and supplier have reached long-term stability in their learning about each other and in their investments in, and commitment to, the relationship. The mature stage in a relationship has positive advantage for the companies. The uncertainty will be low and the companies will have low costs in handing the relationship. Case D has not reached this stage.

Dissolution

Case D still has business transactions between the two parties. Thus, Case D has not reached this stage.

6.6 Findings: Case Study E

6.6.1 Case E Company Profiles

Table 10: Case E Company Profiles

Company Profiles	Established	Employees	Turnover	Products
Supplier E (Transformer)	1991	50	Around NT$ 20 million per year (Around £0.33 million per year)	Transformers, power supplies, and integrated circuit (IC) boards
Customer E (Power Supply)	1978	49000	Around US$ 3.7 billion per year (About £1850 million per year)	Power supply products, opto-electronic components, modules, and systems

Supplier E (Transformer)

Interviewees: managing director, marketing manager, quality control manager, R&D manager, production manager

Case E focuses on the small supplier Transformer and their larger customer Power Supply. Transformer was founded in 1991 with NT$ 2 million capital. Transformer specialises in power supplies, transformers, and integrated circuit (IC) boards. Their turnover is approximately £0.33 million per year. The company has 50 full-time employees. Transformer believes that quality is very important to customers and of course, to the company. The company have implemented compliance with, and certification for, some internationally recognised electronics safety standards, such as the U.S. Underwriters Laboratory (UL) and the European Commission's (CE) safety marking schemes. The majority of their sales are to domestic customers.

Transformer's president is the managing director's father. He is essentially a "sleeping" or non-executive president, in that he invests money in the business but does not participate in its operational management. Transformer makes extensive use of domestic outworkers and small manufacturing subcontractors in the initial stages of

production, from raw materials to semi-finished products. The production manager is responsible for sourcing and supervision of these home workers and small manufacturers. Transformer then makes finished products from their output. Transformer is a small manufacturing company with a limited budget, and they are not financially strong enough to employ many workers directly.

Transformer has been involved with Power Supply for approximately two years. The relationship with Power Supply evolved from initial contact via one of Transformer's customers, who introduced Transformer to Power Supply. The managing director selected customer E (Power Supply), as the larger customer for the case study, because "*Power Supply is the largest opto-electronic components and switching power supplies company in Taiwan, and our biggest customer.*"

Customer E (Power Supply)

Interviewees: vice-managing director, component quality control manager, purchasing manager, buyer, R&D manager

Power Supply Group was established in 1975. Their major products are opto-electronic components and switching power supplies. Power Supply Group is the longest running and largest-scale opto-electronic component supplier in Taiwan. Power Supply Group has a head office in Taiwan, two plants in Mainland China, one plant in Malaysia, one plant in Thailand, and another two related businesses located in Taiwan.

This research is based on Power Supply, the largest and most significant company within the Power Supply Group. Power Supply was established in 1978 and provides a full range of power supply products (including notebook computer power supplies, power converters, adapters for networking devices, and other energy efficient products), opto-electronics (including white LEDs, LED displays), modules (including phone camera modules, network hardware, DVB-T tuner, DT casing), and systems (including monitors, portable entertaining systems (PES), multifunction peripheral/printers (MFP), input devices, personal digital assistants (PDAs), portable navigation devices (PND), and network switches, with total sales of approximately £1850 million per year. There are currently 49000 employees, including a very strong research team with more than 50 experienced engineers providing respected integrated system solutions. Power Supply claims a strong company culture, a strong employee training system and excellent employee benefits. Power Supply has applied

lean manufacturing and centralised purchasing methods. They have also built a Supply Quality Management System, which helps them monitor the quality of bought-in components and press their suppliers to constant product quality improvement.

There are ten interviewee participants in Case E, five from Transformer and five from Power Supply. All the participants are closely involved in, and relevant to the maintenance of this relationship.

6.6.2 The Relationship Characteristics of Case E

The matrices with analysis of the findings from Case E (Transformer and Power Supply) are presented in Appendix 17 and 18, and discussed below.

Mutuality

The Case E relationship appears to be long-term and has developed shared goals and common interests. Their relationship appears to be growing in a positive way. In some cases, they made mutual concessions on their preferred price in order to maintain the relationship.

The Case E relationship appears to be founded on the development of broadly similar shared goals, with technological and product innovation being the most important. Transformer works very closely with Power Supply on their product innovation requirements, as Transformer has expert knowledge in this area of product technology capabilities. Thus, the Case E relationship appears to show a common commitment to mutual growth.

In particular, Power Supply's vice-managing director, purchasing manager and buyer concur that Transformer contributes most and Power Supply gains most in this relationship. This may be a result of the high level of product quality and product knowledge provided by Transformer. This is discussed in more detail in the section of relationship development impacts on the small supplier E (Transformer) under "operations and products". It appears that Transformer has managed the development of the shared goals in this relationship very well. Case E therefore appears to build on similar goals and common interests, and they have improved their relationship in a positive way.

Particularity

The way in which Transformer behaves towards Power Supply appears to be adapted and unique. Respondents from Transformer suggest that their firm is important to Power Supply. Transformer's managing director comments:

"*There is a taboo in this area of business. We do not sell the same products to more than two customers. Besides, Power Supply has specifically required us to supply products on an exclusive basis... If it sells to Power Supply, we cannot sell it to other customers. We have very strong technology. Thus, I do not worry about the relationship with Power Supply.*"

Case E relationship behaves in an individual way. All the respondents from Transformer and Power Supply believe that the relationship between them is secure. Transformer keeps their promise to supply goods exclusively, and they have strong technology capabilities. Transformer emphasises that they have secure relationships with all of their customers, and Power Supply believes that the relationship with Transformer is secure compared with those with other suppliers.

Thus, Case E appears to have high particularity and highly unique technology capabilities. Their relationship appears to be secure and stable.

Trust

In Case E it appears that Transformer trusts Power Supply's goodwill and Power Supply trusts Transformer's product technology competence, as shown by following comments:

"*Power Supply is the largest opto-electronic components and switching power supplies company in Taiwan. We trust Power Supply because of their good reputation and punctual payment.*" (Transformer managing director)

"*Transformer has good product technology and their product quality is stable. We have built an especially friendly relationship. Transformer always keeps their promise that any types of product sold to Power Supply will not be sold to other customers.*" (Power Supply vice-managing director)

Both companies have signed a contract in every business transaction. As this is a matter of company policy, it does not imply that written contracts are necessary to ensure they keep their promises.

Cooperation

Case E appears to indicate a shared interest to work together toward a mutual goal. Both parties appear to understand that cooperation is very important for the long-term relationship and their mutual benefit. The cooperation between Transformer and Power Supply appears evident in product development. In some cases, Transformer cooperates with Power Supply in the R&D of new products. This strengthens the relationship and increases Transformer's relative status in the relationship with Power Supply.

Thus, Case E appears to show positive cooperation in product development. Both parties have recognised that positive cooperation can maintain a long-term, mutually beneficial business.

Inconsistency

Case E respondents tend to report positive communication in this relationship. There have been no serious communication problems between them, through Power Supply only communicate with Transformer's management levels, because Transformer's lower level staff have lacked expert knowledge and skills.

Transformer seems to have some internal inconsistencies in their organisation. In some cases, Transformer's lower level staff are unclear about some aspect of their products and have sometimes reported ambiguous information to their department manager or managing director, as suggested by Transformer managing director:

"*We do not have any serious communication problems influencing the relationship with Power Supply. The general communication problem is related to our lower level staff reporting unclear information to their department manager and me. Lower level staff lack professional product knowledge.*"

Thus, inconsistency appears to exist in Transformer between their lower level staff and management levels. Transformer may need to consider improving their lower level staff's knowledge and skills to reduce this inconsistency.

Power/dependence

Transformer does not appear to have significant problems in dealing with power and dependence with Power Supply. Transformer seems to control the product design/ development and product quality; Power Supply controls order placement.

All the respondents from Transformer and Power Supply concur that company size is not an important issue in this relationship, because Transformer's product technology capabilities are good. Besides, both parties believe that they get benefits from this relationship and are increasing their own company profits.

Case E appears to show no dominant organisation in the relationship since each party controls different aspects of it. Transformer seems most influential in the areas of product knowledge and product quality; Power Supply seems most influential in order placement. Thus, power/dependence in Case E appear to show a fairly balanced interdependency.

6.6.3 Relationship Development Impacts on the Small Supplier E (Transformer)

Supplier's Operations Management

Operations

Transformer does not run relationship development programmes with their suppliers and customers. However, Power Supply uses their Supply Quality Management System with all of their suppliers. Transformers main contacts with Power Supply are via their managing director and quality control manager. In addition, the managing director and marketing manager of Transformer have regular meetings with Power Supply's purchasing manager and buyers to build a positive relationship and keep Power Supply informed about their products.

All the interviewees from Transformer strongly believe that Transformer needs to meet particular standards for Power Supply. Transformer applies recognised electronics safety standards for manufacturing across their product range: for instance, UL and CE standards. This is because the major markets of Power Supply are global. Any electronics products imported into the U.S.A. must be UL certified and marked, while European Economic Community (EEC) countries require the use of the CE standard. Thus, Transformer has to apply these electronics safety standards for Power Supply. This is essential to a continued relationship with Power Supply.

Power Supply does not require Transformer to undertake any supplier development initiative, but Transformer's managing director has required each department to issue regular efficiency reports for him. Transformer appears to have strict quality control and Transformer recognises that quality control is very important to consolidate the

relationship with Power Supply. Transformer's managing director, marketing manager and quality control manager point out that Transformer's operation strategies are focused on technology development, as Transformer realises that continued technology development is necessary for the long-term survival of the company.

The relationship characteristic of power/dependence creates relationship development impacts on the operations of Transformer and influences the relationship development process between Transformer and Power Supply.

Power/dependence	has impacts on operations through the relatively equal and interdependent nature of the relationship.

- Power/dependence: Case E appears to show both parties to be equally influential in this relationship. Transformer's strict quality control enhances their relative status in the relationship and there is strong inter-connection between the operations of the two firms.

Technology

Transformer's technology developments are driven by customer requirements. For example, if customers' products sell to developed countries, technology will be very important; if customers' products sell to underdeveloped countries, technology will be less important. Thus, Transformer's technology strategy is highly adapted to their customer's needs.

Technology seems to have an important impact on Transformer. All the interviewees from Transformer believe that technology developments are very important and they are aware they have strong technology. They appear to understand that Power Supply's expects continued improvement in technology, and recognise that technology is a very important asset in maintaining the relationship with Power Supply.

The relationship characteristics of mutuality and trust create relationship development impacts on the application of technology by Transformer, and have influence on the relationship development process between Transformer and Power Supply.

Mutuality	has impacts on technology because they appear to have similar goals for technological development.
Trust	Power Supply trusts Transformer's product technology competence.

- Mutuality: Case E relationship appears to show similar relationship development goals for both parties in technological development and a shared recognition that technology is a very important asset in maintaining the long-term relationship.
- Trust: Transformer appears to have strong technology abilities. Thus, Power Supply trusts Transformer's product technology competence and Transformer trusts Power Supply's goodwill.

Innovation

Transformer appears to show limited marketing innovation, and has a limited financial budget for attending electronics trade exhibitions and employing staff in its marketing department. Transformer has no company website but they show confidence in their product innovation. Thus, innovation in Transformer seems to be more based on product innovation than marketing innovation.

The two companies understand that their product development cooperation will continue and so have long-term impacts on product innovation. Innovation may also develop in new areas in the future such as transformers, power supplies, and integrated circuit (IC) boards. These observations are compatible with the relationship characteristic of cooperation creating relationship development impacts on innovation by Transformer.

Cooperation	has impacts on innovation, since Transformer works together with Power Supply in product development.

- Cooperation: Cooperation between Transformer and Power Supply is evident in product development. In some cases, Transformer cooperates with Power Supply in the R&D of products.

Customer Service

It appears that Transformer's customer service tends to be reactive. They resolve customer's problems when customers complain, but they do so promptly. If Transformer is unable to solve a customer's problems with their equipment, they will help customers to source a solution from other manufacturers.

All the interviewees from Transformer realise that customer service is very important for the maintenance of a long-term relationship with Power Supply, and increases both sides business. Transformer accepts small orders, as they recognise that Power

Supply has high customer service expectations, which also include zero defects in quality control, continuing improvement in R&D capabilities, and delivery of goods on time.

These findings are consistent with the relationship characteristic of trust having relationship development impacts on the level of customer service provided by Transformer and an influence on the relationship development process between Transformer and Power Supply.

Trust	has impacts on customer service, since Transformer deals with problems immediately.

- Trust: Transformer's customer service tends to be reactive, but their product technology is strong. Thus, Power Supply trusts Transformer's product technology competence.

Supplier's Strategy

Price

Transformer's pricing strategies are dependant on the size of customer orders, product material and product quality, with final decision making by the managing director. Though not directly involved in, or aware of, pricing strategies, the R&D manager provides information on material costs and the production manager provides information on production costs, including outsourced manufacturing.

Transformer's pricing strategies are difficult to compare with those of other competitors, due to the unique and exclusive customisation of the products supplied to Power Supply and their other customers. Transformer's managing director points out that "*every supplier has a different product technology and design, which results in them having a different prices.*" However, Transformer realises that Power Supply may compare the prices of other suppliers producing similar types of products which could potentially be substituted for Transformers products.

Transformer understands that customer's expect good quality and a cheap price. However, Transformer seems to be confident in their product technology, as shown by Transformer marketing manger's statement below:

"*Power Supply certainly hopes for good quality at a cheap price, but our main*

strength is that the technology of our company is good."

Thus, price seems not the sole or preponderant influence on the relationship between Transformer and Power Supply, since Power Supply buys custom-made products from Transformer.

This is reflected in the relationship characteristics of mutuality and particularity, which affect Transformer's prices and influence the relationship development process between Transformer and Power Supply.

Mutuality	has impacts on price, as both parties have offered concessions on price in order to maintain the relationship.
Particularity	has impacts on prices, since Transformer's behaviour towards Power Supply is adapted and unique, as Power Supply requires Transformer to custom-make their products.

- Mutuality: In some cases, both parties made mutual concessions on their preferred price to maintain the relationship with the other organisation.
- Particularity: Transformer's behaviour towards Power Supply appears to be adapted and unique, as Power Supply requires Transformer to custom-make their products. This makes price comparison and product substitution difficult, due to the unique and exclusive technology and design.

Distribution Channel

It appears that Transformer's distribution channel is similar to those of other suppliers. Transformer has a fixed consignment contract with a delivery company.

Transformer appears to recognise that delivering goods on time is very important for building a long-term relationship with Power Supply. Power Supply does not have any complaints about Transformer's distribution channel. These findings may imply that Transformer's timely product delivery may positively influence the process of relationship development between Transformer and Power Supply.

The relationship characteristic of cooperation creates relationship development impacts on the distribution channel of Transformer and influences the relationship development process between Transformer and Power Supply.

Cooperation	has impacts on the distribution channel, since both parties work together toward a mutual goal. Transformer always delivers goods on time.

- Cooperation: Case E appears to show positive cooperation, as each participant has proved their ability to fulfil their obligations to work together toward a mutual goal such as the punctual delivery of goods to Power Supply.

Products

Transformer's product strategy is to supply their customer's needs. Transformer's products do not have direct competitors, because their products are custom-made, as Transformer's quality control manager points out "*There are not many companies who produce similar products. I am aware of only one other company in this market, with similar products, so product comparisons are difficult.*"

Transformer's exclusive product customisation strategies appear to have an important, even defining influence on the relationship with Power Supply. Transformer seems to understand that the customer expects continuous development of new products, and they seem very confident in their ability to provide this.

Thus, Transformer's products are characteristic and competitive, and they have strong product technology.

The relationship characteristics of particularity and power/dependence create relationship development impacts on Transformer's product, and influence the relationship development process between Transformer and Power Supply.

Particularity	has impacts on products, which are customised, making Transformer's behaviour towards Power Supply adapted and unique.
Power/dependence	has impacts on products through Transformer's control of product knowledge and product quality.

- Particularity: Transformer's behaviour towards Power Supply appears to be adapted and unique. Since their products are specifically and exclusively customised for Power Supply.
- Power/dependence: Case E appears to show a roughly equal and interdependent relationship. Transformer is most influential in product knowledge and product quality; Power Supply is most influential in order placement.

Supplier's Capabilities

Capabilities

Transformer appears weak in the core capabilities of their lower level staff in the areas of employee knowledge and skills, technology systems, managerial systems, and values and norms. Transformer has only supported outside training for management. This may partly explain lower level staff lack of expert knowledge and skills.

Transformer appears to have strong technology capabilities. However, Transformer's technology seems over-reliant on a certain key personnel. Transformer has relatively few personnel, such as the managing director, quality control manager, R&D manager, and production manager with a professional level of technical capabilities. This may reflect the lack of training, especially for lower level staff.

Transformer's president points out that he has considered a programme to develop managerial abilities, but not implemented it because of budget limitations. Training and skills are generally limited, especially for lower level staff.

It appears that personal development, especially of lower level employees, is not valued by the company culture. Transformer may need to consider improving its company culture to recognise and foster the value of its human resources, especially for lower level staff.

The relationship characteristic of inconsistency creates relationship development impacts on the capabilities of Transformer and influences the relationship development process between Transformer and Power Supply.

Inconsistency	has impacts on personnel capabilities and communication between management and lower level employees, reflecting a lack of employee training, especially for lower level staff.

- Inconsistency: Inconsistency in Case E appears to exist in Transformer between their lower level staff and management. This is because Transformer has lacked employee training for their lower level staff.

6.6.4 Relationship Development Process in Case E

Transformer's initial contact with Power Supply was via a Transformer customer who introduced Transformer to Power Supply. Then Transformer's managing director and marketing manager visited Power Supply to promote their goods. Transformer recognised that Power Supply was a potential partner. They became acquainted with each other and developed two-way communication without commitment in the initial stage.

Power Supply made inquiries about Transformer before beginning their business relationship with a test transaction. In the early stages, Power Supply only hoped to gain from the relationship, and the development of a long-term relationship was uncertain. Transformer spent a lot of time and effort to build a positive relationship with Power Supply.

Transformer has been involved with Power Supply for approximately two years. At present Case E relationship appears to be growing in a positive way, and seems to be potentially long-term and stable. They are increasing mutuality, particularity, trust, and cooperation in both organisations. In some cases, they made mutual concessions on their preferred price in order to maintain the relationship. They have developed similar goals in this relationship in the areas of technology and product innovation, and appear to have a common view on growing up together. The particularity in Case E appears to be high, since Transformer's behaviour towards Power Supply is adapted and unique. Transformer trusts Power Supply's goodwill and Power Supply trusts Transformer's product technology competence, so mutual trust exists in the relationship. Cooperation between Transformer and Power Supply can be seen in their product innovation activities. Thus, Case E appears to show a shared interest to work together towards a mutual goal. Inconsistency is limited and power/dependence shows interdependence since the parties are in control of different aspects of the relationship, with Transformer most influential in product technology and product quality, and Power Supply most influential by virtue of their control of order placement. Although Case E appears to be a long-term and stable relationship, uncertainty remains, as the managing director of Transformer points out, "*Power Supply's main products are notebook computers and other electronics products with short life cycles. This means we must always improve and innovate, but we have limited financial resources. It is very difficult to offer adequate employee training for the whole staff.*" This limitation could cause the relationship development process between Transformer and Power Supply to slow or reverse in the future. The relationship developmental stage in Case E can be classified as stage three, i.e. the developing stage.

The parties in Case E can perhaps improve their relationship and this will have positive advantages for the companies. Transformer may need to consider improvements in human capabilities (especially for lower level staff), technology systems, managerial systems, and company culture. Transformer still has some concerns with their lower level staff's expert knowledge, and their company culture seems not to value their human resource very highly, especially at the lower level.

Due to the customised nature of the supplied products, and the technological competence of the supplier, the relationship in Case E appears to be relatively difficult to dissolve, but it is certainly potentially vulnerable to dissolution. This is, however, recognised by Transformer staff, who understand that continuous technical improvement and innovation is essential to the maintenance of a positive relationship with Power Supply.

6.6.5 Conclusions on Case E

Transformer's lower level employee expertise appears weak, due to a lack of training, which is only provided for management level employees. This has caused inconsistencies in internal communication with management and external communication with customers. Power Supply now only communicates with Transformer's management levels directly.

Transformer has strong technology capabilities. However, their technology is over-reliant on key personnel such as the managing director, quality control manager, R&D manager, and production manager. Transformer cooperates with Power Supply in product development. Power Supply trusts Transformer's product technology competence.

Transformer appears to have a rather limited staff development programme, with limited training at the management level, and no formal training at all for lower staff levels. This is said to be due to budget restrictions. Transformer lower level employees appear not to be valued by the company culture, and they do not seem to really understand the company's business. Transformer needs to improve its company culture to recognise and foster the value of its staff, especially at the lower level.

It appears that Transformer is weak in marketing innovation. The company has a limited budget for marketing staff and promotional activities, and there is no company website.

This investigation suggests that, in order to improve and better manage its relationship with Power Supply. Transformer may need to make improvements in its employee knowledge and skills (especially at the lower level), its technological and managerial systems, and in its fostering of a positive company culture.

6.6.6 Reflections on Case E

On reflection, Case E demonstrates a situation in which the relationship characteristics create relationship development impacts on the small supplier and influence the relationship development process between the small supplier and its larger customer.

The relationship characteristics in Case E apparently reflect the long-term and stable nature of the relationship. Both parties have on occasion conceded on price in order to maintain the relationship. Case E seems to show developing shared goals and common interests in product. The relationship appears to be growing in the positive way. Case E shows a high degree of particularity in the relationship. Transformer's behaviour towards Power Supply appears to be adapted and unique since Power Supply's products are custom-made. They show mutual trust: Transformer trusts Power Supply's goodwill, whereas Power Supply trusts Transformer's product technology competence. Cooperation in Case E is evident in product development. Case E appears to show no communication problems between them, but a little inconsistency exists in Transformer's internal organisation and between Transformer's lower level staff and management. Power/dependence appears to be relatively equally distributed.

The relationship development impacts on the small supplier are reflected in their strong product technology abilities. The distribution channel performance is similar to those of other suppliers, and their prices are difficult to compare with those of their competitors. Their operations, innovation, and customer service are fine. The downside is their human capabilities, which seem to be over-concentrated in key individuals. It appears that, due to a lack of training, Transformer is weak in core capabilities such as employee knowledge and skills, technology systems, managerial systems, and company culture.

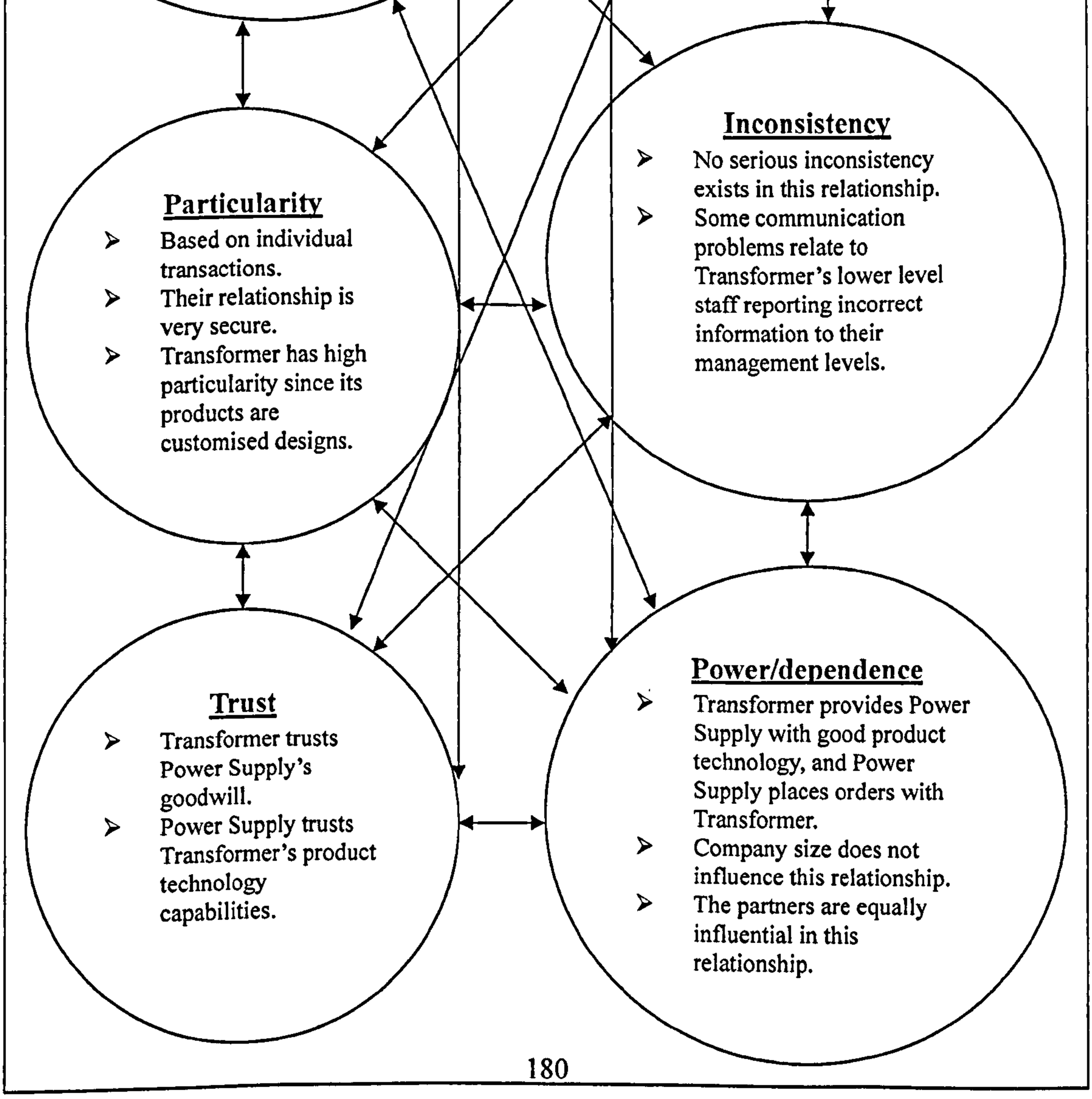
The relationship development process in Case E is classified as stage three "developing stage", since the relationship appears to be long-term and stable. There

are increasing mutual adaptations and mutual commitment is growing. There appears to be mutual trust in Case E. Transformer trusts Power Supply's goodwill, whereas Power Supply trusts Transformer's product technology competence. Case E exhibits no serious inconsistencies between them, but Transformer reports some conflict between their lower level staff and management. Power/dependence is fairly equally distributed between the two companies. The continued positive development of the relationship is not, however, regarded as guaranteed, since it is acknowledged that Power Supply may cause the relationship development process to slow or terminate.

From these observations on Case E, it appears that the core capabilities of Transformer could be a key influence on the relationship development process. Improvement in employee knowledge, technology and managerial systems and an allegiance to a positive company culture among lower level staff, will foster positive development of the relationship with Power Supply.

The analysis of Case E has revealed some of the ways in which the relationship characteristics of mutuality, particularity, trust, cooperation, inconsistency, and power/dependence create relationship development impacts on operations, technology, innovation, customer service, price, distribution channel, products and capabilities of the small supplier Transformer, and influence the relationship development process in the developing stage between Transformer and Power Supply (see Figure 13).

Figure 13: Conceptual Model of the Relationship Development Impacts of Relationship Characteristics on the Process of Relationship Development in Case E



Relationship Development Impacts on Transformer

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Technology and products are very strong in Transformer.
- The price strategy of Transformer is difficult to compare with those of other competitors.
- Transformer's distribution channel is similar to those of other suppliers.
- Transformer's operations, innovation, and customer service are fine.
- Transformer is weak in the core capabilities of lower level staff.

The Relationship Development Status in Case E

Stage One: The Pre-relationship Stage (Awareness)

In this stage, no transactions have yet taken place between customer and supplier. They have communicated, but without commitment to business transactions. The Case E organisations have been involved in business transactions, so the Case E relationship has progressed beyond this stage.

Stage Two: The Exploratory Stage (Exploration)

In this stage, two parties may have little experience of working with each other, and no clear idea of what they hope to gain from the relationship for themselves. However, Transformer and Power Supply have grown up in a positive way. Their relationship appears to be long-term and stable. Therefore, Case E can be not classified in this stage.

Stage Three: The Developing Stage (Expansion)

Relationships in this stage are growing in a positive way. Case E appears to have a long-term and stable relationship. They are increasing mutuality, particularity, and cooperation in both organisations. They show mutual trust. Transformer trusts Power Supply's goodwill, whereas Power Supply trusts Transformer's product technology competence. Inconsistencies are reduced and power/dependence is equally distributed between them. For these reasons, Case E can be classified in this interim stage.

Stage Four: The Stable Stage (Commitment)

In this stage, both the customer and supplier have reached long-term stability in their learning about each other and in their investment in, and commitment to, the relationship. This mature stage in a relationship development has positive advantages for the companies. Uncertainty is low and the companies have low costs in handling the relationship. Given the outstanding issues noted above, Case E is not considered to have reached this stage.

Dissolution

Case E still has business transactions between the two parties. Thus, Case E has not reached this stage.

CHAPTER SEVEN: CROSS-CASE ANALYSIS COMPARISONS AND THEORETICAL IMPLICATIONS

7.1 Introduction

Chapter seven discusses the cross-case analysis of the five individual in-depth case studies. The cross-case analysis is built on a comparison of the empirical findings in the five individual cases. The matrices of the cross-case analysis are presented in Appendix 19. These matrices focus on the analysis and interpretation of the characteristics of the relationship between small suppliers and their larger customers, the relationship development impacts on the small suppliers, and the relationship development process between small suppliers and their larger customers.

The cross-case analysis of the empirical findings is related to and reflects the literature review in Chapter Three and Four. This chapter presents reflections on the themes and conceptual framework of this research, and the insights gained are incorporated into a revised conceptual framework.

7.2 The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

7.2.1 Mutuality

<u>Suppliers</u>

There is similarity across all the suppliers. All believe that their customers give up individual goals or contribute their abilities to maintain the relationship with them, making concessions on price, delivery date, or contributing technological solutions. However, mutual goals seem very difficult to establish, as all parties have the basic goal of increasing their profit, which leads to opposite goals for price. All suppliers perceive that they and their larger customer hold conflicting views on this issue. This is reflected in Cooling's domestic marketing manager's comments:

"*Laptop always compare price with other suppliers. They use our company's goods in completed products for sale in Mainland China. For this market, Laptop thinks a low price is more important than product quality. In some cases, Laptop requires a price that is too low, and lower than our cost. This will put me in a dilemma.*"

Larger customers seem interested in their own company's development rather than in relationship development. Furthermore, all suppliers believe they contribute most and their customer gains most. This perhaps reflects the unequal balance of power in the relationship between small suppliers and their larger customers.

Customers

All customers believe that their supplier has given up their insistence on their preferred price to maintain the relationship with them. Besides this, there is little evidence of common interests, with larger customers primarily interested in taking advantage from the relationship. Some customers believe that they contribute most and their suppliers gain most, some believe the opposite. The findings reflect the observation that the most secure relationships are those in which customers feel they gain most. This perhaps implies that if customers gain more benefits in a relationship, they are more likely to build a long-term relationship with their small supplier. This is reflected in Power Supply's purchasing manager's comment:

"*We believe that Transformer contributes most and we gain most. This is because Transformer has strong technology capabilities and quality control. Our relationship with Transformer is secure.*"

Of course the cause-effect relationship here is not necessarily unidirectional, and the reverse could also be true, and mutual interest "evolve" over the course of the relationship. There are indications from the case studies, however, that in the absence of an established mutual interest, such "evolution" is not guaranteed.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

The findings indicate that both parties, in every case, have given up their individual goals or intentions for the sake of the other firm. This finding conforms to the opinion of Ford *et al.* (1986), who argue that mutuality is how the parties handle the relations between their respective and common interests. However, small suppliers seem to feel that reducing the price is necessary to become more closely involved with their larger customer. Small suppliers feel coerced to give up their preferred price to maintain the relationship. The findings suggest that small suppliers have difficulty in establishing similar goals and common interests with their larger customer. Larger customers seem only interested in their own benefits rather than investment in the relationship, and tend to pursue a one-sided development of the relationship with their small suppliers.

Common goals seem easier to achieve when the supplier has confidence in their technology and product knowledge, as in Case E. Furthermore, suppliers have differing views on who contributes most and who gains most in the relationship. This perhaps reflects differences in relative power between the two parties in the relationship.

The respondents from the suppliers and customers sometimes appear to show confusion between goals and interests. Both suppliers and customers hold views about goals and interests that are often linked to price. Thus, further study concerning mutuality needs more clearly to describe and distinguish between goals and interests.

7.2.2 Particularity

Suppliers

Every supplier points out that the parties to the relationship tend to behave in an individual way towards each other. They negotiate on price and other conditions on an individual business transaction basis. Some suppliers have a secure relationship with their larger customer, some do not. Especially, Bright Light has a markedly insecure relationship with Diode and a fairly insecure relationship with their other customers. This could be interpreted as a lack of uniqueness in Bright Light's relationship with its customers, perhaps reflecting the relatively low level of technology involved in Bright Light's products. Bright Light currently produces lots of products that do not conform to their customers' required standards. This is because Bright Light is still in its infancy and there is need for improvement before the operation is soundly based.

Customers

All customers agree that their business transactions are performed in an individual way. Some customers believe that they have a relatively secure relationship with their small supplier, while some of do not. In particular, Power Supply believes that their relationship with Transformer is very secure compared with those with other suppliers. This could be explained by the exclusive, customised nature of Transformer's products, and their strong technology capabilities.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

The findings indicate that relationships between small suppliers and their larger customers in Taiwan's electronics market are conducted in an individual way, based on individual transactions. Thus, further study in Taiwan's electronics market between small suppliers and their larger customers may explore this aspect of particularity in

future research.

Some of the relationships show a relatively low degree of particularity, as their suppliers produce relatively low technology "commodity" products for their larger customers. However, several suppliers appear to show a high degree of particularity toward their larger customer, for example by virtue of the low cost of the interaction between two parties, or where the customer replaces some components of an IC semiconductor mould automatic cleaning system every three years, or where exclusive, high technology, customised products are supplied. The findings suggest that high particularity can foster a secure relationship between small suppliers and their larger customers. This demonstrates that the depth of the relationship is influenced by the extent of the adaptation and the exclusivity required of, and offered by, the small supplier.

However, there is apparently some cause for concern about the direction and uniqueness of relationships based on the low cost of the interaction between two parties. Low price does not confer much uniqueness, since the partner can be replaced easily by paying a bit more, or because some other company offers the product cheaper, either because they can make it cheaper, or as a "loss-leader", to eliminate a competitor. As Resistor indicates that the relationship with Chip is founded primarily on the low prices of the supplier, its uniqueness is doubtful.

Particularity appears to show a one-sided bias in the cases studied here, and is based on the specific benefits that the small suppliers provide to their larger customer such as price and product technology. This maybe reflects the unequal power in the relationship between small suppliers and their larger customers.

7.2.3 Trust

Suppliers

Several suppliers trust their larger customer for their commitment to a long-term relationship, their positive reputation, and for the regular placement of orders. They do sign contracts covering every business transaction, but this is company policy and does not imply any specific lack of trust in the relationship. Some suppliers show more limited and less specific trust. While they also sign a contract with their larger customer in every business transaction, in these cases it is viewed as an essential protection, rather than a policy-driven formality. This reflects the lower level of trust that suppliers in contractually based transactions have with their larger customers and

implies that these small suppliers are less secure in their relationships.

Customers

Some of the customers show trust in their small suppliers in various ways, such as trusting their customer service, product technology, and their friendship. Diode and Laptop, however, appear to only trust their small supplier to supply cheap products. This lack of trust suggests a limited commitment to the relationship, both reflecting and reinforcing the relative ease with which Diode and Laptop may replace their small suppliers Bright Light and Cooling.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

On the whole, the findings can be divided into two different groups in these cases. Several suppliers trust their larger customer's goodwill. However, their larger customers identify different aspects of the relationship as the primary focus of their trust. For instance, they trust their small supplier's pricing, customer service, or product technology competencies. The findings reflect that small suppliers trust their larger customers generally, based on their company reputation; while larger customers trust in their small suppliers is limited to the specific advantage that small suppliers offer for them. Thus, the customers' company reputation and suppliers' competence are the key factors in the establishment of trust between small suppliers and their larger customers. The criteria used by partners in evaluating these key factors might be a useful topic for further investigation.

The other group's relationships show what could be characterised as contractually based trust. The relationship between these parties appears to show limited trust and both parties have doubts about the extent of the others commitment to the relationship. The findings suggest that relationships showing contractually based trust are less secure than those where the trust is based on competence and goodwill. This finding concerning trust can be related to the contentions of, for example Sako, (1992); Blomqvist, (2000); and Johnsen, (2004), who argue that goodwill and competence trust tend to become more important than contractual trust as relationships develop over time.

7.2.4 Cooperation

Suppliers

All the suppliers have similar opinions on cooperation, viewing it as essential to do their best to meet customer's requirements, with the understanding that positive

cooperation can improve the relationship and increase both companies' profits. Only two suppliers, Clean System and Transformer believe that they have positive cooperation with their larger customer, as Clean System meets Semiconductor's requirements and Transformer cooperates with Power Supply in the R&D of new products. This perhaps suggests that small suppliers find it difficult to build positive cooperation with their larger customer, and may feel that there is limited cooperation in support of their development.

Customers

Only one customer, Power Supply, confirms that they have positive cooperation with their small supplier. The other four customer's cooperation depends on favourable terms and conditions from their suppliers. This may suggest that cooperation with their small suppliers is not a main concern of larger customers, who are more interested in their own company's benefits.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

In general the relationships show little evidence of cooperation. The larger customers are more interested in taking advantage of the relationship than investing in it. However, a few cases show positive cooperation. This is especially evident in the Transformer - Power Supply relationship in product development, as the parties cooperate in the R&D of new products. Such cooperation is likely to strengthen the social relationship between small suppliers and their larger customers, which it might be useful for future research to investigate in more detail.

These findings indicate that small suppliers tend to cooperate with their larger customer. Cooperation seems to be primarily the responsibility of the small supplier. The larger customer is often able to unilaterally control the level of cooperation. Small suppliers do not generally experience cooperation from their larger customer in the development of their relationship. However, small suppliers find it easer to achieve positive cooperation when they have strong product development capabilities. This finding agrees with the contention of Powell *et al.* (1996) who suggest that the R&D of products is a significant stimulus to cooperative industrial activity and Blankenburg *et al.* (1996), who point out that, since firms cooperate in business relationship in order to gain profit or same other payoff, positive cooperative relationships between customers and suppliers enable a long-term relationship.

7.2.5 Inconsistency

Suppliers

All suppliers appear to have experienced some instances of internal communication problems, such as poor communication between the domestic marketing department and other departments, and communication problems between their lower level staff and management. In addition, Bright Light has external conflicts and misunderstandings with its customer Diode. This perhaps reflects the reported weakness of Bright Light's specialist employee knowledge and skills.

Customers

All customers report misunderstandings and ambiguities with their small suppliers, such as inconsistencies by their suppliers in product labelling, product specification, price and other misinformation. Diode, in particular, has serious conflicts and misunderstandings on price and product specification with Bright Light. This perhaps reflects Bright Light's technical shortcomings.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

Inconsistencies highlighted in this study are inconsistency within small suppliers and interpersonal inconsistency between small suppliers and their larger customer. Small suppliers' internal inconsistencies were both interpersonal and interdepartmental. There is evidence of a low level of (interpersonal and interdepartmental) communication problems across all suppliers. Thus, interpersonal inconsistency appears to be a significant characteristic, justifying further research into its origins and importance. The findings conform to those of Johnsen and Ford (2008), who suggest that supplier staff's personal expectations of the relationship is an important influence on how they cope with interpersonal inconsistency with larger customers.

7.2.6 Power/dependence

Suppliers

Only one supplier, Transformer, thinks that power is fairly evenly balanced in their relationship, reflecting Transformer's strong technology capabilities. The majority of suppliers have experienced difficulties with power and dependence in their relationship with their larger customer, reflecting the inherent power imbalance implicit in the customer's control of order placement. Every supplier reports that the difference in size between small suppliers and larger customers does not influence their relationship. This perhaps reflects suppliers belief that, in building a relationship with their customer, the tangible and intangible resources they offer, such as products and customer service, are of more importance.

Customers

The majority of customers believe that they are most influential due to their control of orders and price. Resistor and Semiconductor agree that their suppliers have a little power in their relationships. Chip provides Resistor with low priced, good quality, well designed product, and good customer service; Semiconductor needs to replace some components every three years, which would be difficult to source elsewhere, putting Clean System in a favoured position as incumbent supplier. Only one customer, Power Supply, believes that power is evenly balanced and that both parties help each other. This reflects the fact that larger customers have some dependence on the tangible and intangible resources their small suppliers offer. All customers claim that company size is not an important issue in their relationship. This implies that larger customers are interested in the specific advantages that their small suppliers provide for them rather than in arbitrary characteristics such as company size.

The Dyadic Relationship between Small Suppliers and Their Larger Customers

The cases generally show minimal to slight interdependencies. Only one relationship between Transformer and Power Supply appears to show no dominant organisation in the relationship and a fairly balanced interdependency. Evidently a power imbalance is the norm for these relationships, with the larger customer being generally more influential. The findings reflect suppliers difficulties with power and dependence in the relationship with their larger customer. Small suppliers lack the resources to develop products on their own initiative, and are therefore dependent, perhaps overly so, on customers for the direction of strategic product development.

Suppliers and customers all agree that company size does not influence their relationship. The findings reflect customers interest in the specific product technology or other advantages that suppliers offer them rather than company size; while suppliers recognise that offering positive products and customer service is most important in building a relationship with their customer. Therefore, it appears of particular importance to review this aspect of power/dependence and for future research to continue investigation of power/dependence in the relationship between small suppliers and their larger customers in the Taiwanese electronics industry.

The findings indicate that there is an inherent power imbalance implicit in the customer's control of order placement. However, this imbalance is reduced when small suppliers have strong technology capabilities. The findings tend to confirm the conclusion of Ring and Van De Ven, (1992); Khalid, (2002); and Johnsen and Ford,

(2008), that technical ability is a common way for suppliers to counterbalance the inherent power of the customer.

7.3 Relationship Development Impacts on the Small Suppliers

Key functional areas of the small suppliers were selected for study based on their relative importance in the relationship between small suppliers and their larger customers. The relationship development impacts on operations, technology, innovation, customer service, price, distribution channel, products, and capabilities were considered.

7.3.1 Supplier's Operations Management

Operations

All suppliers strongly believe that the company needs to meet the particular standards for their customers, such as just-in-time manufacturing methods, ISO certification, and electronics safety standards. This perhaps reflects larger customers one-sided influence on their small supplier's operations; while small suppliers appear to be dependent on their larger customers for operations strategy.

Small suppliers find it difficult to run relationship development programmes with their larger customers. Only one supplier Clean System runs relationship development programmes with their customers; and also only one customer Power Supply uses their Supply Quality Management System with all of their suppliers. This perhaps reflects small suppliers weakness in operations, and their lack of resources in people, finance, and materials. Further research with a wider survey sample could establish if this lack of technical support for relationship maintenance is typical.

All suppliers make regular visits to their customers in order to understand their needs and several suppliers show further instances of positive operational strategies such as applying an automated production system, precise quality control, and strong technology development. The other suppliers, Bright Light and Cooling do not show strong operational strategies.

The findings indicate that small suppliers have to apply specific standards for their customers, and the lack of customer relationship development programmes is consistent with a dominant role for the customer. In other words, the relationship characteristic of power/dependence creates relationship development impacts on the

operations of the small suppliers and influences the relationship development process between them and their larger customers.

Technology

Chip and Transformer's technology development are driven by customer requirements. Larger customers' requirements determine the direction of small suppliers' technology development, reflecting the dependence of the small suppliers in this area. The findings indicate a lack of technical development on the part of the supplier. Further research with a larger sample might help to establish the importance of technology development by small suppliers in the maintenance of long-term relationships.

Bright Light and Cooling appear weak in their technology abilities. Across the five cases all suppliers agreed that technology development is very important to the maintenance of the long-term relationship with their customers. All suppliers understand that their customers have high expectations of their technology development.

The findings indicate that the relationship characteristic of power/dependence creates relationship development impacts on the technology of small suppliers and influences the relationship development process between small suppliers and their larger customers. Small suppliers appear to show weakness in technology development and their technology is driven by customer requirements. Thus, larger customers control the technology development direction in the relationship with their small supplier; while small suppliers are dependent in the area of technology development.

Innovation

Two suppliers (Chip and Transformer) appear to show weakness in marketing innovation, since Chip's domestic marketing department relies on the domestic marketing manager to develop new customers and maintain a long-term relationship with existing customers, and other staff in the domestic marketing department did not pay much attention to company market development. Transformer has a limited marketing budget. Bright Light's management innovation is limited, and the company lacks a website. Clean System appears to show weakness in the technical knowledge of their lower level staff. Chip, Clean System and Cooling recognises that their product innovation tends to be adaptive rather than innovative. Bright Light does not to show much product innovation, as their R&D is weak. Transformer appears strong in product innovation. They do not however, have a company website. In summary small suppliers are weak in marketing, management, and product innovation and their

behaviour towards their larger customers reflects these weaknesses, and the competitive nature of their markets.

These findings suggest that the relationship characteristics of particularity and power/dependence create relationship development impacts on the innovation of small suppliers and influence the relationship development process between small suppliers and their larger customers. Small supplier's product innovation tends to be adaptive rather than innovative. Thus, small suppliers could lack particularity towards their larger customer and small suppliers are dependent on their customer in the area of product innovation.

Customer Service

Across the cases all the suppliers realise that customer service is very important for the maintenance and consolidation of the relationship with their customers. The majority of the suppliers appear to show strong customer service and deal with customer problems promptly. Transformer's customer service tends to be reactive, as they resolve customer's problems when customers complain, but they also do so promptly.

The findings indicate that the relationship characteristic of trust creates relationship development impacts on the customer service of small suppliers and influences the relationship development process between small suppliers and their larger customers. For example, Case D appears to have a little trust and can be described as contractually-based trust, as the supplier only has limited abilities to fulfil its obligations to the customer. Thus, if suppliers make more customer service efforts, it will tend to generate goodwill-based, rather than contractually-based, trust (e.g. Håkansson, 1989; Sako, 1992, 1998; Young-Ybarra and Wiersema, 1999; Blomqvist, 2003, 2004).

7.3.2 Supplier's Strategy

Price

The majority of suppliers base their pricing strategies on their costs and reference prices in the same market sector. Several suppliers' pricing strategy is to be a little cheaper than other (mostly larger) suppliers. Chip provides similar quality to other suppliers, but Bright Light, Clean System and Cooling show weaker product quality than other (mostly larger) suppliers. Transformer is an exception, in that their pricing strategies are dependant on the size of the customer order, product material and

product quality, as their product is custom-made.

The findings on price indicate that all the suppliers have given up insistence on their preferred price in order to maintain the relationship with their larger customer. Observations from these cases indicate that small suppliers seem to feel that concessions on price are necessary to become more closely involved with their larger customers. Thus, future research could investigate this aspect further, evaluating the impacts of price on small suppliers.

The findings indicate that the relationship characteristic of mutuality creates relationship development impacts on the price of small suppliers and influences the relationship development process between small suppliers and their larger customers. In some cases, both parties give up insistence on their preferred price to maintain the relationship. For example, in Cases A and E both parties made concessions on their preferred price in order to maintain the relationship. This reflects the positive relationship growth in Cases A and E and the development of shared goals and common interests.

Distribution Channel

All suppliers recognise that punctual deliveries are very important to the maintenance of a long-term relationship with customers. Their distribution is via fixed consignments and they always deliver goods on time.

Thus, the findings indicate that the relationship characteristic of cooperation creates relationship development impacts on the distribution channel of small suppliers and influences the relationship development process between small suppliers and their larger customers. For example, Case E appears to show positive cooperation, as the small supplier has proved its abilities to fulfil its obligations to work together toward a mutual goal such as the punctual delivery of goods to their larger customer.

Products

Supplier product development differs between cases. Bright Light's product quality is very weak. Their product specifications often fail to meet customers' requirements, leading to a loss of orders. Clean System and Cooling's product technologies are both weaker than those of other (mostly larger) suppliers, as their product development efforts could be described as product adaptations rather than innovations. Transformer's product strategies are to supply their customer's needs, as Transformer's products are custom-made. Transformer's products are unique and

competitive, reflecting their strong product technology. In summary, the findings from the five sets case studies indicate that small suppliers lack abilities to develop their products. This perhaps reflects small suppliers lack of employee knowledge and skills.

These findings indicate that the relationship characteristic of power/dependence creates relationship development impacts on the products of small suppliers and influences the relationship development process between small suppliers and their larger customers. Small suppliers appear to develop products to meet the customer's product specifications, rather than innovate on their own initiative, reflecting their dependence on their larger customers in the area of product development strategies. Thus, their larger customer dominates their relationship in the area of product development strategies. This applies to Cases A, B, C, and D. This is in agreement with the widely held view, among both academics and managers, that product development is often of critical importance for companies, (e.g. Biemans, 1992; Utterback, 1994; Kotler, 1997; Cooper, 1998; Gressetvold, 2004).

7.3.3 Supplier's Capabilities

Capabilities

All the suppliers appear to show weaknesses in human capabilities. This is because the majority of suppliers appear to lack specialist employee training for lower level staff which has contributed to weakness in lower level employees' knowledge and skills. However, Clean System and Transformer's management level knowledge and skills are strong.

The technology capabilities in Chip and Clean System depend on some key individual staff members. Bright Light and Cooling's technology capabilities are weak. However, Cooling's larger customer (Laptop) does not complain and accepts Cooling's products, as Laptop uses the goods from Cooling in their finished goods sold in the more price-sensitive, less technically demanding Mainland China market. Transformer appears to have strong technology capabilities.

The majority of suppliers do not appear to have placed great emphasis on the development of their managerial capabilities. This is because limited budgets mean small suppliers cannot offer many employees training. Only one supplier, Clean System, is strong at the management level.

All the suppliers appear weak in their company culture. In particular, Chip, Clean System, and Transformer lower level employees are not valued by the company culture. However, Cooling has a strong family culture.

In summary, small suppliers are weak in the core capabilities and in the areas of human capabilities, technology capabilities, managerial systems, and company culture. This is reflected in a general lack of training for employees. The technological capabilities of small suppliers tend to depend on some key individual staff, the majority of suppliers do not have strong managerial systems, and company culture is weak in the all suppliers. Thus, small suppliers' human capabilities can influence their technological capabilities, managerial systems capabilities, and company culture. The findings demonstrate that human capabilities are important for improving company core capabilities. If small suppliers can improve their employees' knowledge and skills, this can lead small suppliers to enhance their technological and managerial capabilities, and their company culture.

The findings indicate that the relationship characteristic of inconsistency creates relationship development impacts on the capabilities of small suppliers and influences the relationship development process between small suppliers and their larger customers. In some cases, small suppliers appear to have communication problems involving interpersonal inconsistencies. This is because small suppliers have lacked employee training and the employees' knowledge and skills are weak, which in turn may cause interpersonal inconsistency with their larger customer. Thus, the capabilities of a company reflect its success in combining resources to perform activities via internal and external relationships (Håkanson and Snehota, 1995; Rosenbröijer, 1998).

7.4 Relationship Development Process between Small Suppliers and Their Larger Customers

7.4.1 The Pre-relationship Stage

Several suppliers' initial contact with their larger customers was either through industry directories, or through a presence at electronics trade exhibitions. However, a key factor in the initial contact was the initiation of personal friendships between senior staff. In Case A, for example, the relationship is based on a close personal friendship between the two company presidents. Bright Light's president is a friend of Diode's managing director, and Cooling's vice-managing director established a

friendly relationship with Laptop's purchasing manager. Case E's initial contact was via a Transformer customer who introduced Transformer to Power Supply. This is consistent with the observation of Trappey and Lai (1996) who suggest that the prevailing culture in Taiwan emphasises personal relationships between manufacturers, wholesalers and retailers. Kao (1996); Hsiao *et al.* (2002) also argue that personal trust plays a prominent role in the establishment of partnerships in the Taiwanese business community. This reflects personal relationships significant contribution to the establishment of commercial relationships in this industrial sector. This is dissimilar with the Western focus on inter-organisational relationships between buyers and suppliers (Fang and Kriz, 2000).

Insights from the findings thus indicate the importance of personal relationships in forming the initial relationship between small suppliers and their larger customers in the Taiwanese electronics industry.

7.4.2 The Exploratory Stage

Two cases (Cases B and D) can be classified in this stage. Their relationship appears to be potentially short-term. Case B appears to be unstable, but in the other Case D the relationship is currently acceptable to both parties. Laptop only uses goods from Cooling in their finished goods sold in Mainland China, where Cooling's weakness in product quality and technology are offset by their price advantage. Cases B and D appear to show a lack mutuality, particularity, and cooperation, and the level of inconsistency is high. Diode is generally unwilling to make concessions to maintain the relationship; and Laptop is dominant in the areas of order placement and product specification. Trust can be defined as contractual trust in Cases B and D. The customers are the dominant partners in the relationships.

The findings are consistent with relationships in the exploratory stage and show a distance between the partners, and a lack of understanding of each other (Ford, 1980; Dwyer *et al.*, 1987; Ford *et al.*, 2003). Each counterpart may be looking for a new relationship to solve a short-term requirement or might have a tentative idea that it could be of major long-term significance. For instance, Bright Light and Cooling may think their customer is only interested in low price and Diode and Laptop may think their supplier's product quality and product technology are weak.

The relationship development process in the exploratory stage has to undergo further development before achieving relative stability, and the supplier's capabilities

influence this relationship development process. Bright Light and Coolnig are weak in their core human resource, technological, managerial and cultural capabilities, which significantly inhibits the development of the relationship with their larger customer.

7.4.3 The Developing Stage

Three cases (Cases A, C, and E) can be classified in the developing stage. The business relationships between the two companies are growing in a positive way. Their mutuality, particularity and cooperation are increasing, and inconsistencies have been reduced. Suppliers trust their larger customers' goodwill, whereas the larger customer trusts their small supplier's price competence, customer service competence, and product technology competence. The relationship could be described as showing slight interdependence. The cases in this stage appear to be stable. Their mutual adaptations increase and their commitment to each other grow, but the continued development of the relationship is not inevitable and the larger customer may cause development to slow or revert to the pre-relationship stage.

The findings indicate that both parties still have a rather distant relationship. Small suppliers may doubt that their customer will continue to place orders, and their larger customers may wish to shake up or replace an existing supplier to secure better prices. The findings are also consistent with the opinions of (Ford, 1980; Dwyer *et al.*, 1987; Ford *et al.*, 2003) that in this stage of the process of development of an inter-company relationship, business between the companies is increasing, but the relationship can be discontinued by either party.

7.4.4 The Stable Stage

None of the cases are in this stage. Several relationships appear to have long-term potential. However, continued relationship development does not appear to be inevitable and the partners could revert to the pre-relationship stage with other counterparts. Nevertheless, if small suppliers can improve their core capabilities such as human capabilities, technology capabilities, managerial systems, and company culture, their relationship may be enhanced and develop to the stable stage. Case B seems unlikely to develop to the stable stage, but Case D may do so if Cooling can develop their core capabilities.

A relationship in the exploratory stage is relatively unstable, whereas the relationship in the developing stage may improve to the stable stage. If small suppliers can

improve core human, technical, managerial, and cultural capabilities, this will help improve the relationship with its larger customer. The supplier's core capabilities appear to be the essential basis for an improvement in the relationship between small suppliers and their larger customers. This can be evidence that capability development has an important role in the relationship development between customer and supplier (Wilson and Jantrania, 1994; Walter *et al.*, 2001; Johnsen and Ford, 2006).

7.4.5 Dissolution

There are no cases in this stage. Although most of the relationships appear to be relatively easy to dissolve, they are not especially vulnerable since they do show some advantages. Chip shows an advantage in price competence, Clean System shows strong customer service and their price is cheaper than those of large suppliers, and Transformer shows technological competence. The other two cases are quite vulnerable to dissolution. Bright Light has great uncertainly about their future benefits and is uneasy about its relationship with Diode; Case D (Cooling-Laptop) relationship is based on price rather than product quality and so is also vulnerable.

On reflection, the relationship in Case A is largely based on the price competence of the supplier, Chip. The product is essentially a widely available commodity, which Resistor could easily source elsewhere with a small sacrifice in price advantage. Chip's products are not unique, and it is also quite likely that a cheaper source of supply could become available in the future, so this relationship may be easy to dissolve.

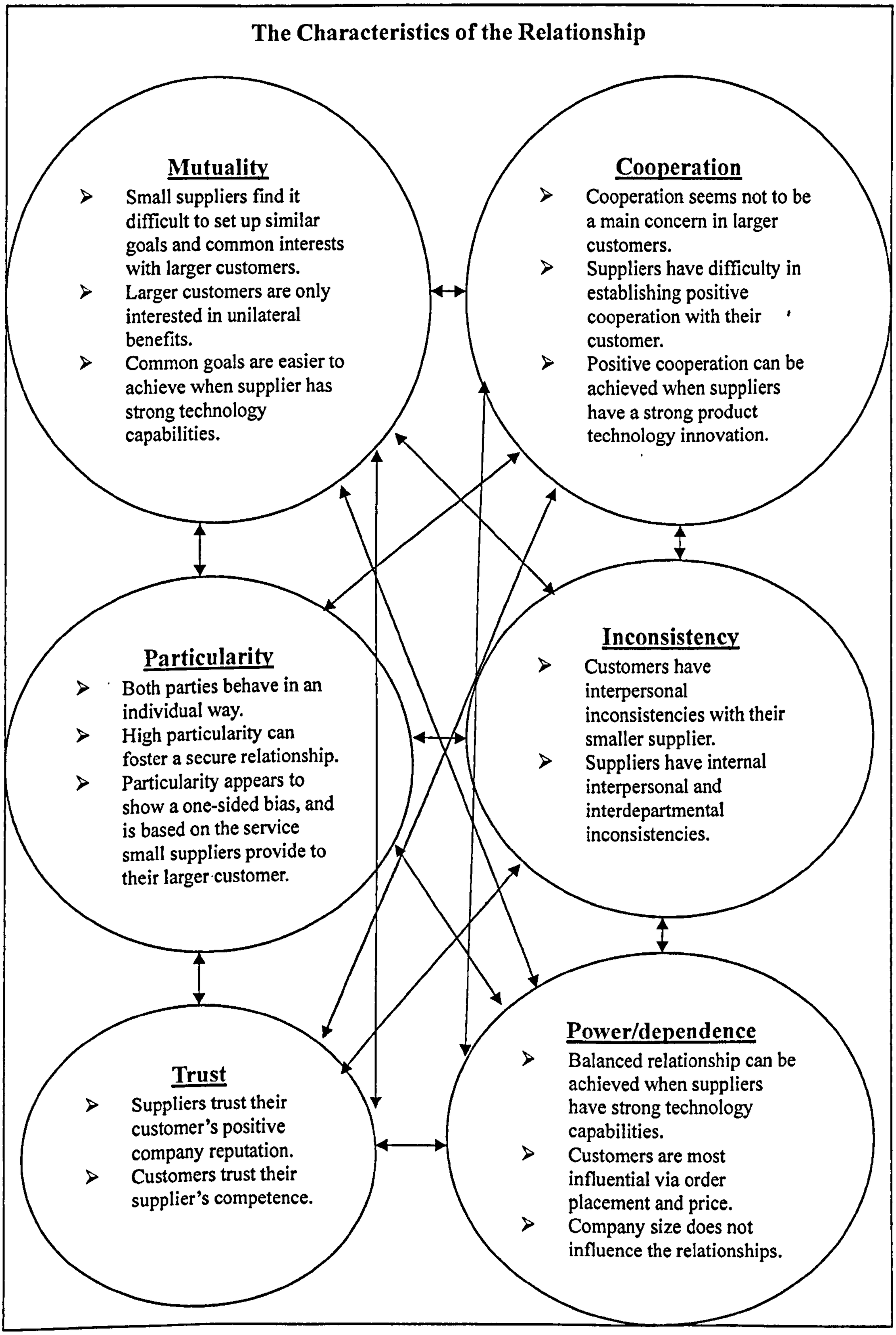
Due to the relative levels of commitment and mutuality developed, a relationship in the exploratory stage is easier to dissolve than a relationship in the developing stage. In addition, a relationship in the exploratory stage is difficult to move to the stable stage and vulnerable to dissolution, whereas the relationship in the developing stage may improve to the stable stage and is not easy to dissolve. The transition from one developmental stage to the next is important for the revised conceptual framework and for further attention in future research.

On reflection, the findings suggest that the core capabilities of small suppliers are the most significant determinants of the extent of the relationship development with their larger customers in the Taiwanese electronics industrial market.

The conceptual framework has been revised as in Figure 14 and indicates the

relationship characteristics that create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. The relationship development impacts on the small suppliers affect areas such as operations, technology, innovation, customer service, price, distribution channel, products, and capabilities. Moreover, capabilities have been found to be a particularly important determinant of the relationship development impact on the small suppliers, especially human capabilities. This is consistent with the opinions of (Teece *et al.*, 1990; Leonard-Barton, 1992) that knowledge and skills embodied in people is often associated with core capabilities.

Figure 14: A revised Conceptual Framework



Relationship Development Impacts on the Small Suppliers

Operations, Technology, Innovation, Customer Service, Price, Distribution Channel, Products, Capabilities

- Small suppliers have to apply specific standards for their customers.
- Small suppliers find it difficult to run relationship development programmes with their larger customers.
- Small suppliers appear to show weakness in operations strategy.
- Technology development is driven by customer requirement.
- Customers have high expectations of small suppliers' technology development.
- Small suppliers appear to show weakness in marketing innovation, management innovation, and product innovation.
- Small suppliers have strong customer service and deal with customer problems promptly.
- The general pricing strategy of small suppliers is to be a little cheaper than other (mostly larger) suppliers.
- Small suppliers' distribution is via fixed consignments and they always deliver goods on time.
- Product development could be described as product adaptation rather than innovation.
- Small suppliers appear to show weakness in human capabilities, technology capabilities, managerial systems, and company culture.

The Relationship Development Process

Stage One: The Pre-relationship Stage (Awareness)

Personal relationships are important in establishing the initial relationship between small suppliers and their larger customers in the Taiwanese electronics industry.

Stage Two: The Exploratory Stage (Exploration)

The cases in this stage appear to show instability and lack mutuality, particularity and cooperation. The level of inconsistency is high and trust can be defined as contractual trust. The customers are the dominant partner in the relationship between small suppliers and their larger customer.

Stage Three: The Developing Stage (Expansion)

The cases in this stage appear to show more stability. However, continued relationship development is not inevitable, and either party can cause development to slow or may revert to the per-relationship stage.

Stage Four: The Stable Stage (Commitment)

A relationship in the exploratory stage is difficult to move to the stable stage, whereas a relationship in the developing stage is closer to, and more likely to improve to the stable stage. If small suppliers can improve their core human, technology, managerial systems, and company culture capabilities, this will help improve their relationship with their larger customer.

Dissolution

A relationship in the exploratory stage is vulnerable to dissolution. A relationship in the developing stage is less vulnerable to dissolution.

CHAPTER EIGHT: ANALYZING THE RELATIONSHIP DEVELOPMENT IMPACTS

8.1 Introduction

The purpose of this chapter is to investigate the research data from the relationship development impacts on small suppliers. This chapter focuses on the novelty of the impacts studied. It discusses the relationship of the findings to the wider theoretical literature and derives the finalised conceptual framework.

8.2 Supplier A (Chip)

8.2.1 Operations

Chip needs to meet the particular standards for their customers. Chip has applied ISO certification. However, Chip does not apply just-in-time methods, and they always keep safety stocks. Chip has efficiency metrics in place for each department.

Chip does not run a relationship development programmes with any customers. However, the Chip domestic marketing manager has regular meetings with their customers and the R&D manager participates when product technology problems need to be resolved. Chip appears not to have serious product quality problems with their automated production system.

8.2.2 Technology

Chip's technology development is driven by its customer requirements. Chip appears to recognise that technology is very important to the relationship with customers. Chip customer requirements determine the direction of Chip's technology development. The findings indicate a lack of technical development on the part of the Chip. Chip should improve technology to maintain a long-term relationship with its customers.

8.2.3 Innovation

Chip appears to show weakness in marketing innovation, since Chip's domestic

marketing department relies on the domestic marketing manager to develop new customers and maintain a long-term relationship with existing customers, and other staff in the domestic marketing department did not pay much attention to company market development.

Furthermore, Chip's product design innovation reacts to the customer's expressed needs, and tends to be adaptive rather than innovative. Chip appears to understand that customers have high expectations in product innovation, as they believe innovation can increase customer's reliance on them and increase their competitiveness. Therefore, Chip maybe needs to re-consider their product innovation and marketing policy.

8.2.4 Customer Service

Chip appears to have good customer service, since they deal with customer's problems immediately. Chip recognises that a long-term stable relationship contributes to consistent customer service development, and the domestic marketing manager strongly believes that the level of customer service will influence the relationship with their customers.

8.2.5 Price

Chip' pricing strategy is to be a little cheaper than other (mostly larger) suppliers. However, Chip provides similar quality to other suppliers. Chip base their pricing strategies on their costs and reference prices in the same market sector. It appears that Chip's pricing strategies are similar to those of other suppliers. Chip's pricing strategies involve the relevant departments giving information such as the material, production, R&D, packing, and delivery costs to the finance department, who calculate the selling price after referring to the prices of competitors in the same area of business. In general, Chip's pricing strategy aims to undercut other suppliers of similar quality.

8.2.6 Distribution Channel

Chip appears not to have problems in the distribution channel. Chip appears to realise that delivery of goods on time is very important to the maintenance of a long-term relationship with their customers. Chip has similar distribution strategies to other suppliers. Chip has a fixed contract with a delivery company. Chip delivers goods

from a fixed location and keeps safety stocks in the warehouse. Chip recognises that punctual deliveries are very important to the maintenance of a long-term relationship with customers.

8.2.7 Products

It appears that Chip's products are fine. Chip's product strategies are to develop high standards and high values. Their product strategies are similar to those of other suppliers. The domestic marketing manager collects market information and reports to the R&D manager. Then the R&D manager develops the products that customers needs.

8.2.8 Capabilities

Chip appears to show weaknesses in human capabilities. This is because Chip has lacked specialised employees training for lower level staff which has probably contributed to weakness in lower level employees' knowledge and skills.

The technology capabilities in Chip depend on some key individual staff members, such as the R&D manager and manufacturing director. Product technology development seems to depend on the customer's needs.

Chip does not have a programme to develop managerial capabilities yet, and limited finance means Chip cannot offer many employees training.

Chip appears weak in their company culture, as employees, with a few exceptions, show limited commitment to the company. Thus, Chip may need to consider improving the perception of company culture in their lower level staff.

8.2.9 Analyzing Case A Using Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

Primary Activates:

When Chip receives the order placement, they will buy components from their suppliers. Chip does not apply just-in-time methods, and they always keep safety stocks. Besides, Chip does not run relationship development programmes with any

suppliers or customers. Chip seems to need to improve its operations management. Chip delivers goods from a fixed location and keeps safety stocks in the warehouse. Chip always delivers goods on time and appears to have good customer service, because they deal with customer's problems immediately.

Support Activates:

Chip seems to understand that quality control is very important to the long-term business relationship with Resistor. Chip appears weak in their human capabilities, managerial capabilities, and company culture. Chip appears to show weaknesses in human capabilities and the commitment level of lower level staff. Chip does not have a programme to develop managerial capabilities yet, and limited finance means Chip cannot offer many employees training. Company culture in Chip is weak in their lower level staff, as employees, with a few exceptions, show limited commitment to the company. Chip has a lack of technical development. Chip's technology development is driven by customer requirements.

Porter's Five Forces

Force 1: Competitive Rivalry within the Industry

It has many competitors in this area of business. Larger suppliers may have lower costs than Chip. Besides, other competitors may have better products technology than Chip.

Force 2: Threat of New Entrants

It seems difficult entry as Chip's products price is cheaper than other larger suppliers. However, common technology in Chip's products, since Chip develops products to meet the customer's needs.

Force 3: Threat of Substitutes

Resistor can easily change from other suppliers, as other suppliers may have good product quality and similar price to Chip.

Force 4: Bargaining Power of Customers

Buyers are not concentrated in this area of business. Besides, Resistor does not have high proportion of output. However, Resistor can easily change other suppliers and easily influence price. This is because common technology in Chip's products.

Force 5: Bargaining Power of Suppliers

Chip has good reputation and Chip's products price is cheaper than other larger suppliers. Chip's customer service is good but technology is weak. Besides, it has many competitors in this area of business. Chip's products are commodity.

Resource-Based View

Tangible Resources:

Chip's products are good. Chip's product strategies are to develop high standards and high values, and their pricing strategy is to be a little cheaper than other (mostly larger) suppliers.

Intangible Resources:

Chip lacks lower level employee training and this causes weakness in core capabilities, such as employee knowledge and skills, technology systems, managerial systems, and values and norms. The technology capabilities in Chip depend on some key individual staff members. Chip may need to consider developing its core capabilities in its lower level staff and may particularly focus on employees' knowledge and skills, technology systems, managerial systems, and values and norms.

8.3 Supplier B (Bright Light)

8.3.1 Operations

Bright Light is weak operationally. They have no formal relationship development programmes with their customers, and find it difficult to develop and maintain good customer relationships. Bright Light does not have any efficiency measures for the relationship with any customers, and only measure the efficiency of internal operations, suggesting a weakness in operations management may aggravate their acknowledged weaknesses in product quality and R&D. They, do, however, make regular visits to customers in order to understand their needs. Bright Light strongly believes that the company needs to meet the particular standards for their customers.

8.3.2 Technology

Bright Light appears weak in their technology abilities. They recognise that it may have a negative influence on the relationship development process with their customers. Bright Light agrees that technology development is very important to the maintenance of the long-term relationship with their customers.

The manufacturing director suggests that the company should buy new machines, since the present equipment is very old and productivity is very low. The president, however, thinks that the company's current limited customer base (ten domestic and one overseas) doesn't justify such a large-scale investment.

8.3.3 Innovation

Bright Light does not seem to show much product innovation, as their R&D is very weak. Their products development often fails to meet customer's needs. Bright Light is receptive to customer's needs and suggestions, and understands that innovation is important, but management innovation is limited. The lack of a company website is considered to be symptomatic, perhaps even symbolic.

8.3.4 Customer Service

Bright Light has reasonably good customer service, provided 24/7. Bright Light always keeps in touch with customers, whether customers give them an order for goods or not. Even when customers phone them and ask for delivery of goods on Saturday or Sunday, they still ask the warehouse to despatch the goods. They give customer service 24 hours a day, every day.

Bright Light thus apparently understands the importance of customer service, and especially of maintaining customer contact, for the maintenance of the relationship with customers.

8.3.5 Price

Bright Light's pricing strategy is to be a little cheaper than other (mostly larger) suppliers. However, Bright Light shows weaker product quality than other (mostly larger) suppliers. Bright Light's pricing strategies depend on production costs and reference prices for comparable products in the same area of business, with final decision making by the president. The manufacturing director provides information on production costs but is not directly involved in, or aware of, external pricing negotiations. Sales are very price-sensitive in this industry, so pricing is critical. Bright Light's customers negotiate especially aggressively on price, and pricing is a dominant influence on their relationship.

8.3.6 Distribution Channel

Bright Light always delivers goods on time, as they recognise that delivering goods on time is very important to their relationship with customers. Bright Light's distribution channel is similar to other suppliers, with distribution via express delivery service, or in person. However, bigger companies tend to carry more stock than Bright

Light, who are sometimes unable to meet large, urgent orders.

8.3.7 Products

Bright Light's product quality is very weak. Their product specifications often fail to meet customers' requirements, leading to a loss of orders. These findings suggest that improving production and research capability may increase the product range and quality and positively influence the process of the relationship development between small suppliers and their larger customers.

8.3.8 Capabilities

Bright Light is very weak in employee knowledge, technology, managerial systems, and company culture. Bright Light is weak in product and production technologies, and R&D capability, in comparison with larger suppliers. Bright Light's future technical development is uncertain. They currently produce lots of products that do not conform to customer standards. This reflects a general lack of training for employees, and a lack of plans to develop managerial capability. Employees' specialised knowledge and technical abilities are very weak. Bright Light also needs to improve its internal culture. Staff morale is poor, and staff turnover is high.

8.3.9 Analyzing Case B Using Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

Primary Activates:

When Bright Light receives the order placement, they will buy components from their suppliers. Bright Light does not show strong operational management. Bright Light does not have any plan for relationship development programmes with any suppliers or customers. Besides, Bright Light does not have any efficiency measures for the relationship with any customers. Bright Light always delivers goods on time, as they recognise that delivering goods on time is very important to their relationship with customers. Bright Light's distribution channel is similar to other larger suppliers, with distribution via express delivery service, or in person. Bright Light has reasonably good customer service, provided 24/7.

Support Activates:

Bright Light appears very weak in their human capabilities, managerial systems,

technology systems, and company culture. Bright Light is very weak in employee knowledge and skills. Besides, Bright Light is weak in product and production technologies, and R&D capability, in comparison with larger suppliers. This is reflected in a general lack of training for employees, and a lack of plans to develop managerial capability. Employees' specialised knowledge and technical abilities are very weak.

Porter's Five Forces

Force 1: Competitive Rivalry within the Industry

It has many competitors in this area of business. Larger suppliers may have lower cost than Bright Light. Besides, other competitors may have better products technology than Bright Light.

Force 2: Threat of New Entrants

Other competitors may easy entry as Bright Light's product technology is very weak. Besides, other suppliers are easy access to distribution channel. This is because Bright Light's distribution channel is similar to other larger suppliers, with distribution via express delivery service.

Force 3: Threat of Substitutes

Diode can easily change from other suppliers, as other suppliers may have good product quality and similar price to Bright Light. Bright Light has insecure relationship with all of its customers.

Force 4: Bargaining Power of Customers

Buyers are not concentrated in this area of business. Diode can easily change other suppliers, as Bright Light's product quality is very weak. Especially, Diode cans easily influence price.

Force 5: Bargaining Power of Suppliers

Bright Light's products price is cheaper than other larger suppliers and their customer service is good. However, it has many competitors in this area of business. Bright Light's products and technology are very weak.

Resource-Based View

Tangible Resources:

Bright Light's pricing strategy is to be a little cheaper than other (mostly larger) suppliers. However, Bright Light's product quality is very weak. Their product specifications often fail to meet customers' requirements, leading to a loss of orders.

Intangible Resources:

Bright Light is very weak in core capabilities such as employee knowledge and skills, technology systems, managerial systems, and company culture. There is a lack of training for employees and there is no plan for the development of managerial ability. This reflects and contributes to the company weaknesses in technology systems and company culture.

Bright Light's product knowledge is insufficient, and there is a lack of talent in the R&D department resulting in a lack of innovation. They have no company website, their production equipment is old and unreliable, and they have limited R&D capabilities. Bright Light appears to have a weak corporate image, both with customers, and with its own staff. Neither does it appear to have an awareness of any specifically articulated company values or culture, and the high staff turnover suggests that their commitment to the company is weak.

8.4 Supplier C (Clean System)

8.4.1 Operations

Clean System runs relationship development programmes with their customers. Clean System has meetings with customers regularly to offer company information and plans for customers. They gain an understanding of customer's needs and wants at the same time.

Clean System has internal efficiency measures for their own company, and they apply just-in-time manufacturing methods. Clean System appears to have precise quality control and their product quality is very stable. They also understand that operational efficiency is very important for the company.

8.4.2 Technology

Clean System recognises that technology development is very important for their company. Improving technology can help their company build good relationships with customers and raise customers trust in them. Besides, Clean System also understands that their customers expect continuous improvement in technology. However, Clean System appears to show weakness in the technical knowledge of their lower level staff.

8.4.3 Innovation

Clean System recognises that their product innovation tends to be adaptive rather than innovative. Besides, Clean System does not seem to have much innovative capacity in their lower level staff, who lack technical knowledge. Clean System appears to understand how important product and production efficiency innovations are in this relationship. Also Clean System's marketing innovation relies on the managing director's business sense.

8.4.4 Customer Service

Clean System has strong customer service and deals with customer's problems promptly. Clean System realises that customer service is very important to consolidate the relationship with their customers, as Clean System's customers replaces some of the components of its IC semiconductor mould automatic cleaning system when they need.

8.4.5 Price

Clean System's pricing strategy is to be a little cheaper than larger suppliers. Clean System refers to other companies' product prices, calculates its production costs and then decides the price. However, Clean System shows weaker product quality than larger suppliers. Nevertheless, this does not influence the relationship with Clean System's Taiwanese customers, because Clean System's competitors are overseas and do not have the same personal relationship with their Taiwanese customers.

8.4.6 Distribution Channel

Clean System always delivers goods on time, as they recognise that punctuality is very important to their relationship with customers. Clean System is the largest IC semiconductor mould automatic cleaning system supplier in Taiwan, as their larger competitors are located overseas. Clean System's domestic distribution channel is through fixed consignments and overseas through sea or air transportation. Thus, Clean System appears to have strong distribution channel strategies.

8.4.7 Products

Clean System's product technologies are weaker than those of other larger suppliers,

as their product development efforts could be described as product adaptations rather than innovations. Clean System's larger competitors are overseas, and are stronger in size, financial strength, internationalisation, number of customers and specialised knowledge.

8.4.8 Capabilities

Clean System's management level knowledge and skills are strong but lower level employees are weaker, due to lack of employee training. Management level staff are sent to participate in job related training. Thus, only management have good technical knowledge. The technology capabilities in Clean System depend on some key individual staff members, since lower level staff's technological abilities are weak. Therefore, Clean System is strong at the management level. Clean System lower level employees are not valued by the company culture. Clean System agree that management level staff have strong belief in the company culture, but that lower level staff lack commitment to, and belief in, the company culture.

8.4.9 Analyzing Case C Using Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

Primary Activates:

When Clean System receives the order placement, they will buy components from their suppliers. Clean System always keeps some components of IC semiconductor mould automatic cleaning system in the stock. Clean System has strong operational management. They run relationship development programmes with their customers and they apply just-in-time manufacturing methods. Clean System always delivers goods on time, as they recognise that delivering goods on time is very important to their relationship with customers. Clean System's domestic distribution channel is through fixed consignments and overseas through sea or air transportation. As Clean System's larger competitors are abroad, they often use sea transportation to deliver their goods. Clean System has strong customer service and deals with customer's problems promptly.

Support Activates:

Clean System appears to have precise quality control and their product quality is very stable. They also understand that operational efficiency is very important for the company. Clean System's management level knowledge and skills are strong but

lower level employees are weak, due to lack of employee training. Clean System lower level employees are not valued by the company culture. The technology capabilities in Clean System depend on some key individual staff members, since lower level staff's technological abilities are weak. Clean System has strong customer service and deals with customer's problems promptly.

Porter's Five Forces

Force 1: Competitive Rivalry within the Industry

Clean System is the largest IC semiconductor mould automatic cleaning system supplier in Taiwan, as their larger competitors are located overseas. As Clean System's larger competitors are abroad, thus Clean System has less competators. However, other overseas competitors may have better products technology than Clean System.

Force 2: Threat of New Entrants

It is difficult entry as Clean System's larger competitors are overseas. Besides, other competitors may difficult access because Clean System's customers replace some components every three years, and it would be inconvenient and potentially disruptive to seek a new supplier.

Force 3: Threat of Substitutes

Semiconductor is difficult to replace by other suppliers. This is because they need replace some components every three years. Larger competitors' products technology is strong than Clean System.

Force 4: Bargaining Power of Customers

Buyers are not concentrated in this area of business. Semiconductor is difficult to replace Clean System, as product components of the IC semiconductor mould automatic cleaning system need replaced every three years.

Force 5: Bargaining Power of Suppliers

Clean System's products price is cheaper than other larger suppliers and their customer service is very strong. Besides, Clean System's larger competitors are overseas and their products are a little behind those of some larger suppliers.

Resource-Based View

Tangible Resources:

Clean System's pricing strategy is to be a little cheaper than larger suppliers. Also Clean System's product technologies are weaker than those of other larger suppliers, as their product development efforts could be described as product adaptations rather

than innovations.

Intangible Resources:

Clean System's lower level employee's knowledge and skills appear weak, due to a lack of training, which is only provided for management level employees. The technology capabilities of Clean System depend on some key individual staff members, Clean System is strong at the management level where staff have strong belief in the company culture, but lower level staff lack commitment to, and belief in, the company culture.

8.5 Supplier D (Cooling)

8.5.1 Operations

Cooling appears weak in their operations and in the area of quality control. The percentage of bad products in Cooling is high and customers frequently complain about this. Cooling strongly believe that they need to meet and apply particular standards for customers. Cooling does not have any efficiency measures for the relationship, but they have implemented ISO certification and just-in-time manufacturing methods. Cooling does not run relationship development programmes with any customers. Improving Cooling's operations strategies in the area of quality control may improve the relationship with customers.

8.5.2 Technology

Cooling appears weak in their technology abilities. The relationship seems to be more based on the price of the goods rather than the technology of the products. Cooling recognises that product technology is very important for their type of customers. This is because Cooling's products are used in hi-tech industries, so development of the technology is very important for their company. Improving technology can improve the relationship with their customers.

8.5.3 Innovation

Cooling does not itself originate product innovations. Cooling recognises that their product innovation tends to be adaptive rather than innovative. Cooling recognises that continuous R&D of new products is very important for Cooling to maintain long-term relationships with their customers. Cooling's products are used in the various kinds of laptops and computers, which have short product life cycles, so their

customers must always have new products to introduce into the market.

8.5.4 Customer Service

Cooling appears to do their best to offer good customer service, which they feel can improve the relationship with customers. Cooling realises that customer service is very important for the maintenance and consolidation of the relationship with their customers.

8.5.5 Price

Cooling's pricing strategy is to be cheaper than other suppliers. Pricing strategies appear to be very important for Cooling. If Cooling's price is too high, Laptop may buy goods from other suppliers. Laptop always compares the price with other suppliers when they place orders. This is because Cooling show weaker product quality than other (mostly larger) suppliers.

8.5.6 Distribution Channel

Cooling's distribution channel is limited. Cooling has only contracted with one consignment company to deliver their goods and they only collect goods at fixed intervals, but larger suppliers may have signed more consignment companies to deliver their goods and have more flexible collection and delivery schedules. Cooling's distribution channel stock levels are less than those of larger suppliers.

8.5.7 Products

Cooling's product technology and quality are both weaker than those of larger suppliers, and their product strategies are to develop products that directly supply customers' explicitly expressed requirements, rather than lead by innovation.

8.5.8 Capabilities

It appears that Cooling is weak in core capabilities in the areas of employee knowledge and skills, technology systems, managerial systems, and values and norms. Cooling does not have good employee training. They have only occasional training at management level, and then management explain what they have learned to their department staff. Therefore, in general the technical knowledge of the staff is limited.

Cooling's technical knowledge and product development skills are weak. Besides, Cooling does not appear to have placed great emphasis on the development of its managerial capabilities. Values and standards appear weak within Cooling, which is run by family members, with the important positions held by relatives of the president. Thus, Cooling does not appear to have strong company culture but has a strong family culture.

8.5.9 Analyzing Case D Using Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

Primary Activates:

When Cooling receives the order placement, they will buy components from their suppliers. Cooling appears weak in their operations and Cooling does not run relationship development programmes with any customers. Cooling's distribution channel is limited. Cooling has only contracted with one consignment company to deliver their goods and they only collect goods at fixed intervals. Also Cooling appears to do their best to offer good customer service, which they feel can improve the relationship with customers.

Support Activates:

Cooling appears weak in their operations and in the area of quality control. Besides, Cooling appears weak in their human capabilities, technology capabilities, managerial capabilities, and company culture. This reflects a lack of development of human resources in relation to the firm's needs. The relationship seems to be more based on the price of the goods rather than the technology of the products.

Porter's Five Forces

Force 1: Competitive Rivalry within the Industry

It has many competitors (large and small) in this area of business. Larger suppliers may have lower costs than Cooling. Also other competitors may have better product technology than Cooling.

Force 2: Threat of New Entrants

It may easy entry as many competitors in this area of business. Cooling's product technology is very weak. Also other competitors may easy access to distribution channel. This is because Cooling has only contracted with one consignment company

to deliver their goods and they only collect goods at fixed intervals, but larger suppliers may have signed more consignment companies to deliver their goods and have more flexible collection and delivery schedules.

Force 3: Threat of Substitutes

Laptop can easily change supplier, as other suppliers may have good product quality and similar price to Cooling. Cooling has an insecure relationship with Laptop. In this case, investment in development of the relationship is based on price rather than product quality.

Force 4: Bargaining Power of Customers

Buyers are not concentrated in this area of business. Laptop can easily change Cooling and Laptop can easily influence price from Cooling.

Force 5: Bargaining Power of Suppliers

Cooling's product is cheaper than other larger suppliers. Also Cooling's customer service is good but technology is weak. It has many competitors in this area of business. Cooling's product quality is very weak.

Resource-Based View

Tangible Resources:

Cooling's product technologies are weaker than those of other (mostly larger) suppliers, as their product development efforts could be described as product adaptations rather than innovations. Cooling's pricing strategy is to be cheaper than other suppliers. Pricing strategies appear to be very important for Cooling.

Intangible Resources:

Cooling is weak in core capabilities in the areas of employee knowledge and skills, technology systems, managerial systems, and values and norms. Cooling's employee knowledge and skills appear very weak especially for lower level staff. Cooling has occasional training for management but has lacked training for its lower level employees, whose expert knowledge is insufficient. Cooling is weak in production efficiency, product technology, and R&D capabilities compared with larger suppliers. Cooling appears to lack planning in its managerial systems. Cooling is a traditional family business with shares held by family members. This affects Cooling's ability to keep talented staff and inter-departmental communication is difficult. Cooling appears to have a weak general company culture but a strong family culture at the upper management level.

8.6 Supplier E (Transformer)

8.6.1 Operations

Transformer appears to have strict quality control and recognises that quality control is very important to consolidate the relationship with customers. Transformer needs to meet particular standards for their customers. Transformer applies recognised electronics safety standards for manufacturing across their product range: for instance, UL and CE standards. This is essential to a continued relationship with customers. Transformer's operation strategies focus on technology development, as Transformer realises that continued technology development is necessary for the long-term survival of the company.

8.6.2 Technology

Technology seems to have an especially important impact on Transformer. Transformer believes that technology developments are very important and they are aware they have strong technology. Transformer's technology developments are driven by customer requirements. Transformer's technology strategy is highly adapted to their customer's needs.

8.6.3 Innovation

Transformer has no company website and they appear to show weakness in marketing innovation but strength in product innovation. Thus, Transformer seems to be driven more by technical rather than marketing innovation, where, since their products are specifically customised, the initiative rests with the customer.

8.6.4 Customer Service

Transformer's customer service tends to be reactive, as they resolve customer's problems when customers complain, but they do so promptly. Transformer accepts small orders. Transformer realise that customer service is very important for the maintenance of a long-term relationship with customers.

8.6.5 Price

Transformer's pricing strategies are dependant on the size of the customer order, product material and product quality, as their product is custom-made. Transformer's pricing strategies are difficult to compare with those of other competitors, due to the

unique and exclusive customisation of the products supplied to their customers.

8.6.6 Distribution Channel

Transformer's distribution channel is similar to those of other suppliers. Transformer has a fixed consignment contract with a delivery company. Transformer appears to recognise that delivering goods on time is very important for building a long-term relationship with customers.

8.6.7 Products

Transformer's products are unique and competitive, reflecting their strong product technology. Transformer's product strategy is to supply their customer's individual needs, as Transformer's products are custom-made. Transformer's exclusive product customisation strategies appear to have an important, even defining influence on the relationship with customers.

8.6.8 Capabilities

Transformer appears weak in the core capabilities of their lower level staff in the areas of employee knowledge and skills, technology systems, and values and norms. However, Transformer's management level knowledge and skills are strong. Transformer has only supported outside training for management. This may partly explain lower level staff lack of expert knowledge and skills.

Transformer appears to have strong technology capabilities, though they seem over-reliant on a certain key personnel. Transformer's managerial system is fine. Transformer lower level employees are not valued by the company culture.

8.6.9 Analyzing Case E Using Porter's Value Chain, Porter's Five Forces, and the Resource-Based View Theory

Porter's Value Chain

Primary Activates:

When Transformer receives the order placement, they will buy components from their suppliers. Transformer's products are custom-made. Transformer's operation strategies are focused on technology development, as Transformer realises that

continued technology development is necessary for the long-term survival of the company. Besides, Transformer has a fixed consignment contract with a delivery company. Transformer's customer service tends to be reactive, as they resolve customer's problems when customers complain, but they also do so promptly. Transformer accepts small orders.

Support Activates:

Transformer appears to have strict quality control and Transformer recognises that quality control is very important to consolidate the relationship with Power Supply. Transformer appears weak in the core capabilities of their lower level staff in the areas of employee knowledge and skills, technology systems, and values and norms. Transformer's lower level employee expertise appears weak. However, Transformer's products are characteristic and competitive, and they have strong product technology.

Porter's Five Forces

Force 1: Competitive Rivalry within the Industry

Transformer's product strategy is to supply their customer's needs. Transformer's products do not have direct competitors, because their products are custom-made. However, other competitors may have better product technology than Transformer.

Force 2: Threat of New Entrants

It is difficult entry as not many competitors in this area of business. However, other competitors may easy access to distribution channel because Transformer's distribution channel is similar to those of other suppliers. Transformer has a fixed consignment contract with a delivery company.

Force 3: Threat of Substitutes

Power Supply finds it difficult to change supplier, as Transformer has strong product technology. The relationship between Transformer and Power Supply appears to be secure and stable.

Force 4: Bargaining Power of Customers

Buyers are not concentrated in this are of business. Power Supplier is difficult to change supplier. Power Supply has limited influence on the price, because Transformer's products are custom-made.

Force 5: Bargaining Power of Suppliers

Transformer has good reputation. Transformer's pricing strategies are difficult to compare with those of other competitors. Transformer's products technology is strong and customer service is good. Especially, Transformer's products are custom-made.

Resource-Based View

Tangible Resources:

Transformer's products are unique and competitive, reflecting their strong product technology. Transformer's pricing strategies are difficult to compare with those of other competitors, due to the unique and exclusive customisation of the products supplied to their customers.

Intangible Resources:

Transformer appears weak in the core capabilities of their lower level staff in the areas of employee knowledge and skills, technology systems, and values and norms. Transformer's lower level employee expertise appears weak, due to a lack of training, which is only provided for management level employees. Transformer has strong technology capabilities. However, their technology is over-reliant on key personnel. Transformer lower level employees appear not to be valued by the company culture, and they do not seem to really understand the company's business.

8.7 Summary of Case Studies

After revising all these five cases analysis, it is demonstrated that the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. The relationship development impacts on the small suppliers are confirmed in the areas of operations, technology, innovation, customer service, price, distribution channel, products, and capabilities, in the areas of employee knowledge and skills embodied in people, technology systems, managerial systems, and values and norms appear to be most important relationship development impacts on the small suppliers. The following are some instances from the case analysis.

Case A: Chip is weak in its employee's knowledge and skills, technology systems, managerial systems, and values and norms. However, Chip has lower product price at the same quality as other suppliers. The relationship development in Case A can be classified as stage three, i.e. the developing stage.

Case B: Bright Light is extremely weak in core capabilities such as employee knowledge and skills, technology systems, managerial systems, and company culture. Bright Light has an insecure relationship with Diode and all of its customers. The relationship development of Case B can be classified as stage two, i.e. the exploratory stage.

Case C: Clean System is strong at the management level but their lower level

employee's knowledge and skills, technology, values and norms are weak. Their customer Semiconductor replaces some components of the IC semiconductor mould automatic cleaning system every three years. Thus, Case C appears to be potentially long-term and stable. The relationship developmental stage in Case C can be classified as stage three, i.e. the developing stage.

Case D: Cooling is weak in core capabilities in the areas of employee knowledge and skills, technology systems, managerial systems, and values and norms. Cooling's weaknesses in product quality and technology are offset by their price advantage. Cooling's goods are used in the completed products of Laptop, which are sold in Mainland China. The relationship development of Case D can be classified as stage two, i.e. the exploratory stage.

Case E: Transformer appears weak in the core capabilities of their lower level staff in the areas of employee knowledge and skills, technology systems, and values and norms. However, Transformer's management level is strong and they have a strong family culture, as Transformer is a family business. The relationship developmental stage in Case E can be classified as stage three, i.e. the developing stage.

8.8 Conclusions

Relationship Characteristics

After these five cases analysis, we can demonstrate that relationship characteristics of mutuality, particularity, trust, cooperation, inconsistency, and power/dependence create impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. For example, relationship characteristic of power/dependence creates relationship development impacts on the technology of small suppliers and influences the relationship development process between small suppliers and their larger customers. Small suppliers appear to show weakness in technology development and their technology is driven by customer requirements. Thus, larger customers control the technology development direction in the relationship with their small supplier; while small suppliers are dependent in the area of technology development.

Relationship Development Process

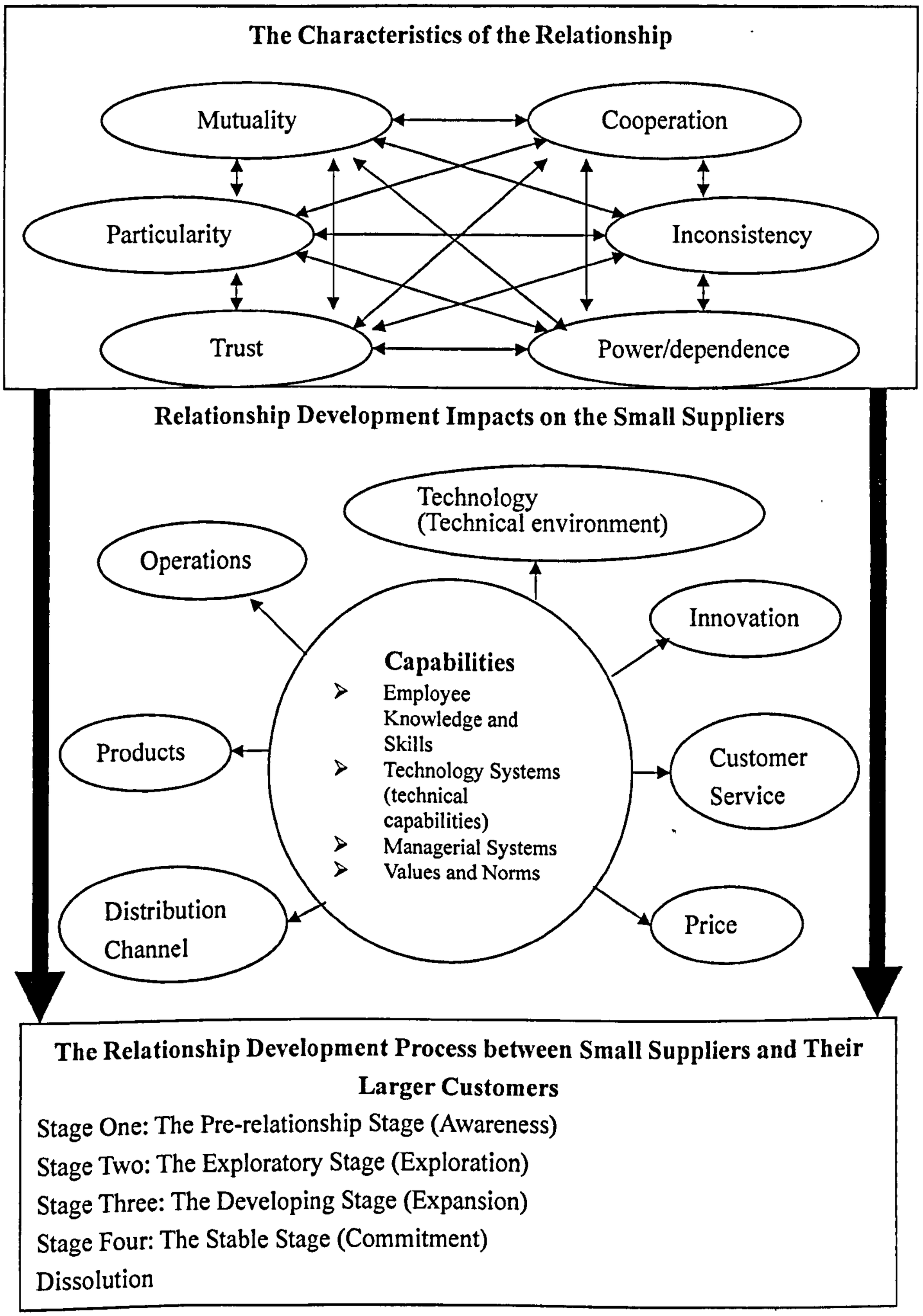
After these five cases, we can verify that Ford relationship development process is very powerful to examine in the relationship between suppliers and customers. From these five cases show that Case A classify in the stage three, Case B classify in the stage two, Case C classify in the stage three, Case D classify in the stage two, and Case E classify in the stage three.

Relationship Development Impacts

Relationship development impacts can be confirmed in the areas of operation, technology, innovation, customer service, products, price, distribution channel, and capabilities. Especially, capabilities appear most important influence the relationship development process. Small suppliers are weak in the core capabilities and in the areas of human capabilities, technology capabilities, managerial systems, and company culture. This is reflected in a general lack of training for employees. The technological capabilities of small suppliers tend to depend on some key individual staff, the majority of suppliers do not have strong managerial systems, and company culture is weak in the all suppliers. Thus, small suppliers' human capabilities can influence their technological capabilities, managerial systems capabilities, and company culture. The findings demonstrate that human capabilities are important for improving company core capabilities. If small suppliers can improve their employees' knowledge and skills, this can lead small suppliers to enhance their technological and managerial capabilities, and their company culture.

Supplier's core capabilities can also be influence other relationship development impacts such as operations, technology, innovation, customer service, price, distribution channel, and products. If supplier has strong capabilities, then supplier will have strong operations, technology, innovation, customer service, price, distribution channel, and products. Thus, company's core capabilities are the most important in the relationship development impacts on small supplier. .

Figure 15: Revised Conceptual Framework



CHAPTER NINE: CONCLUSIONS AND RECOMMENDATIONS

9.1 Introduction

This chapter is the final chapter and presents the overall conclusions from the thesis. This chapter will firstly draw the main conclusions based on the aim and objectives in Chapter One and the emerging research questions outlined at the end of Chapter Four. This is followed by a discussion of the contributions to knowledge, managerial implications, and the limitations of the research strategy. Finally, this chapter will outline and discuss recommendations for future research.

9.2 Discussion of the Research Questions

This thesis set out to examine the relationship development impacts of the characteristics of the relationship between small suppliers and their larger customers in the Taiwan domestic electronics industry on the process of development of these relationships. This section presents the outcomes of the investigation in terms of the key findings that have emerged from the research questions and the conclusions drawn in answer to each research question.

9.2.1 Research Question 1:

- How may the relationship characteristics create relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers?

The first research question is addressed through the review of the literature connected with the development of the relevant concepts. There have been several investigations of relationship characteristics and several of the relationship development process. This research attempts to elucidate the link the two, i.e. between the characteristics and development of the relationship. The Industrial Marketing Purchasing (IMP) literature has been an important source for the conceptual framework of the investigation. The preliminary literature review revealed the network perspective, dyadic relationship perspective, relationship characteristics, and the relationship development process.

The general characteristics of customer-supplier relationships and the "typical" relationship development process have been established in previously published IMP studies. The characteristics of the relationship selected for further study in this investigation were chosen based on their relative importance and appropriateness in a relationship between small suppliers and their larger customers. They are mutuality, particularity, trust, cooperation, inconsistency, and power/dependence. The relationship characteristics identified are discussed below.

Mutuality

The findings on mutuality reflects the view of Ford *et al.* (1986), who maintain that mutuality is how the parties strike a balance between their individual and common interests. Both parties in each case studied have given up individual goals to maintain the relationship. However, small suppliers appear to have difficulty in establishing similar goals and common interests with their larger customers. Common goals are easer to accomplish when suppliers have strong technology capabilities. Small suppliers feel coerced to reduce the price to maintain the relationship. The interaction is thus dominated by the self-interest of the larger customers, which generally appear to be exclusively interested in their own benefits rather than investment in the relationship with their small suppliers.

Particularity

Ford *et al.* (1986) define particularity as a measure of the direction and uniqueness of the interaction between customer and supplier, reflecting the difficulty of the replacement of the supplier by the customer. Small suppliers and their larger customers in the Taiwanese electronics industry treat each other in an individual way, as each business transaction is individually negotiated. Particularity appears to show an unfair bias in this research, and is based on the specific benefits that the small suppliers provide to their larger customer such as price and product technology. The findings demonstrate that high particularity can foster a feeling of security in the relationship between small suppliers and their larger customers. This is influenced by the extent of the adaptation and the exclusivity required of, and offered by the small suppliers. However, in Case A. Resistor indicates that the relationship with Chip is founded primarily on the low prices of the supplier. This gives some cause for concern about the uniqueness. Low price does not confer much uniqueness, since the partner can be replaced easily by paying a bit more, or because some other company offers the product cheaper, either because they can make it cheaper, or as a "loss-leader", to eliminate a competitor. Thus, the particularity conferred by low price

is doubtful.

Trust

The research findings indicate that small suppliers trust their larger customers generally, based on company reputation, while larger customers trust in their small suppliers is limited to the specific advantage that small suppliers offer for them. Thus, the customers' company reputation and suppliers' competence are the key factors in the foundation of trust between small suppliers and their larger customers. Besides, this research reflect that contractual trust appears to be a characteristic of relationships which are felt to be insecure, while competence and goodwill trust are characteristics of relatively secure relationships. Thus, the findings concerning trust tend to support the contentions of (Sako, 1992; Blomqvist, 2000; Johnsen, 2004), who argue that goodwill and competence trust tend to become more important than contractual trust as the relationships between customer and supplier develops.

Cooperation

In this study, cooperation seems to be primarily the responsibility of the small suppliers. Larger customers are often able to unilaterally control the extent of cooperation with their small suppliers. Cooperation with their small supplier seems not to be a main concern of larger customers. On the other hand, small suppliers appear to experience little or no positive cooperation with their larger customers. Positive cooperation is evident when small suppliers have strong product R&D capabilities. Thus, the findings on cooperation tend to support the opinion of Powell *et al.* (1996) who suggest that the R&D of products is a significant stimulus to cooperative industrial activity. Therefore, product R&D capabilities are an important factor in business cooperation, helping to build a long-term business relationship.

Inconsistency

Ford *et al.* (1986) define inconsistency as ambiguity or lack of clarity in interaction. Inconsistency was shown by the small suppliers in the study. Internal (interpersonal and interdepartmental) communication problems especially those originating from low level staff, are the most commonly reported inconsistency in this study. Small suppliers do not report serious inconsistency in the relationship with their larger customers, but larger customers report that their small suppliers have on occasion misunderstood their requirements. This finding relates to that of Johnsen and Ford (2008), who maintain that supplier staff's personal expectations of the relationship is an important influence on how they cope with interpersonal inconsistency with larger customers.

Power/dependence

The findings of this study indicate that small suppliers have experienced difficulties with power and dependence in the relationship with their larger customer. Larger customers are generally more influential in the relationship between small suppliers and their larger customers, reflecting the inherent power imbalance implicit in the customer's control of order placement. Larger customers appear to determine the strategic direction of small suppliers. However, this imbalance is reduced when small suppliers have strong technology capabilities. This finding reflects the opinions of (Ring and Van De Ven, 1992; Khalid, 2002; Johnsen and Ford, 2008), who argue that technical ability is a common way for suppliers to counterbalance the inherent power of the customer.

Company size is not reported as a perceived influence on the relationship between small suppliers and their larger customers in this research. Larger customers are more interested in the specific product technology or other benefits that small suppliers offer them rather than relative company size; while small suppliers believe that offering positive products and customer service is the key point in building a relationship with their larger customer. Thus, our findings support the contention of Johnsen, (2005) that technical expertise is the most common source of power available to a small supplier.

9.2.2 Research Question 2:

- What are the different types of relationship development impacts that may influence the relationship development process between small suppliers and their larger customers?

The second research question of the thesis concerns the types of relationship development impacts on the small suppliers that may influence the relationship development process between them and their larger customers. This research has been identified three key areas of impacts on the small suppliers; in their operations management, strategy, and capabilities.

Supplier's Operations Management

In this research the supplier's operations management is taken to include the key functional areas of operations, technology, innovation, and customer service, which were selected for further study based on their importance (Heizer and Render, 2001).

Larger customers can unilaterally influence their small supplier's operations, by requiring just-in-time manufacturing methods, ISO certification, and electronics safety standards. Small suppliers' technology development is driven by the customer's requirement, reflecting the dependence of the small suppliers in the relationship. Small suppliers appear weak in marketing, management, and product innovation, and small suppliers' behaviour towards their customers appears to lack uniqueness and direction. Small suppliers realise that customer service is very important to the maintenance of a long-term relationship with their larger customers.

Thus, the relationship characteristics of particularity and power/dependence create relationship development impacts on the operations management of small suppliers and influence the relationship development process between small suppliers and their larger customers.

Supplier's Strategy

Supplier strategy is focused on price, distribution channel, and product (Johnson and Scholes, 1999). The findings indicate that small suppliers have in some cases made concessions on price to maintain the relationship with their larger customers. The distribution channel is similar for all small suppliers. Small suppliers perceive punctual deliveries to be very important in consolidating the relationship with their larger customer. Small suppliers develop products to the meet customer requirements, reflecting their dependence on their larger customers in the area of product development strategies. Product development is widely regarded as of central important for electronics companies (e.g. Biemans, 1992; Utterback, 1994; Kotler, 1997; Cooper, 1998; Gressetvold, 2004).

Therefore, the relationship characteristics of mutuality, cooperation, and power/dependence create relationship development impacts on the strategy of small suppliers and influence the relationship development process between small suppliers and their larger customers.

Supplier's Capabilities

This research builds on Leonard-Barton's (1992) view of core capabilities, which consist of employee knowledge and skills embodied in people, technology systems, managerial systems, and values and norms. In addressing the issue of supplier's capabilities, our findings indicate that small suppliers are weak in human capabilities, technological capabilities, managerial systems capabilities, and company culture. This reflects a general lack of training for employees. Such technological capabilities as

are possessed by small suppliers depend on some key individual staff. The majority of suppliers do not have strong managerial systems, and company culture is weak in all suppliers. This is consistent with the view expressed by, for example, Teece *et al.*, (1990) and Leonard-Barton, (1992), that suppliers' human capabilities can influence their technological capabilities, managerial systems capabilities, and company culture.

The relationship characteristic of inconsistency thus creates relationship development impacts on the capabilities of small suppliers and influences the relationship development process between small suppliers and their larger customers.

9.2.3 Research Question 3:

- What influences do the above relationship development impacts have on the relationship development process between small suppliers and their larger customers?

The third research question concerns the influence these relationship development impacts on the small supplier have on the relationship development process between small suppliers and their larger customers. The findings from the five case studies suggest that relationship characteristics create relationship development impacts on the small suppliers and in turn influence the relationship development process between small suppliers and their larger customers.

Operations

The majority of small suppliers did not run relationship development programmes with their larger customers. Small suppliers have to apply specific standards for their customers, consistent with a dominant role for the customer. Thus, small suppliers depend on their larger customers to give direction to their operational strategy.

The relationship characteristic of power/dependence creates relationship development impacts on the operations of the small suppliers and influences the relationship development process between small suppliers and their larger customers.

Technology

The findings indicate that small suppliers are weak in technology development and their technology is driven by their customers' requirement. Thus, larger customers determine the direction of technology development in the relationship with their small suppliers. Larger customers are dominant the technology development direction in the

relationship with their small suppliers.

The relationship characteristic of power/dependence creates relationship development impacts on the technology of the small suppliers and influences the relationship development process between small suppliers and their larger customers.

Innovation

The findings appear to show that small suppliers are generally weak in marketing, management, and especially in product innovation. Their product innovation tends to be adaptive rather than innovative, and the way small suppliers behave towards their larger customers reflects their weakness in product innovation.

These observations are compatible with the relationship characteristic of particularity creating relationship development impacts on the innovation of the small suppliers and influencing the relationship development process between small suppliers and their larger customers.

Customer Service

The findings from the cases reveal that small suppliers recognise that customer service is very important to consolidate the long-term relationship with their customers and they deal with customers' problems immediately. Thus, if suppliers make more efforts in customer service, it will increase the degree of goodwill-based (as opposed to contractually-based) trust with their customers (e.g. Håkansson, 1989; Sako, 1992, 1998; Young-Ybarra and Wiersema, 1999; Blomqvist, 2003, 2004).

These findings are consistent with the relationship characteristic of trust having relationship development impacts on the level of customer service provided by small suppliers and an influence on the relationship development process between small suppliers and their larger customers.

Price

The cases suggest that small suppliers' pricing strategy is to be a little cheaper than other (mostly larger) suppliers. Small suppliers have on occasions given up the insistence on their preferred price to maintain the relationship with their larger customer.

This is reflected in the relationship characteristic of mutuality, which affects small suppliers' prices and influences the relationship development process between small

suppliers and their larger customers.

Distribution Channel

The findings from the five sets case studies are that small suppliers understand that the delivery of goods on time is very important to the maintenance of a long-term relationship with customers. Small suppliers report no problems with their distribution channel. Thus, each counterpart has proved their abilities to fulfil their obligations to work together toward a mutual goal such as small suppliers have provided punctual delivery of goods to their larger customers.

The relationship characteristic of cooperation creates relationship development impacts on the distribution channel of small suppliers and influences the relationship development process between small suppliers and their larger customers.

Products

The findings from the cases suggest that small suppliers' product development is weaker than that of larger suppliers. Small suppliers appear to develop products to meet the customer's product specifications rather than innovate on their own initiative. Thus, their larger customer dominates their relationship in the area of product development strategies.

The relationship characteristic of power/dependence creates relationship development impacts on the small suppliers' product, and influence the relationship development process between small suppliers and their larger customers.

Capabilities

The findings from the five case studies show that small suppliers are weak in their core capabilities in the areas of employee knowledge and skills, technology, managerial systems, and values and norms. Small suppliers lack specialist employee training which may contribute to these weaknesses. Thus, human capabilities appear to limit the core capabilities of small suppliers, and may also on occasion be a cause of interpersonal inconsistencies with their larger customer.

The relationship characteristic of inconsistency creates relationship development impacts on the capabilities of small suppliers and influences the relationship development process between small suppliers and their larger customers.

The relationship characteristics create relationship development impacts on the

operations, technology, innovation, customer service, price, distribution channel, products, and capabilities of the small suppliers and influence the relationship development process between small suppliers and their larger customers. The findings indicate that capability limitations have important impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. This reflects the view of (Håkanson and Snehota, 1995; Rosenbröijer, 1998) that the capabilities of a company reflect the success in combining resources to perform activities via internal and external relationships. Especially, human capabilities demonstrate significant relationship development impacts on the small suppliers and influence the relationship development process between small suppliers and their larger customers. This agrees with the opinions of Teece *et al.*, (1990), and Leonard-Barton, (1992) that knowledge and skills embodied in people is most often associated with core capabilities.

9.3 Contributions to Knowledge

Overall, the main contribution of this thesis centres on an understanding of how relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers. More precisely, the contributions are concerned with the different impacts on the small suppliers that may influence the relationship development process between small suppliers and their larger customers. Thus, the primary contribution of this research is in the answers to research questions 2 and 3 in the conceptual framework.

This research primarily draws upon research from the Industrial Marketing and Purchasing Group (IMP Group). The IMP Group focuses on the relationship between customers and suppliers. It inspects industrial markets from different perspectives (IMP Group, 1982; Håkansson and Johanson, 1988; Håkansson and Snehota, 1995).

For the past 30 years, a number of studies have employed the "Interaction Approach" (IMP Group, 1982). These studies have focused on the interaction and relationships between buyer and seller industrial companies. Relative size was not considered in most of these early studies. More recent studies have focused on understanding relationship developments between customers and suppliers where there is a difference in size and importance between the parties (Blomqvist, 2002; Chen and Chen, 2002; Johnsen and Ford, 2004; Johnsen, 2005). However, there is a lack of research on both relationship characteristics and relationship development process. In

particular, the relationship development impacts of the characteristics of the relationship between small suppliers and their larger customers on the process of relationship development in the Taiwanese electronics industry, has not previously been examined. For that reason, this research has focused on the link between relationship characteristics and the relationship development process of firms that are of different sizes (i.e. the relationship between small suppliers and their larger customers). It proposes a new direction in researching how the relationship characteristics may create relationship development impacts on the small suppliers and may influence the relationship development process between small suppliers and their larger customers.

The findings from the five case studies have suggested particular impacts on the small suppliers which influence their relationship with their larger customers. The findings also indicate that capabilities are a particularly critical relationship development impact on the small suppliers and influence the relationship with their larger customers. This is because improving small suppliers' capabilities in certain areas such as technology, managerial systems, values and norms, and, most especially, employee knowledge and skills, will help small suppliers in managing their relationship with larger customers.

This thesis may help inform the development of managerial lessons for Taiwanese small suppliers, helping in developing their company or in enhancing the relationship with their larger customers in the Taiwanese electronics industry. Besides, this research may also help small suppliers in better managing their larger customers in other industries in Taiwan. As SMEs in Taiwan account for nearly 97.77% of all business enterprises in the country (Hsueh *et al.*, 2007), and 76.66% of the labour market (Ministry of Economic Affairs, 2006), SMEs are one of the pillars of Taiwan's economic success (Hsiao *et al.*, 2002). In particular, Taiwan's economic growth depends on the export of electronic products (Hwang, 2002). This thesis has therefore focused on a critical economic issue for Taiwan, and potentially could have significant practical impact.

The conceptual framework has examined relationship development impacts on the relationship development process between small suppliers and their larger customers. Thus this research extends the approach of the IMP Group, in a specific context.

9.4 Managerial Implications

The purpose of this section is to reflect on this thesis from the perspective of some managerial implications of the relationship development impacts on the relationship characteristics of small suppliers and their larger customers on the process of relationship development.

9.4.1 Understanding the Relationship Development Impacts on the Small Suppliers and the Influence on the Relationship Development Process between Small Suppliers and Their Larger Customers

The first managerial implication is an understanding of the different types of influences on the relationship development process between small suppliers and their larger customers. This thesis considers the relationship development impacts on the small suppliers in three functional areas, namely supplier's operations management, supplier's strategy, and supplier's capabilities.

Under supplier's operations management, supplier's operations, technology, innovation, and customer service are considered. Small suppliers show operational, technological, and innovation dependence on their larger customers. For instance, small suppliers have to apply specific standards for their larger customers that are consistent with a dominant role for the customers; their technology development is driven by customer requirements, and their product innovation tends to be adaptive rather than innovative. However, the majority of suppliers in this study show strong customer service, and recognise its importance for the maintenance of a long-term relationship with their larger customer. Thus, the relationship characteristics of cooperation and power/dependence create relationship development impacts on the operations management of small suppliers and influence the relationship development process between small suppliers and their larger customers.

The supplier's strategies concerning pricing, distribution channel, and product development were investigated. The findings indicate that all the small suppliers have given up their preferred price on occasion to maintain the relationship with their larger customers. Small suppliers appear to show no problems with their distribution channel, as they recognise that delivery of goods on time is very important to consolidate a long-term relationship with their customers. Their products development is to meet the customer's product specifications rather than innovate on their own initiative. Thus, the relationship characteristics of mutuality and particularity create relationship development impacts on the strategies of small suppliers and influence the relationship development process between small suppliers and their larger

customers.

Supplier's capabilities in this research focus on Leonard-Barton's (1992) view of core capabilities as employee knowledge and skills embodied in people, technology systems, managerial systems, and values and norms. The findings indicate that small suppliers are weak in human capabilities, technology capabilities, managerial systems, and company culture. Thus, the relationship characteristic of inconsistency creates relationship development impacts on the capabilities of small suppliers and influences the relationship development process between small suppliers and their larger customers.

9.4.2 The Development of Small Suppliers' Capabilities

An important managerial implication is that small suppliers need to consider how they develop core capabilities in the areas of employee knowledge and skills embodied in people, technology systems, managerial systems, and values and norms. The findings from the five case studies show that small suppliers lack specialised employee training especially for low level staff. Small suppliers lack resources to train staff, resulting in these weaknesses. Thus, employee knowledge and skills are highlighted as especially critical for improvement.

9.4.3 The Development of Small Suppliers' Resources

One managerial implication of this research is that it underscores the need for small suppliers to develop their capabilities. Small suppliers have limited financial there may be very good reason for small suppliers seeking and development its resources and may find it difficult to borrow money from a bank, perhaps to develop their business operations or run employee training programmes. Thus, small suppliers need to find alternative sources of finance. The Small and Medium Enterprise Administration of the Ministry of Economic Affairs promotes a "System of Honorary Consultative Attorneys for SMEs" project. This service provides a consultative channel on regulations (Small and Medium Enterprise Administration Ministry of Economic Affairs, 2005). In addition, the Small and Medium Enterprise Administration of the Ministry of Economic Affairs has provided guidance for SMEs in making good use of government resources (Small and Medium Enterprise Administration Ministry of Economic Affairs, 2007). Other resources may be accessed via a business association of SMEs or via collaboration with a university. Collaboration with universities may bring together students and industrialists who will

work side by side to pool their intellectual capital to make a difference in industry and higher education. This could also help suppliers to employ good staff.

9.5 Limitations of the Research Strategy

The aim of this section is to reflect on and identify limitations in the investigative approach. The investigation employed a qualitative method, being based on five in-depth case studies, in line with a phenomenological research philosophy.

Taiwanese electronics industry small suppliers and their larger customers were chosen as research subjects, small suppliers and their larger customers being defined by the number of employees and turnover. Since the small suppliers are SMEs, which play an especially important role in Taiwan's economy, the findings may also be applicable to customer relations in other Taiwanese industries.

One limitation concerns the effect on relationship development of small supplier capabilities. This study used the capability classification of Leonard-Barton (1992) who suggests company's core capabilities are employee knowledge and skills embodied in people, technology systems, managerial systems, and values and norms. However, these categories overlap, and our respondents sometimes seemed to have difficulty distinguishing between them. In addition, in the interests of consistency, the classification of capabilities was limited to that formulated by Leonard-Barton (1992). It may be that a synthesis of capability classifications, published by other authors, though difficult, would capture a richer and more discriminating summary of company capabilities.

This research follows three themes; relationship characteristics, relationship development impacts on the small suppliers, and the relationship development process. The approach to the relationship development impacts on the small suppliers is based on a synthesis from the strategic management and industrial marketing literature. Although other literature was considered in the initial stages of the research the approaches to relationship characteristics and relationship development process are more narrowly based on the work of Industrial Marketing Purchasing (IMP) Group. While the author feels the IMP approach is especially appropriate in these areas, this narrower basis may perhaps be considered a limitation.

A methodological limitation concerns the interviewees in this research. The research design involved five case studies and fifty participants, ten participants for each

relationship (five participants from the small supplier and five participants from their larger customer). All the participants are involved in the relationship between the small supplier and their larger customer. Key personnel, such as small supplier president, managing director, marketing manager, sales person, R&D manager; and larger customer purchasing manager, buyer, domestic department vice-managing director, were chosen. All the participants have arguably sufficient knowledge for this research, but the emphasis on key personnel under-represents the views and insights of lower-level staff. In a sense it mirrors the under-representation reported for the culture of some of the small suppliers, whose lower-level staff were under-trained, under-skilled and under-valued.

9.6 Recommendations for Further Research

This research uses exploratory in-depth case studies to test the conceptual framework. It does not attempt to use hypotheses to explore the relationship development impacts on the small suppliers and their influence on the relationship development process between small suppliers and their larger customers. Thus, the future research could use the quantitative approach to examine the conceptual framework.

A possible extension of the approach would be to examine the interplay of company role and company size. This research is focused on small suppliers and their larger customers. A suggested alternative could examine the relationship between larger suppliers and their small customers.

Another possible direction for future research could focus on different industrial markets. The present study is limited to the electronics industry and the Taiwan domestic market. Future research could apply the conceptual framework to different industries.

Finally, this research is primarily focused on the IMP literature. Thus future researchers could use different contexts and themes, with a modified to examine the conceptual framework.

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APPENDICES

Appendix 1: Research Indicators

The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Themes	Definitions	Indicators	Interview Questions
Mutuality	➢ The importance of the shared goals or common interests between the companies in the relationship (Ford *et al.*, 1986).	➢ Suppliers and customers are prepared to give up their individual goals for the sake of their relationship. ➢ Suppliers and customers develop their interests relative to the relationship, rather than individually.	➢ In which way does your customer/ supplier give up their individual goals for the relationship? ➢ How are goals developed in the relationship? ➢ What are your goals and interests in your relationship with your customer/ supplier? ➢ In which areas are goals similar and in which are they different? ➢ Who contributes most? ➢ Who gains most?
Particularity	➢ Direction and uniqueness of the interaction between supplier and customer in a relationship (Ford *et al.*, 1986).	➢ The supplier directs its resources and activities towards the customers. ➢ The customer directs its resources and activities towards the supplier.	➢ Does your customer/ supplier treat you in an individual or a more standardised way? (Please give examples.) ➢ How secure do you feel in this relationship? ➢ How does this compare to your other customers'/ suppliers' relationships?
Trust	➢ "One party's belief that its needs will be fulfilled in the future by actions taken	➢ Suppliers and customers believe that their own needs will be taken into account by the other party.	➢ In which areas do you trust your customer/ supplier? ➢ How would you describe trust in your relationship with your customer/ supplier?

	by the other party" (Anderson and Weitz, 1989, p.312).	➢ The degree of trust between suppliers and customers will influence their long-term business and will differ at different stages of the relationship development process.	
Cooperation	➢ Similar or complementary coordinated activities performed by firms in a business relationship to achieve mutual outcomes or singular outcome with expected reciprocity over time (Anderson and Narus, 1990).	➢ Suppliers and customers take coordinated actions to improve performance of both firms. ➢ Suppliers and customers' cooperation extent will differ at different stages of the relationship development process.	➢ How would you describe cooperation in your relationship with your customer/ supplier? ➢ How do you approach this cooperation? ➢ To what extent does the cooperation affect the business relationship development with your customer/ supplier? ➢ How does cooperation influence the way the relationship develops?
Inconsistency	➢ Ambiguity or lack of clarity in interaction (Ford *et al.*, 1986).	➢ Suppliers and customers report ambiguity or lack of clarity in communications with their counterpart in the relationship. ➢ Between suppliers and customers, different levels of inconsistency exist in different stages of the relationship development process.	➢ What is communication like between you and your customer/ supplier? ➢ Have you had any experiences of unclear communication in your relationship? (If yes, please give us examples.) ➢ How has unclear communication influenced the relationship in your experience?
Power/dependence	➢ Power as the ability of one partner to get the other	➢ Suppliers and customers have a balance of power in the mature stage of the relationship	➢ How do you and your customer/ supplier control different aspects of your relationship?

	partner to do something they would not normally do (Anderson and Weitz, 1989). ➢ Dependence is the obverse of power (Emerson, 1981).	development process.	➢ How does size difference influence to your relationship? ➢ Who is most influential in this relationship and in what areas are they influential? ➢ How would you describe the benefits in your relationship with your customer/ supplier?

Relationship Development Impacts on the Small Suppliers

Themes	Definitions	Indicators	Interview Questions
Operations	➢ "The processes within organisations that acquire inputs (people, capital and materials) and transform these inputs into outputs (services and goods) consumed by the public" (Vonderembse and White, 1996, p.3).	➢ When supplier has few customer relationships, the power of the customer is strong and supplier is dependent, the customers might dominate their relationship by requiring the supplier to focus largely on manufacturing.	➢ How many domestic customers do you have? ➢ Have you been involved in relationship development programmes with any suppliers and customers? (If so, can you tell your experience?) ➢ Do you need to meet any particular standards for your customer? ➢ Have you had to apply certain standards for your customer? ➢ Have you been expected to undertake any efficiency measures such as just-in-time? ➢ Has there been any quality control expectation that may have influenced your own quality control measures? ➢ What aspects of the relationship have been influenced by the operations activities?
Technology	➢ "The set of physical processes, methods, techniques, tools and equipment by which products are made or services rendered" (Skinner, 1982, p.464).	➢ When particularity is strong from supplier to customer, supplier may be required to direct its technological development towards few or single customer (e.g. builds its technology for one product of a	➢ How would you describe technology developments in your relationship? ➢ How influential are you and your customer in these developments? ➢ What aspects of the relationship have been influenced by

		particular customer).	your customer's technology expectations?
Innovation	➢ "Innovation is the process by which an invention is first transformed into a new commercial product, process or service" (Saren, 1984, p.11-12).	➢ When supplier cannot innovate new or better products to offer their customers, this may influence the mutuality between supplier and their customer.	➢ How does your company manage innovation? ➢ In what ways does innovation influence the relationship between you and your customer? ➢ What aspects of the relationship have been influenced by your customer's innovation expectations?
Customer Service	➢ "Including all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced, and provides added value in forms (such as convenience, amusement, timeliness, comfort, or health) that are essentially intangible concerns of its first purchaser" (Zeithaml and Bitner, 2003, p.3).	➢ When supplier is weak in the customer service, trust may be reduced in the relationship.	➢ How do you approach customer service in your company? ➢ How important is customer service to your customer? ➢ How does customer service influence the relationship to your customer? ➢ What aspects of the relationship have been influenced by your customer's customer service expectations?
Price	➢ Price is used as a "communicator as a bargaining tool and as a competitive weapon; and the customer can use price for comparing products, judging	➢ When the price of the small supplier is higher then larger supplier, the power of the customer is greater; tending to increase their dominance in the relationship.	➢ How do you develop your pricing strategies? ➢ How do your pricing strategies compare with those of competitors such as larger suppliers? ➢ How do your pricing strategies influence the relationship to your customer?

	relative value for money or judging product quality" (Brassington and Pettitt, 2003, p.391).		➢ What aspects of the relationship have been influenced by your customer's pricing expectations?
Distribution Channel	➢ The distribution channel is defined as "the structure linking a group of individuals or organisations through which a product or service is made available to the consumer or industrial user" (Brassington and Pettitt, 2003, p.472).	➢ When there is a lot of inconsistency between supplier and customer, supplier is less likely to deliver goods to their customers on time.	➢ How do you develop your distribution strategies? ➢ How do your distribution strategies compare with those of competitors such as larger suppliers? ➢ How do your distribution strategies influence the relationship to your customer? ➢ What aspects of the relationship have been influenced by your customer's distribution expectations?
Products	➢ "Anything can be offered to a market for attention, acquisition, use, or consumption and that might satisfy a want or need; it includes physical objects, services, persons, places, organisations, and ideas" (Kotler and Armstrong, 1994, p.276).	➢ When suppliers cannot offer varied products to customers, this may influence the cooperation of customer and supplier relationship.	➢ How do you develop your product strategies? ➢ How do your product strategies compare with those of competitors such as larger suppliers? ➢ How do your product strategies influence the relationship to your customer? ➢ What aspects of the relationship have been influenced by your customer's product expectations?
Capabilities	➢ "A set of differentiated skills, complementary assets, and	➢ When both of supplier and customer develop the internal structure of their	➢ What aspects of the relationship have been influenced by your employees' knowledge and skills?

	routines that provide the basis for a firm's competitive capacities and sustainable advantage in a particular business" (Teece *et al.*, 1990, p.28).	organisations, this may help mutuality and the relationship between them. ➢ When both of supplier and customer improve employees' knowledge and skills, it may help to reduce inconsistency between them. ➢ When both of supplier and customer improve manager's ability, it may reduce inconsistency and help solve problems between them. ➢ When trust is strong between supplier and their customers, it is easier for them to work toward common goals.	➢ What aspects of the relationship have been influenced by your technology abilities? ➢ How do you approach the development of managerial ability? ➢ What aspects of the relationship have been influenced by customer's expectations of your values and standards?

Appendix 2: Interview Guide Pilot Case Study: Interviews with Supplier

A. Company Background

- When was the company established?
  貴公司於何時設立?
- What are the major products of the company?
  貴公司的主要產品爲何?
- What is your position and responsibility in the company?
  你的職位及主要負責工作內容?
- How much is the turnover of the company?
  貴公司每年多少營業額?
- What is the number of employees?
  貴公司的員工總數?
- Where are the company's major markets?
  貴公司的主要市場是在那裡?

B. Relationship Background

- Which larger customer will be discussed in interview?
  貴公司將提供那一家較大的客戶做爲這次訪談的對象?
- How long have you been working together with your customer?
  貴公司與你的客戶往來多久了?
- Who is involved in this relationship with your customer?
  誰負責參予維持貴公司和客戶的關係?
- What kind of products do you sell to your customer?
  你賣那些產品給你的客戶?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- In which way does your customer give up their individual goals for the relationship?
  在那些方面你的客戶爲了與你的關係放棄他個別的目標?
- How are goals developed in the relationship?
  在這種關係下,你是如何發展目標的?

- What are your goals and interests in your relationship with your customer?
  你希望通過與客戶間的關係達到什麼目標及獲得什麼利益(好處)?
- In which areas are goals similar and in which are they different?
  那些方面的目標是一樣的? 那些是不同的?
- Who contributes most?
  誰的貢獻比較多?
- Who gains most?
  誰獲得的比較多?

Particularity

- Does your customer treat you in an individual or a more standardised way? (Please give examples.)
  你的客戶是以個體(個案)的還是規範(標準)的方式與你做買賣? (如果是,請舉例)
- How secure do you feel in this relationship?
  你認爲你們(與客戶)的關係有多可靠?
- How does this compare to your other customers' relationships?
  與其他客戶關係相比,你認爲這種關係可靠還是不可靠?

Trust

- In which areas do you trust your customer?
  你在那些方面信任你的客戶?
- How would you describe trust in your relationship with your customer?
  你如何描述"信賴"對於你和你客戶之間的關係?

Cooperation

- How would you describe cooperation in your relationship with your customer?
  你如何描述"合作"對於你和你客戶之間的關係?
- How do you approach this cooperation?
  你如何達到"合作"?
- To what extent does cooperation affect the business relationship development with your customer?
  "合作" 對於發展雙方關係有何種程度的影響?
- How does cooperation influence the way the relationship develops?
  "合作" 如何影響雙方發展關係?

Inconsistency

- What is communication like between you and your customer?

你和客戶溝通的狀況爲何?

- Have you had any experiences of unclear communication in your relationship? (If yes, please give us examples.)
  你曾經有和客戶溝通不良的經驗嗎? (如果有,請舉例)
- How has unclear communication influenced the relationship in your experience?
  在你的經驗中有沒有不良的溝通造成影響和客戶的關係?

Power/dependence

- How do you and your customer control different aspects of your relationship?
  你和你的客戶如何支配相互關係中不同的方面?
- How does size difference influence to your relationship?
  你和你的客戶的相對不同的規模是如何影響你與客戶之間的關係?
- Who is most influential in this relationship and in what areas are they influential?
  在你和你的客戶間的關係中,誰比較有影響力? 他們的影響在那些方面?
- How would you describe the benefits in your relationship with your customer?
  你如何描述你和你的客戶間的關係所帶來的好處?

D. Relationship Development Impacts on the Small Suppliers

Operations

- How many domestic customers do you have?
  你有多少國內的客戶?
- Have you been involved in relationship development programmes with any suppliers and customers? (If so, can you tell your experience?)
  你是否參與過一些發展與客戶及供應商關係的計劃嗎? (如果有,請告訴我你的經驗)
- Do you need to meet any particular standards for your customer?
  你需要達到客戶的特定標準嗎?
- Have you had to apply certain standards for your customer?
  你有沒有爲了你的客戶而不得不採用特定標準的經歷?
- Have you been expected to undertake any efficiency measures such as just-in-time?
  你是否曾被要求去做一些效率評估,例如零庫存?
- Has there been any quality control expectation that may have influenced your own quality control measures?
  貴公司對品管預期是否有影響到貴公司的品管衡量?

- What aspects of the relationship have been influenced by the operations activities?
  公司經營的活動影響相互關係的那些方面?

Technology

- How would you describe technology developments in your relationship?
  你如何描述技術發展對於你與客戶的相互關係?
- How influential are you and your customer in these developments?
  技術發展如何影響你和你的客戶的關係?
- What aspects of the relationship have been influenced by your customer's technology expectations?
  你的客戶對技術的期待影響相互關係的那些方面?

Innovation

- How does your company manage innovation?
  貴公司如何管理創新?
- In what ways does innovation influence the relationship between you and your customer?
  創新如何影響貴公司和客戶的關係?
- What aspects of the relationship have been influenced by your customer's innovation expectations?
  你的客戶對創新的預期影響相互關係的那些方面?

Customer Service

- How do you approach the customer service in your company?
  貴公司如何處理客戶服務?
- How important is customer service to your customer?
  客戶服務對你的客戶有多重要?
- How does customer service influence the relationship to your customer?
  客戶服務如何影響你和客戶間的關係?
- What aspects of the relationship have been influenced by your customer's customer service expectations?
  你的客戶對客戶服務預期影響相互關係的那些方面?

Price

- How do you develop your pricing strategies?
  貴公司如何發展訂價的策略?
- How do your pricing strategies compare with those of competitors such as

larger suppliers?
你的訂價策略和其他競爭者例如較大的供應商比較起來有何異同?

- How do your pricing strategies influence the relationship to your customer?
  你的訂價策略如何影響你和顧客之間的關係?
- What aspects of the relationship have been influenced by your customer's pricing expectations?
  你的客戶對價格的期待影響相互關係的那些方面?

Distribution Channel

- How do you develop your distribution strategies?
  貴公司如何發展通路策略?
- How do your distribution strategies compare with those of competitors such as larger suppliers?
  你的通路策略和其他競爭者例如較大的供應商比較起來有何異同?
- How do your distribution strategies influence the relationship to your customer?
  你的通路策略如何影響你和顧客之間的關係?
- What aspects of the relationship have been influenced by your customer's distribution expectations?
  你的客戶對通路的期待影響相互關係的那些方面?

Products

- How do you develop your product strategies?
  貴公司如何發展產品的策略?
- How do your product strategies compare with those of competitors such as larger suppliers?
  你的產品策略和其他競爭者例如較大的供應商比較起來有何異同?
- How do your product strategies influence the relationship to your customer?
  你的產品策略如何影響你和顧客之間的關係?
- What aspects of the relationship have been influenced by your customer's product expectations?
  你的客戶對產品的期待影響相互關係的那些方面?

Capabilities

- What aspects of the relationship have been influenced by your employees' knowledge and skills?
  你的公司員工的知識與技能影響相互關係的那些方面?
- What aspects of the relationship have been influenced by your technology

abilities?
你的公司本身的技術能力影響相互關係的那些方面?

- How do you approach the development of managerial ability?
  你如何著手培養管理人(經理人)的能力?
- What aspects of the relationship have been influenced by the customer's expectations of your values and standards?
  你的客戶的預期價值和標準影響相互關係的那些方面?

Appendix 3: Interview Guide Pilot Case Study: Interviews with Customer

A. Company Background

- When was the company established?
  貴公司於何時設立?
- What are the major products of the company?
  貴公司的主要產品爲何?
- What is your position and responsibility in the company?
  你的職位及主要負責工作內容?
- How much is the turnover of the company?
  貴公司每年多少營業額?
- What is the number of employees?
  貴公司的員工總數?
- Where are the company's major markets?
  貴公司的主要市場是在那裡?

B. Relationship Background

- Which small supplier will be discussed in the interview?
  貴公司將提供那一家較小的供應商做爲這次訪談的對象?
- How long have you been working with your supplier?
  貴公司與你的供應商往來多久了?
- Who is involved in this relationship with your supplier?
  誰負責參予維持貴公司和供應商的關係?
- What kind of products do you buy from your supplier?
  你買那些產品從你的供應商?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- In what ways does your supplier give up their individual goals for the relationship?
  在那些方面你的供應商爲了與你的關係放棄他個別的目標?
- How are goals developed in the relationship?
  在這種關係下,你是如何發展目標的?

- What are your goals and interests in your relationship with your supplier?
  你希望通過與供應商間的關係達到什麼目標及獲得什麼利益(好處)?
- In which areas are goals similar and in which are they different?
  那些方面的目標是一樣的? 那些是不同的?
- Who contributes most?
  誰的貢獻比較多?
- Who gains most?
  誰獲得的比較多?

Particularity

- Does your supplier treat you in an individual or a more standardised way? (Please give examples.)
  你的供應商是以個體(個案)的還是規範(標準)的方式與你做買賣? (如果是, 請舉例)
- How secure do you feel in this relationship?
  你認爲你們(與供應商)的關係有多可靠?
- How does this compare to your other suppliers' relationships?
  與其他供應商關係相比,你認爲這種關係可靠還是不可靠?

Trust

- In which areas do you trust your supplier?
  你在那些方面信任你的供應商?
- How would you describe trust in your relationship with your supplier?
  你如何描述"信賴"對於你和你供應商之間的關係?

Cooperation

- How would you describe cooperation in your relationship with your supplier?
  你如何描述"合作"對於你和你供應商之間的關係?
- How do you approach this cooperation?
  你如何達到"合作"?
- To what extent does cooperation affect the business relationship development with your supplier?
  "合作" 對於發展雙方關係有何種程度的影響?
- How does cooperation influence the way the relationship develops?
  "合作" 如何影響雙方發展關係?

Inconsistency

- What is the communication like between you and your supplier?

你和供應商溝通的狀況爲何?

- Have you had any experiences of unclear communication in your relationship? (If yes, please give us examples.)
  你曾經有和供應商溝通不良的經驗嗎? (如果有,請舉例)
- How has unclear communication influenced the relationship in your experience?
  在你的經驗中有沒有不良的溝通造成影響和供應商的關係?

Power/dependence

- How do you and your supplier control different aspects of your relationship?
  你和你的供應商如何支配相互關係中不同的方面?
- How does size difference influence to your relationship?
  你和你的客戶的相對不同的規模是如何影響你與供應商之間的關係?
- Who is most influential in this relationship and in what areas are they influential?
  在你和你的供應商間的關係中,誰比較有影響力? 他們的影響在那些方面?
- How would you describe the benefits in your relationship with your supplier?
  你如何描述你和你的供應商間的關係所帶來的好處?

Appendix 4: Letter from British Council in Taiwan

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Fax		Tel	+ 886 (0) 7 235 1715 ext 13
Date	25 May 2005	Fax	+ 886 (0) 7 238 0411
Ref	Appendix Translation	No of pages	1 +

Dear Ms. Lee,

In response to your request, please find attached two appendixes which have been translated based on your Chinese versions (as bracketed) into English ones.

Should there be of any questions, please feel free to let me know.

Sincerely yours,

Suzanne Yang
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British Council, Kaohsiung Office
Tel# +886 7 235 1715 ext 13
Fax#+886 7 238 0411
E-mail: suzanne.yang@britishcouncil.org.tw

Appendix 5: Interview Guide Pilot Case Study: Interviews with Supplier (Translation by British Council in Taiwan)

A. Company Background

- (貴公司於何時設立?)
  When was your company established?
- (貴公司的主要產品爲何?)
  What are the major products of your company?
- (你的職位及主要負責工作內容?)
  What is your position and responsibility in the company?
- (貴公司每年多少營業額?)
  How much is the turnover of your company?
- (貴公司的員工總數?)
  What is the total number of employees in your company?
- (貴公司的主要市場是在那裡?)
  Where are your company's major markets?

B. Relationship Background

- (貴公司將提供那一家較大的客戶做爲這次訪談的對象?)
  Which larger customer will be discussed in this interview?
- (貴公司與你的客戶往來多久了?)
  How long have you been working with your customer?
- (誰負責參予維持貴公司和客戶的關係?)
  Who is involved in keeping this relationship with your customer?
- (你賣那些產品給你的客戶?)
  What kind of products is sold to your customer?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- (在那些方面你的客戶爲了與你的關係放棄他個別的目標?)
  In which area will your customer give up his individual goals for keeping the relationship with you?
- (在這種關係下,你是如何發展目標的?)
  How are goals developed in the relationship?

- (你希望通過與客戶間的關係達到什麼目標及獲得什麼利益,好處?)
  What are your goals and interests in your relationship with your customer?
- (那些方面的目標是一樣的? 那些是不同的?)
  In which areas are goals similar and in which areas are they different?
- (誰的貢獻比較多?)
  Who contributes most?
- (誰獲得的比較多?)
  Who gains most?

Particularity

- (你的客戶是以個體,個案的還是規範,標準的方式與你做買賣? 如果是,請舉例)
  Does your customer treat you in an individual or a more standardised way? Please give examples.
- (你認爲你們與客戶的關係有多可靠?)
  How secure do you feel in this relationship?
- (與其他客戶關係相比,你認爲這種關係可靠還是不可靠?)
  Do you think this kind of special relationship more secure or insecure in comparison with your relationships with other customers?

Trust

- (你在那些方面信任你的客戶?)
  In which areas do you trust your customer?
- (你如何描述 "信賴" 對於你和你客戶之間的關係?)
  How would you describe "trust" in your relationship with your customer?

Cooperation

- (你如何描述 "合作" 對於你和你客戶之間的關係?)
  How would you describe "cooperation" in your relationship with your customer?
- (你如何達到 "合作" ?)
  How do you reach this cooperation?
- ("合作" 對於發展雙方關係有何種程度的影響?)
  To what extent does the cooperation affect the business relationship development with your customer?
- ("合作" 如何影響雙方發展關係?)
  How does cooperation affect the way the relationship developed?

Inconsistency

- (你和客戶溝通的狀況爲何?)
  What is the communication status between you and your customer?
- (你曾經有和客戶溝通不良的經驗嗎? 如果有,請舉例)
  Have you had any experiences of unclear communication with your customer?
  If yes, please give us examples
- (在你的經驗中不良的溝通如何影響你和客戶的關係?)
  How has unclear communication influenced the relationship in your experiences?

Power/dependence

- (你和你的客戶如何支配相互關係中不同的方面?)
  How do you and your customer control different aspects of your relationship?
- (不同的公司規模是如何影響你與客戶之間的關係?)
  How does size difference influence your relationship?
- (在你和你的客戶間的關係中,誰比較有影響力? 他們的影響在那些方面?)
  Who has the most influence in this relationship and in what areas?
- (你如何描述你和你的客戶間的關係所帶來的好處?)
  How do you describe the benefits in your relationship with your customer?

D. Relationship Development Impacts on the Small Suppliers

Operations

- (你有多少國內的客戶?)
  How many domestic customers do you have?
- (你是否參與過一些發展與客戶及供應商關係的計劃嗎? 如果有,請告訴我你的經驗)
  Have you been involved in relationship development programmes with any suppliers and customers? If yes, please advise your experiences.
- (你需要達到客戶的特定標準嗎?)
  Do you need to meet any particular standards set by your customer?
- (你有沒有爲了你的客戶而不得不採用特定標準的經歷?)
  Have you had any experiences in applying certain standards for your customer?
- (你是否曾被要求去做一些效率評估,例如零庫存?)
  Have you been expected to undertake any efficiency measures such as just-in-time?
- (貴公司對品管預期是否有影響到貴公司的品管衡量?)
  Has there been any quality control expectation that may have influenced your

own quality control measures?

- (公司經營的活動影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by the activities of the operation?

Technology

- (你如何描述技術發展對於你與客戶的相互關係?)
  How would you describe the technology developments in your relationship?
- (技術發展如何影響你和你的客戶的關係?)
  How influential are you and your customer in these technology developments?
- (你的客戶對技術的期待影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward technology?

Innovation

- (貴公司如何管理創新?)
  How does your company manage innovation?
- (創新如何影響貴公司和客戶的關係?)
  In what ways does innovation influence the relationship between you and your customer?
- (你的客戶對創新的預期影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward innovation?

Customer Service

- (貴公司如何處理客戶服務?)
  How do you approach the customer service in your company?
- (客戶服務對你的客戶有多重要?)
  How important is the customer service to your customer?
- (客戶服務如何影響你和客戶間的關係?)
  How does the customer service influence the relationship with your customer?
- (你的客戶對客戶服務預期影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward customer service?

Price

- (貴公司如何發展訂價的策略?)
  How do you develop your pricing strategies?

- (你的訂價策略和其他競爭者例如較大的供應商比較起來有何異同?)
  How are your pricing strategies in comparison with those of other competitors such as larger suppliers?
- (你的訂價策略如何影響你和顧客之間的關係?)
  How do your pricing strategies influence the relationship with your customer?
- (你的客戶對價格的期待影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward pricing?

Distribution Channel

- (貴公司如何發展通路策略?)
  How do you develop your distribution strategies?
- (你的通路策略和其他競爭者例如較大的供應商比較起來有何異同?)
  How are your distribution strategies in comparison with those of other competitors such as larger suppliers?
- (你的通路策略如何影響你和顧客之間的關係?)
  How do your distribution strategies influence the relationship with your customer?
- (你的客戶對通路的期待影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward distribution?

Products

- (貴公司如何發展產品的策略?)
  How do you develop your product strategies?
- (你的產品策略和其他競爭者例如較大的供應商比較起來有何異同?)
  How are your product strategies in comparison with those of other competitors such as larger suppliers?
- (你的產品策略如何影響你和顧客之間的關係?)
  How do your product strategies influence the relationship with your customer?
- (你的客戶對產品的期待影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your customer's expectations toward product?

Capabilities

- (你的公司員工的知識與技能影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your employees' knowledge and skills?

- (你的公司本身的技術能力影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by your technology abilities?
- (你如何著手培養管理能力?)
  How do you approach the development of managerial abilities?
- (你的客戶的預期價值和標準影響相互關係的那些方面?)
  What aspects of the relationship have been influenced by customer's expectations toward your values and standards?

Appendix 6: Interview Guide Pilot Case Study: Interviews with Customer (Translation by British Council in Taiwan)

A. Company Background

- (貴公司於何時設立?)
  When was your company established?
- (貴公司的主要產品爲何?)
  What are the major products of your company?
- (你的職位及主要負責工作內容?)
  What is your position and responsibility in the company?
- (貴公司每年多少營業額?)
  How much is the turnover of your company?
- (貴公司的員工總數?)
  What is the total number of employees in your company?
- (貴公司的主要市場是在那裡?)
  Where are your company's major markets?

B. Relationship Background

- (貴公司將提供那一家較小的供應商做爲這次訪談的對象?)
  Which small supplier will be discussed in this interview?
- (貴公司與你的供應商往來多久了?)
  How long have you been working to with your supplier?
- (誰負責參予維持貴公司和供應商的關係?)
  Who is involved in keeping this relationship with your supplier?
- (你買那些產品從你的供應商?)
  What kind of products do you buy from your supplier?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- (在那些方面你的供應商爲了與你的關係放棄他個別的目標?)
  In which area will your supplier give up his individual goals for keeping the relationship with you?
- (在這種關係下,你是如何發展目標的?)
  How are goals developed in the relationship?

- (你希望通過與供應商間的關係達到什麼目標及獲得什麼利益,好處?)
  What are your goals and interests in your relationship with your supplier?
- (那些方面的目標是一樣的? 那些是不同的?)
  In which areas are goals similar and in which areas are they different?
- (誰的貢獻比較多?)
  Who contributes most?
- (誰獲得的比較多?)
  Who gains most?

Particularity

- (你的供應商是以個體,個案的還是規範,標準的方式與你做買賣? 如果是,請舉例)
  Does your supplier treat you in an individual or a more standardised way? Please give examples.
- (你認爲你們與供應商的關係有多可靠?)
  How secure do you feel in this relationship?
- (與其他供應商關係相比,你認爲這種關係可靠還是不可靠?)
  Do you think this kind of special relationship more secure or insecure in comparison with your relationships with other suppliers?

Trust

- (你在那些方面信任你的供應商?)
  In which areas do you trust your supplier?
- (你如何描述 "信賴" 對於你和你供應商之間的關係?)
  How would you describe "trust" in your relationship with your supplier?

Cooperation

- (你如何描述 "合作" 對於你和你供應商之間的關係?)
  How would you describe "cooperation" in your relationship with your supplier?
- (你如何達到 "合作" ?)
  How do you reach this cooperation?
- ("合作" 對於發展雙方關係有何種程度的影響?)
  To what extent does the cooperation affect the business relationship development with your supplier?
- ("合作" 如何影響雙方發展關係?)
  How does cooperation affect the way the relationship developed?

Inconsistency

- (你和供應商溝通的狀況爲何?)
  What is the communication status between you and your supplier?
- (你曾經有和供應商溝通不良的經驗嗎? 如果有,請舉例)
  Have you had any experiences of unclear communication with your customer? (If yes, please give us examples)
- (在你的經驗中不良的溝通如何影響你和供應商的關係?)
  How has unclear communication influenced the relationship in your experiences?

Power/dependence

- (你和你的供應商如何支配相互關係中不同的方面?)
  How do you and your supplier control different aspects of your relationship?
- (不同的公司規模是如何影響你與供應商之間的關係?)
  How does size difference influence your relationship?
- (在你和你的供應商間的關係中,誰比較有影響力?他們的影響在那些方面?)
  Who has the most influence in this relationship and in what areas?
- (你如何描述你和你的供應商間的關係所帶來的好處?)
  How do you describe the benefits in your relationship with your supplier?

Appendix 7: Revised Interview Guide: Interviews with Suppliers

A. Company Background

- When was the company established?
  貴公司於何時設立?
- What are the major products of the company?
  貴公司的主要產品爲何?
- What is your position and responsibility in the company?
  你的職位及主要負責工作內容?
- How much is the turnover of the company?
  貴公司每年多少營業額?
- What is the number of employees?
  貴公司的員工總數?
- Where are the company's major markets?
  貴公司的主要市場是在那裡?

B. Relationship Background

- Which larger customer will be discussed in interview?
  貴公司將提供那一家較大的客戶做爲這次訪談的對象?
- How long have you been working together with your customer?
  貴公司與你的客戶往來多久了?
- Who is involved in this relationship with your customer?
  誰負責參予維持貴公司和客戶的關係?
- What kind of products do you sell to your customer?
  你賣那些產品給你的客戶?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- In which way does your customer give up their individual goals for the relationship?
  在那些方面你的客戶爲了與你的關係放棄他個別的目標?
- How are goals developed in the relationship?
  在這種關係下,你是如何發展目標的?
- What are your goals and interests in your relationship with your customer?

你希望通過與客戶間的關係達到什麼目標及獲得什麼利益(好處)?

- In which areas are goals similar and in which are they different?
  那些方面的目標是一樣的? 那些是不同的?
- Who contributes most?
  誰的貢獻比較多?
- Who gains most?
  誰獲得的比較多?

Particularity

- Does your customer treat you in an individual or a more standardised way? (Please give examples.)
  你的客戶是以個體(個案)的還是規範(標準)的方式與你做買賣? (如果是,請舉例)
- How secure do you feel in this relationship?
  你認爲你們(與客戶)的關係有多可靠?
- How does this compare to your other customers' relationships?
  與其他客戶關係相比,你認爲這種關係可靠還是不可靠?

Trust

- In which areas do you trust your customer?
  你在那些方面信任你的客戶?
- How would you describe trust in your relationship with your customer?
  你如何描述"信賴"對於你和你客戶之間的關係?

Cooperation

- How would you describe cooperation in your relationship with your customer?
  你如何描述"合作"對於你和你客戶之間的關係?
- To what extent does cooperation affect the business relationship development with your customer?
  "合作"對於發展雙方關係有何種程度的影響?
- How does cooperation influence the way the relationship develops?
  "合作"如何影響雙方發展關係?

Inconsistency

- What is communication like between you and your customer?
  你和客戶溝通的狀況爲何?
- Have you had any experiences of unclear communication in your relationship? (If yes, please give us examples.)

你曾經有和客戶溝通不良的經驗嗎? (如果有,請舉例)

- How has unclear communication influenced the relationship in your experience?
  在你的經驗中有沒有不良的溝通造成影響和客戶的關係?

Power/dependence

- How do you and your customer control different aspects of your relationship?
  你和你的客戶如何支配相互關係中不同的方面?
- How does size difference influence to your relationship?
  你和你的客戶的相對不同的規模是如何影響你與客戶之間的關係?
- Who is most influential in this relationship and in what areas are they influential?
  在你和你的客戶間的關係中,誰比較有影響力? 他們的影響在那些方面?
- How would you describe the benefits in your relationship with your customer?
  你如何描述你和你的客戶間的關係所帶來的好處?

D. Relationship Development Impacts on the Small Suppliers

Operations

- How many domestic customers do you have?
  你有多少國內的客戶?
- Have you been involved in relationship development programmes with any suppliers and customers? (If so, can you tell your experience?)
  你是否參與過一些發展與客戶及供應商關係的計劃嗎? (如果有,請告訴我你的經驗)
- Do you need to meet any particular standards for your customer?
  你需要達到客戶的特定標準嗎?
- Have you had to apply certain standards for your customer?
  你有沒有爲了你的客戶而不得不採用特定標準的經歷?
- Have you been expected to undertake any efficiency measures?
  你是否曾被要求去做一些效率評估?
- Has there been any quality control expectation that may have influenced your own quality control measures?
  貴公司對品管預期是否有影響到貴公司的品管衡量?
- What aspects of the relationship have been influenced by the operations activities?
  公司經營的活動影響相互關係的那些方面?

Technology

- How would you describe technology developments in your relationship?
  你如何描述技術發展對於你與客戶的相互關係?
- How influential are you and your customer in these developments?
  技術發展如何影響你和你的客戶的關係?
- What aspects of the relationship have been influenced by your customer's technology expectations?
  你的客戶對技術的期待影響相互關係的那些方面?

Innovation

- How does your company manage innovation?
  貴公司如何管理創新?
- In what ways does innovation influence the relationship between you and your customer?
  創新如何影響貴公司和客戶的關係?
- What aspects of the relationship have been influenced by your customer's innovation expectations?
  你的客戶對創新的預期影響相互關係的那些方面?

Customer Service

- How do you approach the customer service in your company?
  貴公司如何處理客戶服務?
- How important is customer service to your customer?
  客戶服務對你的客戶有多重要?
- How does customer service influence the relationship to your customer?
  客戶服務如何影響你和客戶間的關係?
- What aspects of the relationship have been influenced by your customer's customer service expectations?
  你的客戶對客戶服務預期影響相互關係的那些方面?

Price

- How do you develop your pricing strategies?
  貴公司如何發展訂價的策略?
- How do your pricing strategies compare with those of competitors such as larger suppliers?
  你的訂價策略和其他競爭者例如較大的供應商比較起來有何異同?
- How do your pricing strategies influence the relationship to your customer?
  你的訂價策略如何影響你和顧客之間的關係?

- What aspects of the relationship have been influenced by your customer's pricing expectations?
  你的客戶對價格的期待影響相互關係的那些方面?

Distribution Channel

- How do you develop your distribution strategies?
  貴公司如何發展通路策略?
- How do your distribution strategies compare with those of competitors such as larger suppliers?
  你的通路策略和其他競爭者例如較大的供應商比較起來有何異同?
- How do your distribution strategies influence the relationship to your customer?
  你的通路策略如何影響你和顧客之間的關係?
- What aspects of the relationship have been influenced by your customer's distribution expectations?
  你的客戶對通路的期待影響相互關係的那些方面?

Products

- How do you develop your product strategies?
  貴公司如何發展產品的策略?
- How do your product strategies compare with those of competitors such as larger suppliers?
  你的產品策略和其他競爭者例如較大的供應商比較起來有何異同?
- How do your product strategies influence the relationship to your customer?
  你的產品策略如何影響你和顧客之間的關係?
- What aspects of the relationship have been influenced by your customer's product expectations?
  你的客戶對產品的期待影響相互關係的那些方面?

Capabilities

- What aspects of the relationship have been influenced by your employees' knowledge and skills?
  你的公司員工的知識與技能影響相互關係的那些方面?
- What aspects of the relationship have been influenced by your technology abilities?
  你的公司本身的技術能力影響相互關係的那些方面?
- How do you approach the development of managerial ability?
  你如何著手培養管理人(經理人)的能力?

- What aspects of the relationship have been influenced by the customer's expectations of your values and standards?
  你的客戶的預期價值和標準影響相互關係的那些方面?

Appendix 8: Revised Interview Guide: Interviews with Customers

A. Company Background

- When was the company established?
  貴公司於何時設立?
- What are the major products of the company?
  貴公司的主要產品爲何?
- What is your position and responsibility in the company?
  你的職位及主要負責工作內容?
- How much is the turnover of the company?
  貴公司每年多少營業額?
- What is the number of employees?
  貴公司的員工總數?
- Where are the company's major markets?
  貴公司的主要市場是在那裡?

B. Relationship Background

- Which small supplier will be discussed in the interview?
  貴公司將提供那一家較小的供應商做爲這次訪談的對象?
- How long have you been working with your supplier?
  貴公司與你的供應商往來多久了?
- Who is involved in this relationship with your supplier?
  誰負責參予維持貴公司和供應商的關係?
- What kind of products do you buy from your supplier?
  你買那些產品從你的供應商?

C. The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Mutuality

- In what ways does your supplier give up their individual goals for the relationship?
  在那些方面你的供應商爲了與你的關係放棄他個別的目標?
- How are goals developed in the relationship?
  在這種關係下,你是如何發展目標的?
- What are your goals and interests in your relationship with your supplier?

你希望通過與供應商間的關係達到什麼目標及獲得什麼利益(好處)?

- In which areas are goals similar and in which are they different?
  那些方面的目標是一樣的? 那些是不同的?
- Who contributes most?
  誰的貢獻比較多?
- Who gains most?
  誰獲得的比較多?

Particularity

- Does your supplier treat you in an individual or a more standardised way? (Please give example)
  你的供應商是以個體(個案)的還是規範(標準)的方式與你做買賣? (如果是, 請舉例)
- How secure do you feel in this relationship?
  你認爲你們(與供應商)的關係有多可靠?
- How does this compare to your other suppliers' relationships?
  與其他供應商關係相比,你認爲這種關係可靠還是不可靠?

Trust

- In which areas do you trust your supplier?
  你在那些方面信任你的供應商?
- How would you describe trust in your relationship with your supplier?
  你如何描述"信賴"對於你和你供應商之間的關係?

Cooperation

- How would you describe cooperation in your relationship with your supplier?
  你如何描述"合作"對於你和你供應商之間的關係?
- To what extent does cooperation affect the business relationship development with your supplier?
  "合作"對於發展雙方關係有何種程度的影響?
- How does cooperation influence the way the relationship develops?
  "合作"如何影響雙方發展關係?

Inconsistency

- What is the communication like between you and your supplier?
  你和供應商溝通的狀況爲何?
- Have you had any experiences of unclear communication in your relationship? (If yes, please give us examples.)

你曾經有和供應商溝通不良的經驗嗎? (如果有,請舉例)

- How has unclear communication influenced the relationship in your experience?
  在你的經驗中不良的溝通如何影響你和供應商的關係?

Power/dependence

- How do you and your supplier control different aspects of your relationship?
  你和你的供應商如何支配相互關係中不同的方面?
- How does size difference influence to your relationship?
  你和你的客戶的相對不同的規模是如何影響你與供應商之間的關係?
- Who is most influential in this relationship and in what areas are they influential?
  在你和你的供應商間的關係中,誰比較有影響力? 他們的影響在那些方面?
- How would you describe the benefits in your relationship with your supplier?
  你如何描述你和你的供應商間的關係所帶來的好處?

Appendix 9: Analysis and Interpretation from Supplier A's (Chip) Perspective

Company Background

The company was established in 1988.
Major products: chip resistors.
Company turnover: around NT$ 50 million per year (around £0.83 million per year).
The company has 100 employees.
The company has around 10 domestic customers, and its major markets are Taiwan, U.S.A., and Mainland China.

Relationship Background

Larger customer: customer A (Resistor).
Relationship duration: approximately three years.
Participants of this relationship: The domestic marketing manager and domestic marketing department are mainly responsible for maintaining the relationship. The R&D manager only deals with product design and product technology problems. The manufacturing director only participates to address complaints on product quality. The supply chain manager only deals with product packing and delivery.
Types of products sold to customer A (Resistor): chip resistors.

Supplier A (Chip) Respondent Roles

Interviewees / Themes	Managing Director	Domestic Marketing Manager	R&D Manager	Manufacturing Director	Supply Chain Manager
Respondent's Role	➢ Responsible for all company management policy and operations.	➢ Responsible for the development of company business in Taiwan.	➢ Responsible for the R&D of improved products.	➢ Responsible for production management and product quality.	➢ Responsible for the company material supply, handling, and storage.

Supplier A's (Chip) Perspective on the Characteristics of the Relationship

Themes \ Interviewees	Managing Director	Domestic Marketing Manager	R&D Manager	Manufacturing Director	Supply Chain Manager
The Characteristics of the Relationship between Small Supplier A (Chip) and Their Larger Customer A (Resistor)					
Mutuality	➢ Resistor concedes on its preferred price to maintain the relationship with Chip. ➢ The relationship development goal is to set up a strategic alliance. ➢ Resistor seems only interested in their company development rather than in relationship development. ➢ Chip's main goal is to obtain long-term and stable order placement.	➢ In some cases, Resistor makes concessions on price and delivery date. ➢ The relationship development goal is to increase the volume of orders. ➢ Resistor seems only interested in their company development. ➢ The main goal for Chip is to obtain higher volume and more stable order placement. ➢ Chip contributes most and Resistor gains most.	➢ Resistor concedes higher prices in order to maintain the relationship. ➢ The relationship development goal is to increase the volume of orders. ➢ Both companies have similar goals in the R&D of better products for Resistor. ➢ Chip contributes more and Resistor gains more.	➢ In some cases, Resistor concedes on delivery date in order to maintain the relationship. ➢ The relationship development goal is to increase company profits. ➢ Both companies have similar goals in improving product quality. ➢ Both parties contribute and gain in this relationship.	➢ In some cases, Resistor makes concessions on packaging. ➢ The relationship development goal is to obtain mutual benefit from the relationship. ➢ Not sure who contributes or gains most.

	➢ Chip contributes most and Resistor gains most.				
Particularity	➢ Based on individual transactions. ➢ The relationship is secure with Resistor. ➢ The relationship is secure with all of their customers.	➢ Based on individual transactions. ➢ The relationship with Resistor is secure. ➢ Chip has a secure relationship with all of their customers.	➢ Based on individual transactions. ➢ The relationship is secure. ➢ The relationship with Resistor is secure compared with those with other suppliers.	➢ Based on individual transactions. ➢ The relationship is secure. ➢ The relationship with Resistor and those with other customers are similar.	➢ Based on individual transactions. ➢ The relationship is secure. ➢ Not very sure about how this relationship compares with other customer relationships.
Trust	➢ They trust Resistor due to the long-term relationship and their positive reputation. ➢ They trust each other.	➢ Resistor has goodwill in this area of business. ➢ The domestic marketing manager believes they trust each other.	➢ The R&D manager believes that they trust each other. This is because sometimes he has faults in product design. Resistor always gives him opportunity to improve.	➢ Resistor has credibility in the business. ➢ They trust each other.	➢ Resistor has positive reputation in this area of business. ➢ Resistor trusts Chip to deliver goods on time.
Cooperation	➢ Chip does their best to cooperate with	➢ Chip does their best to meet Resistor's	➢ Positive cooperation can help the R&D	➢ The manufacturing director does his best	➢ The supply chain manager does his best

	Resistor. ➢ Positive cooperation creates maximum profit for both partners.	requirements. ➢ Chip gives Resistor's orders priority. ➢ Positive cooperation can increase both companies' competitive ability.	manager develop new products.	to cooperate with Resistor in urgent requests.	to cooperate with Resistor on delivery time.
Inconsistency	➢ No serious communication problems exist between them.	➢ No serious communication problems exist between them. ➢ There have been some cases of incorrect product labelling.	➢ In some cases, the R&D manager does not very clearly understand Resistor's product requirements. ➢ No serious inconsistency exists in their relationship.	➢ The main inconsistency comes from poor intra-company communication within Chip between the domestic marketing department and the manufacturing director.	➢ The main inconsistency comes from poor communication within Chip between the domestic marketing department and the supply department.
Power/dependence	➢ Chip controls product design and product quality. ➢ This has nothing to do with relative size of the two companies.	➢ Chip controls product price and quality; Resistor controls order placement. ➢ Company size does not influence this	➢ Resistor controls order placement. ➢ Difference in company size does not influence this relationship. ➢ Resistor is most	➢ Chip controls product quality; Resistor controls order placement. ➢ Relative company size does not influence this	➢ Chip controls product delivery; Resistor controls order placement. ➢ Company size does not influence this

	➢ Resistor is most influential in this relationship through its control of the placing of orders.	relationship. ➢ Resistor is most influential in this relationship since they control order placement.	influential in this relationship.	relationship. ➢ Resistor seems most influential in this relationship.	relationship. ➢ Resistor is most influential in this relationship.

Supplier A's (Chip) Perspective on Relationship Development Impacts on the Small Supplier A (Chip)

Themes \ Interviewees	Managing Director	Domestic Marketing Manager	R&D Manager	Manufacturing Director	Supply Chain Manager
Relationship Development Impacts on the Small Supplier A (Chip)					
Operations	➢ The managing director visits Resistor once a year to discuss the year plan. ➢ The company needs to meet particular standards for Resistor. ➢ Chip does not undertake just-in-time manufacturing. ➢ There are no serious quality problems, because Chip has an automated production system. ➢ Chip's operations are aimed at building a	➢ The domestic marketing manager stated that he has regular meetings with Resistor. ➢ Absolutely need to meet the particular standards for Resistor. ➢ Chip does not apply just-in-time methods. ➢ Resistor does not expect Chip to undertake any efficiency measures for the relationship. ➢ Chip hopes their quality control can	➢ The R&D manager stated that he only participates in product development. ➢ Definitely need to meet the particular standards for Resistor. ➢ Every department has a different efficiency evaluation. ➢ Quality control is very important for the company. ➢ Chip's operations strategies will influence the direction of R&D.	➢ There are no relationship development programmes with any suppliers or customers. ➢ There is a definite need to apply ISO 9002 standards for Resistor. ➢ The manufacturing director reports production efficiency evaluations to the managing director every month. ➢ Chip does not apply just-in-time methods but they maintain	➢ There are no relationship development programmes with any suppliers or customers. ➢ Chip has to apply ISO standards for Resistor.

	long-term relationship with all customers.	reach zero-defect.		safety stocks. ➢ Resistor has high product quality expectations.	
Technology	➢ Improving technology can help Chip build positive relationships with customers. ➢ Resistor hopes Chip will continue to improve their technology and understand customer needs.	➢ Technology development is very important to keep the long-term relationship with Resistor. ➢ Technology depends on the customer's need.	➢ Improving technology can advance the relationship with customers.	➢ Technical development can contribute to increase in the companies business.	➢ Technology development can increase the relationship with Resistor.
Innovation	➢ Chip's innovation responds to customer requirements and market trends. ➢ Marketing innovation is weak. ➢ Resistor hopes Chip will continue	➢ Chip is very weak in marketing innovation. ➢ Innovation can increase customers' reliance on us and increase our competitiveness.	➢ Chip's innovation is totally driven by customer's needs. ➢ Resistor hopes Chip will continue to introduce new and better products.	➢ Chip's product innovation is driven by customer needs and wants.	➢ Chip seems weak in the product and marketing innovation. ➢ Chip continues to develop new products.

	innovation in products.				
Customer Service	➢ Chip deals with customer's problems immediately. ➢ Positive customer service can support a long-term and stable relationship with customers. ➢ Resistor's customer service expectation is high product quality and delivery of goods on time.	➢ Chip maintains regular contact with the customer. ➢ The level of customer service will influence the relationship with Resistor. ➢ Resistor's main customer service expectation is the delivery of goods on time.	➢ Chip deals with customer's problems immediately. ➢ The level of customer service is very important for future order placement. ➢ Resistor's customer service expectation is high product quality and good product design.	➢ Chip always delivers goods on time. ➢ Positive customer service will build long-term and stable relationship with customers. ➢ Resistor's main customer service expectation is the delivery of goods on time.	➢ Chip deals with customer's complaints immediately.
Price	➢ Chip's pricing strategy is to match market prices and cover their cost. ➢ If the price is too high, Resistor may buy goods from other suppliers.	➢ Chip's pricing strategy is to undercut other suppliers in similar areas of business. ➢ If Chip's price is too high, Resistor will tell them. ➢ Resistor thinks "the	➢ The R&D manager provides R&D cost estimates for the managing director. ➢ The main pricing strategy is to be cheaper than other suppliers.	➢ The manufacturing director reports production costs to the managing director. ➢ Pricing strategies are similar to other suppliers.	➢ The supply chain manager reports the cost of delivery to the managing director. ➢ Not sure how pricing strategies compare with competitors.

	➢ Chip always compares prices within the same area of business. This ensures Chip's prices are not too high.	cheaper the better" on price.	➢ If price is too high, Resistor will buy goods from other suppliers.		
Distribution Channel	➢ Chip has signed a contract with a delivery company. ➢ The distribution strategies are similar to other suppliers.	➢ Chip has a fixed contract with a delivery company. ➢ Chip's distribution channel is similar to other suppliers. ➢ Chip's distribution strategies do not influence this relationship.	➢ Chip has a fixed contract with a delivery company. ➢ The R&D manager seems not to know how the company's distribution strategies compare with other suppliers.	➢ Chip uses a fixed contract delivery company to deliver their goods. ➢ Distribution strategies are the same as other suppliers.	➢ Chip has a fixed contract with a delivery company. ➢ Distribution strategies should be similar to other suppliers.
Products	➢ Chip's product strategies are to develop high standards and high value. ➢ Product strategies are similar to those of other suppliers.	➢ The domestic marketing manager collects market information on products and reports to the R&D manager. ➢ Their product	➢ Chip's product strategy is to develop high added value products. ➢ Chip is similar to other suppliers in product strategies. ➢ Resistor hopes Chip	➢ The product strategies aim to supply the customer's needs and wants. ➢ Product strategies are similar to other suppliers.	➢ There was no comment on this question. This is outside the remit of the supply chain manager.

	➢ Resistor has high product expectations.	strategies are similar to those of other suppliers. ➢ Resistor hopes Chip will continue to research new products.	will develop new products continuously.		
Capabilities	➢ Limited finance means Chip cannot offer employee training for whole staff. ➢ Chip is weak in technology capabilities. ➢ The development of managerial abilities in Chip is based on recruiting specialised management employees. ➢ Company culture needs to improve.	➢ Chip has lacked specialised employee training for lower level staff. ➢ Company needs to improve specialised technology capabilities. ➢ The company would like to employ specialised management employees. ➢ Company lower level employees show limited commitment to the company.	➢ The company does not have much employee training for lower level staff. ➢ The company need to improve R&D capabilities. ➢ The company seems not to develop managerial abilities. ➢ The company needs to improve its company culture to recognise and foster the value of lower level staff.	➢ The company has lacked employee training for lower level staff. ➢ Production technology is weak. ➢ Limited budget to develop managerial abilities. ➢ Lower level employees are not valued by the company culture.	➢ Company has lacked specialised employee training. ➢ Technological abilities need to be reinforced. ➢ There is no budget to develop managerial abilities. ➢ The company culture is weak in their lower level staff.

Appendix 10: Analysis and Interpretation from Customer A's (Resistor) Perspective

Company Background

The company was established in 1993.
Major products: resistors.
Company turnover: around NT$ 288 million per year (about £4.8 million per year).
The company has around 410 employees.
The company's major markets are in Mainland China, Japan, Singapore, Malaysia, and Thailand.

Relationship Background

Small supplier: supplier A (Chip).
Relationship duration: approximately three years.
Participants in this relationship: The purchasing manager and purchasing department are mainly responsible for maintaining the relationship.
Types of products bought from supplier A (Chip): chip resistors.

Customer A (Resistor) Respondent Roles

Interviewees / Themes	Vice-Managing Director	Purchasing Manager	Buyer	Quality Control Manager	Supply Chain Manager
Respondent's Role	➢ Assisting the managing director to deal with business.	➢ Responsible for all company purchasing.	➢ Responsible for purchasing chip resistors.	➢ Responsible for product quality management.	➢ Responsible for company material management, supply, and warehousing.

Customer A's (Resistor) Perspective on the Characteristics of the Relationship

Themes \ Interviewees	Vice-Managing Director	Purchasing Manager	Buyer	Quality Control Manager	Supply Chain Manager
The Characteristics of the Relationship between Small Supplier A (Chip) and Their Larger Customer A (Resistor)					
Mutuality	➢ Chip reduces the price after Resistor compares the price of other suppliers. ➢ The development goal is that Chip continues to provide lower prices for Resistor. ➢ No similar goals in this relationship. ➢ Chip contributes most and gains most in this relationship.	➢ Chip reduces the price after Resistor compares the price of other suppliers. ➢ Resistor's main goals and interests are that Chip provides low prices, good product quality, good customer service, and delivers goods on time. ➢ Both companies have the goals of increasing their own profits. ➢ Chip contributes most and gains most in this relationship.	➢ Chip concedes on price in order to maintain the relationship. ➢ Resistor's main goals and interests are purchasing cheap, good quality products. ➢ Both companies have a similar goal of making profits for their own company, but different goals related to the required price. ➢ Chip contributes most and gains most in this relationship.	➢ The quality control manager seems unsure in what way Chip gives up their individual goal for the relationship. ➢ The goals and interests are that Chip provides good product quality. ➢ Both companies have similar goals for increasing product quality. ➢ Chip contributes most and gains most in this relationship.	➢ Chip has given up their insistence on a minimum order size to maintain the relationship. ➢ The goals and interests for Resistor are that Chip deliver goods on time and accept small orders. ➢ Chip contributes most and gains most in this relationship.

Particularity	➢ Based on individual transactions. ➢ The relationship with Chip is secure. ➢ Not sure of the security of the relationship with any supplier.	➢ Based on individual transactions. ➢ The relationship is secure between the two parties. ➢ The relationship is secure compared with those of other suppliers.	➢ Based on individual transactions. ➢ The relationship with Chip is secure. ➢ Cheap price and positive customer service make it worth maintaining the relationship.	➢ Based on individual transactions. ➢ The relationship with Chip is probably secure compared with those with other suppliers.	➢ Based on individual transactions. ➢ The relationship with Chip is secure. ➢ Not sure how this relationship compares with those with other suppliers.
Trust	➢ Resistor trusts Chip's long-term business relationship and cheap price. ➢ Chip seems to have lower prices than other suppliers.	➢ Resistor trusts Chip to provide low price and high product quality. ➢ Low price and good quality are key reasons for the purchasing manager to trust Chip.	➢ Resistor trusts Chip to provide low prices. ➢ They have a positive relationship.	➢ Resistor trusts Chip's product quality. ➢ They seem to have a positive friendship.	➢ Resistor trusts Chip to deliver goods on time.
Cooperation	➢ Positive cooperation can bring both companies' growth in business. ➢ They work in coordination.	➢ If Chip always keeps positive cooperation with Resistor, Resistor will always place orders with them. ➢ Positive cooperation	➢ Chip makes more efforts to cooperate with Resistor than vice versa. ➢ Positive cooperation will benefit both	➢ The quality control manager states positive cooperation means positive product quality. ➢ Positive cooperation is	➢ Chip has a positive cooperation with Resistor. ➢ It is believed a positive relationship has been built based on positive

		can keep Resistor buying goods from Chip.	companies.	mutually advantageous.	cooperation.
Inconsistency	➢ The vice-managing director does not often communicate with Chip.	➢ They do not have serious communication problems. ➢ In some cases, Chip mis-labels product.	➢ Resistor does not have serious communication problems with Chip. ➢ There are some cases of inconsistent product labelling.	➢ The quality control manager does not have serious communication problems with Chip.	➢ Sometime Chip is neglectful of product labelling.
Power/dependence	➢ Resistor places orders with Chip, and Chip provides Resistor with good products and customer service. ➢ Company size difference does not influence this relationship. ➢ Resistor is more influential in this relationship through its influence on orders.	➢ Resistor controls order placement, and Chip provides product price and customer service. ➢ Company size is not an important issue in this relationship. ➢ Resistor is most influential in this relationship and has influence on orders. ➢ Resistor gets benefits from this relationship	➢ Chip provides Resistor with cheap product, and Resistor places orders with Chip. ➢ Relative company size is not important in this relationship. ➢ Resistor is more influential in this relationship. It is Resistor who purchases products from Chip. ➢ The benefit of this	➢ Chip controls the product quality. ➢ The relationship is not affected by company size. ➢ Resistor is more influential in this relationship. ➢ The most important advantage from this relationship to Resistor is cheap products.	➢ Chip controls the delivery of goods on time. ➢ Company size difference does not influence this relationship. ➢ May be Resistor is more influential in this relationship. ➢ The key benefit to Resistor from this relationship is that

	➢ Resistor takes advantage from this relationship by getting cheap products.	in the area of cheap product.	relationship for Resistor is the purchase of cheap products.		Chip accepts small orders.

Appendix 11: Analysis and Interpretation from Supplier B's (Bright Light) Perspective

Company Background

The company was established in 2000.
Major products: light emitting diodes (LEDs), including GaNWafer, chips on wafer, chips.
Company turnover: around NT$ 60 million per year (around £1 million per year).
The company has 53 employees.
The company has 10 main customers in its domestic market, with Mainland China the only overseas market.

Relationship Background

Larger customer: customer B (Diode).
The Relationship is of around five years standing.
Participants in this relationship: The marketing manager and marketing department are mainly responsible for maintaining the relationship. The president only deals with price negotiations. The managing director occasionally participates, for example, in meeting non-standard customer' requirements. The manufacturing director only participates to address complaints on product quality or delivery.
Types of products sold to customer B (Diode): light emitting diodes (LEDs), LED semi-finished goods (beginning and middle semi-finished goods).

Supplier B (Bright Light) Respondent Roles

Interviewees / Themes	President	Managing Director Assistant Manager	Marketing Manager	Manufacturing Director
Respondent's Role	➢ Management policy and company strategy.	➢ Operational management of the company (managing director). ➢ Assistant to the managing director (assistant manger).	➢ Mainly responsible for marketing.	➢ Production management and quality control.

Supplier B's (Bright Light) Perspective on the Characteristics of the Relationship

Interviewees / Themes	President	Managing Director Assistant Manager	Marketing Manager	Manufacturing Director
The Characteristics of the Relationship between Small Supplier B (Bright Light) and Their Larger Customer B (Diode)				
Mutuality	➢ Sometimes Diode negotiates a price reduction rather than change to a cheaper supplier, because Diode would like to continue the relationship with Bright Light. ➢ A subsidiary goal is to increase new product development and production capability. ➢ Bright Light's main goals are increasing orders and company profits. ➢ Both companies naturally wish to maximise their profits, resulting in opposing pressures on product price. ➢ The respondent believes	➢ The managing director noted that in some cases the Bright Light's president negotiates maintenance of the existing price. ➢ The assistant manager does not directly participate in this relationship. ➢ The main goals of Bright Light are increasing orders and company profits. ➢ Bright Light and Diode have different goals related to price and product quality. (After a seconds thought) ➢ Not sure who contributes or gains most. (sounding hesitant)	➢ In some cases, Diode contributes technological solutions to Bright Light's problems. ➢ Bright Light's goal and interest in the relationship is obtaining orders for goods. ➢ Companies have the same goal of profit maximisation, and different goal related to the price of Bright Light's products. ➢ Does not know who contributes or gains most.	➢ In some cases, Diode provides technology support. ➢ Before developing the goals and interests, Bright Light needs to increase company production efficiency and product. ➢ Both companies have similar product quality goals. ➢ Does not know who contributes or gains most. (after a few seconds consideration)

	strongly that Bright Light contributes more to the relationship. ➢ A firm response that Diode gains much more from the relationship. (Strong tone)			
Particularity	➢ Based on individual transactions. ➢ Not very secure between two parties. ➢ Not very secure with any of Bright Light's customers.	➢ Based on individual transactions. ➢ The relationship with Diode is not secure. ➢ Not very secure with any of their customers.	➢ Relies on each transaction. ➢ Bright Light feels insecure, due to the competitive nature of its markets.	➢ Not clear about the relationship characteristic of particularity with Diode. ➢ The manufacturing director seems not to feel their relationship depends simply on order fulfilment.
Trust	➢ Before signing the contract, the president will ask the managing director and marketing department to confirm all aspects with the customer. ➢ Trust is based on the contract.	➢ Before a business transaction, Bright Light always makes inquiry about the business reputation of new customers. ➢ Bright Light signs a contract with Diode in every business transaction.	➢ Signing a contract with the customer in every business transaction is the company policy.	➢ Bright Light trusts Diode, because they are a long-standing customer.
Cooperation	➢ Bright Light does his best to meet Diode's requirements.	➢ Bright Light cooperates with Diode to help ensure demands	➢ The most important result of positive cooperation is for	➢ Positive cooperation should be a positive influence in this

	➢ It is believed that positive cooperation can improve the relationship and increase both companies' profits.	are met. ➢ Positive cooperation can improve development of both companies.	Diode to introduce new customers to Bright Light.	relationship. ➢ Bright Light always operates in cooperation with its customers.
Inconsistency	➢ The general communication requirement is related to negotiations on price. ➢ Until now, there have been no serious communication problems influencing the relationship with Diode. ➢ In some cases, the director does not communicate the customer's requirement clearly and this can result in the president's misunderstanding of the customer's needs.	➢ The main inconsistencies arise during price negotiation. ➢ If there is unclear communication of price, quality and standard of the products, the business transaction may be unsuccessful.	➢ A lack of marketing department product knowledge can create communication problems with customers. ➢ At times senior managers in both Diode and Bright Light do not effectively communicate process updates with their respective organisations. ➢ The marketing manager has experienced interpersonal inconsistencies with Diode. ➢ Internal communication problems also exist in Bright Light.	➢ Communication problems have been related to product quality and product standards. ➢ Ambiguity in the communication of product standards may result in failed business transactions. ➢ High staff turnover has contributed to a lack of clarity about Diode's requirements.
Power/dependence	➢ Bright Light controls the products quality; Diode	➢ The managing director stated that Diode buys goods from	➢ Bright Light seems not to control anything, but Diode	➢ Bright Light controls the product quality and production

	controls the final price of the products. ➢ Diode is most influential in this relationship through its influence on orders and price.	cheaper suppliers without considering the relationship with Bright Light. ➢ The assistant manager pointed out that Diode controls product price. ➢ Diode is most influential in this relationship and has a controlling influence on order placement.	controls all. ➢ Company size difference did not influence this relationship. ➢ Diode is most influential in this relationship through control of orders, price, and product standards.	progress; Diode controls order placement. ➢ Diode is most influential in this relationship through its control of order placement. ➢ R&D is based on the needs of Diode. ➢ Every effort is made to meet customer requirements.

Supplier B's (Bright Light) Perspective on Relationship Development Impacts on the Small Supplier B (Bright Light)

Interviewees / Themes	President	Managing Director Assistant Manager	Marketing Manager	Manufacturing Director
Relationship Development Impacts on the Small Supplier B (Bright Light)				
Operations	➢ No plans for programmes of relationship development with any customers. ➢ Strongly believe that the company meets the particular standards of Diode. ➢ The president requires each department to issue regular efficiency reports. ➢ Quality control is not stable. ➢ Bright Light is still learning and improving its operations.	➢ Only make scheduled visit to Diode. ➢ Definitely need to meet the particular standards for Diode. ➢ Each department has a different efficiency evaluation. ➢ Poor quality control will influence the relationship with Diode. ➢ Poor operation strategies will influence the profits and reputation of the company.	➢ No relationship development programmes with any suppliers or customers. ➢ Need to apply ISO standards for Diode. (Strong tone) ➢ Report sales achievement to the managing director every month. ➢ Need to strengthen product quality. ➢ R&D and quality control will influence operation strategies.	➢ Never attend relationship development programmes with any suppliers or customers. ➢ Have to apply ISO standards for Diode. ➢ Efficiency evaluation is based on production efficiency and the quality of the products. ➢ Bright Light has a serious quality control problem. ➢ R&D ability will influence operation strategies.
Technology	➢ Improving technology can advance relationship with customers. ➢ Increasing technology can make for a more stable	➢ Bright Light is very weak in R&D, and production technology. ➢ Increasing technology will improve the profits of Bright	➢ Technology developments are very important. ➢ Technology ability needs to improve. ➢ Diode expects Bright Light to	➢ The technology capabilities are very weak.

	relationship with customers.	Light.	improve its R&D ability, and production technology.	
Innovation	➢ Receiving new information and also understanding customer needs. ➢ Still need to learn how to promote innovation. ➢ Diode has high innovation expectations.	➢ Always receiving new information and researching new products. ➢ Management innovation is limited. ➢ Diode hopes Bright Light will innovate new or better products.	➢ Bright Light has done some innovation in management, but not much. ➢ Bright Light has no website.	➢ The manufacturing director does not know about company management innovation. ➢ Bright Light wants to innovate but has not actually done so.
Customer Service	➢ Keep in touch with customer regularly. ➢ It is believed good customer service can improve the relationship with customers. ➢ Bright Light's customer service is good.	➢ Bright Light tries its best to provide good customer service. ➢ It is believed poor customer service will influence the relationship with customers.	➢ Deal with customer service issues in 24 hours even through the weekend. ➢ Certainly, customer service is very important. ➢ It is believed good customer service can make customers take the initiative in asking for new products.	➢ Deal with customer's problems promptly. ➢ Customer service is very important. ➢ If they do not have good customer service, the managing director will take disciplinary action.
Price	➢ Pricing strategies refer to the relationship between costs and prices within an area of	➢ Pricing strategy decisions are based on the information received by the president.	➢ The president decides the price. ➢ Not clear about other	➢ The manufacturing director does not know about pricing policy.

	business. ➢ Pricing strategies are similar to those of other suppliers. ➢ If the price is too high, Diode will buy goods from other suppliers. ➢ Diode wants Bright Light to offer a cheap price. ➢ Diode always compares the prices of different suppliers.	(managing director) ➢ Price is decided by the president. (assistant manager) ➢ Price maybe a little cheaper than larger suppliers. ➢ Diode buys goods from cheap suppliers. ➢ When they both are not happy about the prices, this will influence the relationship.	suppliers' pricing strategies. ➢ If price is too high, Diode will buy products from other suppliers. ➢ Price maybe is a lower than other suppliers. ➢ Diode only cares about the cheap price. ➢ Diode expects a cheap price on each successive contract.	
Distribution Channel	➢ The managing director and marketing department are in charge of distribution strategies. ➢ Distribution strategies are probably similar to other suppliers. ➢ Diode only cares about receiving goods on time.	➢ Fixed express delivery company or personal delivery (urgent request or because it's coincidentally convenient). ➢ Larger suppliers are more fixed in systematic delivery procedures. ➢ No known problems with the distribution strategies.	➢ Through express delivery company or in person delivery. ➢ Distribution strategies are the same as other larger suppliers.	➢ Only responsible for delivering goods on time. ➢ The distribution strategies are probably similar with other companies. (Uncertain) ➢ Diode expects the delivery of goods on time.
Products	➢ Product strategies are weaker than large suppliers. ➢ If product standards cannot	➢ Product strategies are weak. ➢ Production and development of products needs to be	➢ Larger suppliers are stronger in product strategies. ➢ Product standards do not meet	➢ Bright Light is weak in product development strategies.

	reach Diode's specification, then Diode will not give Bright Light orders. ➢ Bright Light's products are more suited for sale in underdeveloped countries.	improved. ➢ Need advanced product technology. ➢ Diode hopes Bright Light can upgrade product quality. ➢ Diode always complains about the products of Bright Light.	Diode's requirements. ➢ Cannot research and develop special "custom products". ➢ Cannot meet customer's requirements so will not build a good relationship with customer.	➢ Larger suppliers have better product strategies compared with Bright Light. ➢ The product specifications have been influenced by Diode's product expectations. ➢ The percentage of defective products is very high.
Capabilities	➢ Not enough funds for employee training. ➢ Not enough professional knowledge of technologies. ➢ Staff need to improve specialised technical abilities. ➢ Diode hopes Bright Light can have much higher level of technology. ➢ Working together with academic departments in some universities to improve Bright Light's product and production technology. ➢ No plan to develop managerial	➢ Limited finance so cannot offer employee education and training. (managing director) ➢ Their expertise and abilities limited. (assistant manager) ➢ Diode hopes Bright Light can implement more advanced technologies. ➢ Cannot cope with the technology problems from Diode. ➢ Asking industrial circles experts and professor from university for product technology guidance.	➢ Unable to answer technical questions from Diode. ➢ Weak in the product technology knowledge. ➢ Diode's technology expectations require a higher level of expertise. ➢ Production technology and R&D capabilities are very weak. ➢ All actions require the permission of the president. ➢ Sales persons do not have real authority. ➢ High rates of staff turnover in	➢ No employee training. ➢ Need to strengthen staff's ability. ➢ Components with standard specifications are fine, but the company cannot produce "customised" components with special specifications. ➢ Technological abilities need to be reinforced. ➢ The manufacturing director is not aware of any planned development of managerial ability. ➢ Company culture is poor.

	abilities.	➢ No budget to develop managerial ability. ➢ The president holds the entire power.	marketing department. ➢ Internal culture needs to change.	➢ There is a high rate of staff turnover.

Appendix 12: Analysis and Interpretation from Customer B's (Diode) Perspective

Company Background

The company was established on the 21st of March 1995.
Major products: semiconductor chips, light emitting diode (LED) chips.
Company turnover: around NT$ 1 billion per year (around £16.7 million per year).
The company has 270 employees.
The company's major markets are in Asia, the United States of America (U.S.A.), and Europe.

Relationship Background

Small supplier: supplier B (Bright Light).
Relationship duration: about five years.
Participants in this relationship: The purchasing manager and his staff are responsible for the purchase of LED chips.
Types of products bought from supplier B (Bright Light): light emitting diodes (LEDs), LED semi-finished goods (beginning and middle semi-finished goods).

Customer B (Diode) Respondent Roles

Interviewees / Themes	Managing Director	Domestic Department Vice-Managing Director	Purchasing Manager	Manufacturing Director	Product Design Manager
Respondent's Role	➢ Managing the whole company's operation.	➢ Assisting the managing director to deal with domestic businesses.	➢ Purchasing related components and modules.	➢ Managing production and quality control.	➢ Designing and developing products.

Customer B's (Diode) Perspective on the Characteristics of the Relationship

Interviewees / Themes	Managing Director	Domestic Department Vice-Managing Director	Purchasing Manager	Manufacturing Director	Product Design Manager
The Characteristics of the Relationship between Small Supplier B (Bright Light) and Their Larger Customer B (Diode)					
Mutuality	➢ The goals developed after discussion with Bright Light involve the supply of lower cost and higher quality products. ➢ The goals and interests are that Bright Light will offer stable quality and cheap products. ➢ The goals of the two companies are dissimilar, involving different requirements for specifications and prices of the products. ➢ Not clear who	➢ In some cases, Bright Light concedes lower prices in order to maintain the relationship. ➢ The goals and interests are that Bright Light provides the lowest possible prices. ➢ The two companies thus have different goals on price. ➢ Diode contributes most, because Diode gives Bright Light orders for goods.	➢ In some cases, Bright Light gives up their insistence on their preferred price to maintain the relationship with Diode. ➢ The goal of development is lower prices. At the same time, Bright Light has to meet Diode's quality requirements. ➢ The goals and interests are that Bright Light can meet the purchasing manager's	➢ Bright Light makes concessions on product quality and specifications. ➢ The goals of development are to ensure that Bright Light provides stable product quality and delivery times. ➢ A goal and interest is an improvement in quality by Bright Light. ➢ The two companies differ in their requirements for	➢ The development goal is for Bright Light to meet the requested specifications. ➢ The goals and interests are the acquisition of the ability to meet the specifications and quality control standards. ➢ Both companies share the goal of increasing company profits. They differ in relation to product specification requirements. ➢ Diode contributes

	contributes most to, or gains most from the relationship.		requirements for the delivery, quality and price. ➢ Both companies have the goal of maximising their respective profits. ➢ Both sides have different requirements for quality and price. ➢ Diode contributes most, but Bright Light contributes a little as well.	product specifications. ➢ Maybe Diode contributes most and Bright Light gains most. (Uncertain)	most. (After a few seconds thought)
Particularity	➢ Based on individual transaction. ➢ Not sure of the security of the relationship with Bright Light. ➢ Then after a moment consideration: not sure of the security of the relationship with any suppliers.	➢ Based on individual transaction. ➢ The relationship with Bright Light is not secure. ➢ The relationship is not very secure compared with other suppliers.	➢ Based on individual transaction. ➢ The relationship with Bright Light is not very secure. ➢ The relationship is not very secure compared with other suppliers.	➢ Maybe is individual transaction based. ➢ Not clear about the particularity of the relationship with Bright Light. ➢ Not clear how the relationship compares with other suppliers.	➢ The relationship with Diode is controlled by the purchasing department. ➢ Not clear about the relationship with all customers.

Trust	➢ Purchasing department is required to sign contracts with Bright Light every time. ➢ Diode seems to have a good image and a high reputation.	➢ Trust Bright Light's service attitude. ➢ Diode is a sound company of good repute.	➢ Trust Bright Light's price, delivery and service. Besides, Bright Light is able to accept small orders. ➢ Diode signed a contract with Bright Light in every business transaction.	➢ Trust Bright Light they always deliver the needed components on time. ➢ If Bright Light is able to provide Diode with good components with high stability, this will increase Diode's trust in Bright Light.	➢ Only trust in Bright Light's service, as their technology and quality control are weak. ➢ If Bright Light can provide Diode products with the required specifications, this will increase the degree of trust.
Cooperation	➢ It is believed positive cooperation will make Diode continue doing business with Bright Light. ➢ Positive cooperation can bring both companies' growth in business. ➢ If Bright Light cannot completely cooperate with Diode, Diode will replace it.	➢ Cooperation depends on the quality and prices that Bright Light offers Diode. ➢ It is believed a positive relationship has been built based on positive cooperation. ➢ Price has a very important influence on both sides' cooperation.	➢ Long-term cooperation depends on cheap prices. ➢ Price and quality will influence the cooperation. ➢ Positive cooperation will improve both companies' benefits. ➢ Diode places orders for goods with Bright Light each year. Bright Light has to totally	➢ It is supposed that adequate quality products and delivery on time will help maintain long-term cooperation. ➢ Positive cooperation can increase both companies' profits. ➢ If Bright Light cannot completely cooperate with Diode's request, the manufacturing	➢ Bright Light cooperates on product specifications and quality in order to keep the relationship with Diode. ➢ A Long-term cooperation is positive for both sides.

			cooperate with Diode.	director will report it to his vice-managing director and the purchasing manager.	
Inconsistency	➢ The managing director is not sure about communication with Bright Light, because he does not often communication with Bright Light.	➢ In some cases, they have inconsistencies in price, quality and other specifications. ➢ They do not have serious inconsistency problems.	➢ Normally, it's the pricing problem. ➢ If they have serious inconsistency, Diode may consider a change to another supplier.	➢ Diode has inconsistency in the requested quality and occasional requirement for urgent delivery. ➢ Any inconsistency problems will be reported to the assistant managing director.	➢ Inconsistencies are restricted to quality standards.
Power/dependence	➢ Diode places orders with Bright Light, and Bright Light provides Diode with good quality and good price. ➢ Bright Light's profits depend on Diode's orders. ➢ Diode is more	➢ Diode places Bright Light orders for goods; Bright Light is responsible for producing the products that Diode request. ➢ The relationship is not affected by company size.	➢ Diode controls the price and the order for goods, and Bright Light controls the quality of the products. ➢ Diode is more influential in this relationship.	➢ Both Diode and Bright Light control the quality. ➢ Company's size is not important. ➢ Diode is most influential in this relationship.	➢ Diode controls the specifications of the products and Bright Light has to meet them. ➢ The size difference does not influence in this relationship. ➢ Diode maybe is most influential in this

	influential in this relationship. It's Diode who purchases products from Bright Light.	➢ Diode is most influential in this relationship. Diode places orders for goods with Bright Light.			relationship. (Not sure)

Appendix 13: Analysis and Interpretation from Supplier C's (Clean System) Perspective

Company Background

The company was established in 1978.
Major products: integrated circuit (IC) semiconductor mould automatic cleaning system.
Company turnover: around NT$ 200 million per year (around £3.3 million per year).
The company has 98 employees.
The company has around 30 domestic customers, and the major markets are Taiwan, Mainland China and Southeast Asia.

Relationship Background

Larger customer: customer C (Semiconductor).
Relationship periods: more than 10 years.
Participants of this relationship: The president and marketing manager are mainly responsible for maintaining the relationship. The R&D manager only deals with technology problems. The manufacturing director only participates to address complaints on product quality.
Types of products sold to customer C (Semiconductor): integrated circuit (IC) semiconductor mould automatic cleaning system.

Supplier C (Clean System) Respondent Roles

Interviewees / Themes	President	Managing Director	Marketing Manager	R&D Manager	Manufacturing Director
Respondent's Role	➢ Management tactics and plan for the whole company.	➢ Supervision of production, operational and financial management, and carrying out the policy of the president.	➢ Responsible for company's sales achievement.	➢ R&D of new products.	➢ Mainly responsible for production and product quality.

Supplier C's (Clean System) Perspective on the Characteristics of the Relationship

Themes \ Interviewees	President	Managing Director	Marketing Manager	R&D Manager	Manufacturing Director
The Characteristics of the Relationship between Small Supplier C (Clean System) and Their Larger Customer C (Semiconductor)					
Mutuality	➢ Sometimes Semiconductor gives up the insistence on its preferred price to keep the relationship with Clean System. ➢ The relationship development goal is the continued profitability of both companies. ➢ Clean System's main goals are enhancing company business achievements and profit. ➢ Each company has	➢ Semiconductor gives up their insistence on their preferred price to maintain the relationship with Clean System. ➢ The relationship development goal is to obtain mutual benefit from the relationship. ➢ The main goals in Clean System are improving business profit. ➢ Both companies have similar profitability goals, and as a result,	➢ Semiconductor concedes higher prices in order to maintain the relationship. ➢ The relationship development goal is the development of new products to increase both companies' profits. ➢ Both companies have similar goals for increasing the benefits to their own company and have no differing goals. ➢ Clean System	➢ Semiconductor makes concessions on price. ➢ The relationship development goal is the development of new and better products. Semiconductor would like to have a faster IC semiconductor mould automatic cleaning system. ➢ Both companies have similar goals in the R&D of better products for the Semiconductor. ➢ Clean System	➢ The relationship development goals are stable quality and the delivery of goods on time. ➢ The common goal is delivery as scheduled. ➢ Both contribute and gain in this relationship.

	similar goals of increasing their business profit which leads to different goals for price. ➢ Both parties contribute and gain in this relationship.	different requirements for the price of products. ➢ Not sure who contributes or gains most.	contributes more and Semiconductor gains more.	contributes more and Semiconductor gains more.	
Particularity	➢ Based on individual transactions. ➢ Very secure with Semiconductor. ➢ Very secure with all of Clean System's customers.	➢ Based on individual transactions. ➢ Very secure with Semiconductor. ➢ Clean System has very secure relationships with all of their customers.	➢ Relies on each transaction. ➢ Very secure between the two parties. ➢ Clean System builds a strong relationship with all of their customers.	➢ Based on individual transactions. ➢ Very secure in this relationship. ➢ All of the relationships with their customers are secure.	➢ Based on individual transactions. ➢ Very secure between the two companies. ➢ The manufacturing director is not very sure about this relationship compared with other customers, because he is only responsible for production and product quality.
Trust	➢ The president trusts Semiconductor because	➢ Semiconductor has goodwill in this area of	➢ The marketing manager trusts	➢ The R&D manager trusts Semiconductor	➢ Semiconductor has credibility in the

	of their long-term relationship and positive reputation. ➢ The president believes they trust each other.	business. ➢ Semiconductor trusts Clean System's customer service and Clean System trusts the long-term relationship with Semiconductor.	Semiconductor, because Semiconductor is the biggest company in this business area and they have a long-term relationship.	in the long-term relationship.	business.
Cooperation	➢ The president believes they have positive cooperation. ➢ Positive cooperation creates maximum profit for both partners.	➢ They cooperate with each other.	➢ They help each other. ➢ Positive cooperation is important to help the managing director and marketing manager to collect market information.	➢ The R&D manager tries his best to research and develop products that the customer needs. ➢ Positive cooperation gives the R&D manager a sense of business requirements for the design of products.	➢ Positive cooperation should be a positive influence in this relationship. ➢ Positive cooperation can improve the relationship for both sides.
Inconsistency	➢ No serious communication problems exist between them.	➢ The general communication problem is related to administrative	➢ The main inconsistency comes from poor communication between the marketing	➢ In some cases, the R&D manager does not very clearly understand Semiconductor's	➢ No serious inconsistency exists in their relationship. ➢ In some cases, lower

	➢ They have, however identified some differences in some areas.	personnel reporting incorrect information to the managing director.	manager and their lower level staff.	product requirements, because of ambiguous or inaccurate reporting by their lower level administration.	level administrations have reported ambiguous information to the manufacturing director.
Power/dependence	➢ Semiconductor controls customer service. ➢ Semiconductor is most influential in this relationship through its control of the placing of orders. ➢ This has nothing to do with relative size of the two companies.	➢ Semiconductor is most influential in this relationship and controls orders. ➢ Company size does not influence this relationship.	➢ Clean System controls the provision of positive customer service for Semiconductor. ➢ Difference in company size does not influence this relationship.	➢ Clean System R&D tends to aim at providing Semiconductor's needs and wants. ➢ Semiconductor seems most influential in this relationship.	➢ Semiconductor controls order placement. Clean System controls the quality of products. ➢ Semiconductor is most influential in this relationship.

Supplier C's (Clean System) Perspective on Relationship Development Impacts on the Small Supplier C (Clean System)

Interviewees / Themes	President	Managing Director	Marketing Manager	R&D Manager	Manufacturing Director
Relationship Development Impacts on the Small Supplier C (Clean System)					
Operations	➢ The president has been involved in a relationship development programme with Semiconductor. ➢ President strongly believes that the company needs to meet the particular standards for Semiconductor. ➢ Clean System has applied just-in-time manufacturing. ➢ Quality control is stable in Clean System. ➢ Clean System's	➢ The managing director has not participated in relationship development programmes with any customers. ➢ Absolutely need to meet the particular standards for Semiconductor. ➢ Every department has a different efficiency evaluation and they have applied just-in-time methods. ➢ Quality control is stable in their	➢ The marketing manager has been involved in the relationship development programmes with customers. ➢ Definitely need to apply ISO standards and CE certification for Semiconductor. ➢ Clean System has applied just-in-time methods. ➢ Quality control is very important for the relationship with	➢ The R&D manager stated that he has been involved in a relationship development programme with Semiconductor. ➢ Needs to meet particular standards for Semiconductor. ➢ There are no efficiency measures applied to the R&D department. ➢ Quality control is very important for the company. ➢ Clean System's	➢ The manufacturing director seems to be very unsure about relationship development programmes with any customers. ➢ Had to apply ISO standards and CE certification for Semiconductor. ➢ Their efficiency measure is production performance. ➢ Quality control is very stable in Clean System. ➢ Operations methods of

	operations are building long-term relationships with all customers.	company. ➢ Positive operation strategies can help the company to plan their future business direction.	Semiconductor. ➢ Positive operations tactics allow a rapid response to new commercial developments.	operations strategy will influence the direction of R&D.	the company influence their production efficiency.
Technology	➢ Improving technology can help Clean System build positive relationships with customers. ➢ Semiconductor hopes Clean System will continue to improve their technology.	➢ Continuous improvement in technology can increase Semiconductor's reliance on Clean System. ➢ Technology is a very important asset in maintaining the relationship with Semiconductor.	➢ Technical development can contribute to increase in the companies business. ➢ Increasing technology can maintain a stable and long-term relationship with Semiconductor.	➢ Improving technology can improve the relationship with customers. ➢ Semiconductor hopes Clean System will constantly improve their technology.	➢ Technological development can increase customer trust in Clean System. ➢ Semiconductor hopes Clean System will constantly improve their technology and continue to supply them with good products.
Innovation	➢ Clean System continues to study emerging technologies and commercial	➢ Clean System's innovation relies on the managing director's business sense to plan	➢ Clean System's innovation is totally reliant on the managing director's market	➢ The R&D manager is responsible for the innovation of new products.	➢ The manufacturing director is responsible for production efficiency innovations.

	opportunities. ➢ Continuing innovation can improve the relationship with all customers. ➢ Semiconductor hopes Clean System will continue innovation.	future company development. ➢ Clean System informs Semiconductor of their current R&D direction. ➢ Semiconductor has high expectations of Clean System innovation.	sense. ➢ Clean System always tells Semiconductor their future development plans. ➢ Semiconductor has had no complaints about Clean System's innovation performance so far.		➢ Semiconductor hopes Clean System will continue to innovate to improve product quality and increase production efficiency.
Customer Service	➢ Clean System processes customer complaints immediately. ➢ It is strongly believed that good customer service can support a long-term and stable relationship with customers. ➢ Good customer service can result in a customer introducing	➢ Clean System deals with customer orders quickly and delivers goods on time. ➢ The managing director believes good customer service is a key principle of the company. ➢ Maintaining good customer service and always keeping in touch with customer's	➢ The customer comes first; they process customer problems immediately. ➢ It is believed customer service can increase business achievement. ➢ Offering good customer service can help build a positive relationship with customers. ➢ Good after sales	➢ They deal with customer's problems immediately. ➢ Good customer service can improve the relationship with the customer. ➢ It is believed good customer service can lead to customers taking the initiative in asking for new products.	➢ The manufacturing director deals with customer's problems immediately. ➢ Good customer service can increase the placement of orders from customers.

	new customers to Clean System.	results in customer's dependence on us. ➢ Good after sales service can help Clean System sell new products and maintain income from Semiconductor.	service can establish a stable and long-term relationship with customers.		
Price	➢ Clean System's pricing strategy is to match market prices and cover their costs. ➢ Clean System's product prices are cheaper than other larger suppliers. ➢ Semiconductor believes the product prices from Clean System are fair. ➢ Certainly customers would like low product prices, the cheaper the	➢ Clean System's pricing is determined by the market. ➢ Clean System's pricing strategy is to be cheaper than other larger suppliers. ➢ Clean System's product prices are not Semiconductors first consideration when purchasing from them. ➢ The managing director believes product quality and customer	➢ Product prices are intended to match or better those of competitors in the same area of business. ➢ Clean System's price is cheaper than other larger suppliers. ➢ A positive relationship can encourage a customer to compare other things than price when making purchasing decisions. ➢ Semiconductor thinks	➢ The R&D manager seems not very sure about Clean System's pricing strategies and he only informs the president of the cost of production.	➢ There was no comment on this question, as this is outside the remit of the manufacturing director.

	better.	service are actually more important than the price.	"the cheaper the better" on prices.		
Distribution Channel	➢ Clean System has signed a contract with a delivery company. ➢ Larger suppliers use sea transportation for distribution. ➢ Semiconductor does not have any complaints about Clean System's distribution methods.	➢ Clean System has a fixed contract with a delivery company. ➢ The larger competitors of Clean System are overseas and they use sea transportation to deliver their goods. ➢ Clean System's distribution strategies are strong.	➢ Clean System uses a delivery company to deliver their goods. ➢ The larger suppliers use sea transportation. ➢ Semiconductor only cares about receiving goods on time.	➢ There was no comment on this question, as this is outside the remit of the R&D manager.	➢ There was no comment on this question, as this is outside the remit of the manufacturing director.
Products	➢ Clean System's product strategies are developed to meet customer's needs and wants. ➢ Product strategies are weaker than those of other larger suppliers.	➢ The product strategy aims to supply to customer's needs and wants. ➢ Their product strategies are weaker than those of other larger suppliers.	➢ The marketing manager collects market information on products and reports to the R&D manager. ➢ Compared with larger suppliers, Clean System is weak in their	➢ The R&D manager collects information on new products on the market, then researches customer preferences. ➢ If the R&D manager is always unable to develop the products	➢ The manufacturing director produces products to designs from the R&D department. ➢ The manufacturing director seems not to know the product

	➢ In some cases, Clean System is unable to provide the products that Semiconductor wants. ➢ If Clean System offers the customer good products, the customer will introduce new customers for them.	➢ The managing director believes product strategies will influence the relationship with customers. ➢ Positive products can benefit both companies.	product strategies. ➢ Semiconductor hopes Clean System will continue to research new products.	that customers need, this will influence the relationship with customers. ➢ Semiconductor hopes Clean System will develop new products continuously.	strategies in this company. ➢ The manufacturing director is only responsible for production and product quality. ➢ Semiconductor hopes product quality can attain zero defects.
Capabilities	➢ Clean System has lacked specialised employee training for lower level staff. ➢ The company has few personnel with specialised technology skills. ➢ Company send management level staff to external training organisations to participate in	➢ Clean System's lower level staff lack basic training. ➢ Company technology is over-reliant on certain key personnel. ➢ Clean System only offers training for department managers. ➢ Semiconductor has the impression that Clean System only really values its directors.	➢ The company needs to strengthen the general level of staff knowledge and skill. ➢ The company has relatively few personnel with a professional level of technical ability. ➢ The company only offers employee training at the management level.	➢ The company has little training for lower level employees. ➢ The R&D department is reliant on the R&D manager. ➢ The company offers training to directors. ➢ Lower level staff in the R&D department need improvement and recognition of their value.	➢ The company has little training for lower level staff. ➢ Lower level staff is lacking in technical ability. ➢ The manufacturing director is not aware of any planned development of managerial ability, but the company has sent the manufacturing

	job-related training. ➢ Lower level employees are undervalued by, and have little commitment to, the company, which neither trains them nor gives them productivity bonuses.	➢ Lower level employees show limited commitment to the company, which neither trains them or gives them productivity bonuses.	➢ The company needs to improve its company culture to recognise and foster the value of lower level staff.	➢ Lower level employees are not valued by the company culture.	director to some relevant organisations for training. ➢ The company need to improve the position of lower level employees in the company culture.

Appendix 14: Analysis and Interpretation from Customer C's (Semiconductor) Perspective

Company Background

The company was established in 1984.
Major products: integrated circuit (IC) semiconductor, integrated circuit (IC) packaging, integrated circuit (IC) test equipment, and various kinds of integrated circuit.
Company turnover: around US$ 1 billion per year (about £500 million in 2005).
The company has 19000 employees.
The company's major markets are in Taiwan, Japan, the United States of America (U.S.A.), and Europe.

Relationship Background

Small supplier: supplier C (Clean System).
Relationship duration: more than 10 years.
Participants in this relationship: Production manager, purchasing manager, buyer, module-manufacturing director, equipment engineer all of whom are based in the head office plant. The purchasing manager and purchasing department are mainly responsible for maintaining the relationship, but since they are purchasing for production, they report regularly to the production manager.
Types of products bought from supplier C (Clean System): integrated circuit (IC) semiconductor mould automatic cleaning system.

Customer C (Semiconductor) Respondent Roles

Interviewees / Themes	Production Manager	Purchasing Manager	Buyer	Module-Manufacturing Director	Equipment Engineer
Respondent's Role	➢ Responsible for all production business in head office plant.	➢ Management of the purchase of IC semiconductor components.	➢ Purchasing IC semiconductor components.	➢ Responsible for the IC module manufacture, packaging and testing.	➢ Maintenance and renewal of machinery, plus equipment and program design.

Customer C's (Semiconductor) Perspective on the Characteristics of the Relationship

Interviewees / Themes	Production Manager	Purchasing Manager	Buyer	Module-Manufacturing Director	Equipment Engineer
The Characteristics of the Relationship between Small Supplier C (Clean System) and Their Larger Customer C (Semiconductor)					
Mutuality	➢ In some cases, Clean System concedes lower prices in order to maintain the relationship. ➢ The goal is continuous improvement. Clean System constantly strives to offer Semiconductor good products. ➢ Semiconductor's main goals and interests are purchasing good and cheaper products. ➢ Not sure who contributes or gains	➢ In some cases, Clean System gives up their insistence on the price to maintain the relationship with Semiconductor. ➢ The goal developed is that Clean System always offers good and cheap products to Semiconductor. ➢ The main goals and interests of Semiconductor are that Clean System provides cheaper and better products.	➢ Sometimes Clean System reduces the price to maintain the relationship. ➢ The goals developed are that Clean System offers cheaper prices and good after sales service to Semiconductor. ➢ The goals and interests are that Clean System offers good and cheaper products. ➢ Both companies share the goal of increasing company profits. They	➢ Clean System makes concessions on price to maintain the relationship. ➢ The goal developed is that Clean System offers good after sales service. ➢ The goals and interests are good after sales service. ➢ They have similar goals of developing their products with fewer breakdowns, faster operation and much cleaner function.	➢ The goal developed is that Clean System offers good after sales service for Semiconductor. ➢ The goals and interests for Semiconductor are that Clean System offer good customer service. ➢ The shared goal is fewer product breakdowns. ➢ Maybe Clean System contributes most and Semiconductor gains most.

	most.	➢ Both companies have a similar goal of making profits for their own company, but different goals related to the required price. ➢ Clean System contributes most and Semiconductor gains most.	differ in relation to the required price. ➢ Clean System contributes most and Semiconductor gains most.	➢ Both companies contribute to and gain from this relationship.	
Particularity	➢ Based on individual transactions. ➢ The relationship with Clean System is positive. ➢ The relationship with Clean System is secure compared with those with other suppliers.	➢ Based on individual transactions. ➢ The relationship is secure between the two parties. ➢ The relationship is positive compared with those with other suppliers.	➢ Based on individual transactions. ➢ The relationship with Clean System is secure. ➢ The relationship is positive compare with other suppliers.	➢ Maybe based on individual transactions. ➢ The relationship with Clean System is probably secure. ➢ The relationship is secure compare with other suppliers.	➢ Based on individual transactions. ➢ The relationship with Clean System is probably fine. ➢ The equipment engineer is not sure how this relationship compares with those with other suppliers.
Trust	➢ The production manager trusts Clean	➢ The purchasing manager trusts Clean	➢ The buyer trusts Clean System's price and	➢ The module-manufacturing	➢ The equipment engineer trusts Clean

	➢ System's cheaper price and customer service. ➢ Clean System seems to have strong customer service and a long-term relationship with Semiconductor.	➢ System's cheaper price and customer service. ➢ Clean System has high quality customer service and stable quality products. ➢ They have a long-term relationship.	➢ customer service. ➢ Clean System's customer service is very strong. They trust each other.	➢ director trusts Clean System's after sales service. ➢ After sales service is a very important reason for the module-manufacturing director to trust Clean System.	➢ System's customer service. ➢ Positive customer service is a key reason for the equipment engineer to trust Clean System.
Cooperation	➢ If Clean System always offers good and cheaper products for Semiconductor, this will promote long-term cooperation with Semiconductor. ➢ Positive cooperation can keep Semiconductor buying goods from Clean System. ➢ Positive cooperation can bring both	➢ It is believed positive cooperation can improve mutual profitability and maintain a long-term relationship. ➢ If Clean System maintains positive cooperation with Semiconductor, Semiconductor will always buy goods from Clean System. ➢ Positive cooperation	➢ It is believed a positive relationship has been built based in positive cooperation. ➢ Positive cooperation is to the advantage of both sides.	➢ Positive cooperation means good after sales service and rapid repair when products break down. ➢ Positive cooperation can increase both companies' profits.	➢ Clean System has positive cooperation with Semiconductor. ➢ Positive cooperation can maintain a long-term relationship between them. ➢ Positive cooperation will benefit both companies.

	companies' growth in business.	can maintain a long-term business relationship.			
Inconsistency	➢ The production manager is not sure about communication with Clean System, because he does not often communicate with Clean System.	➢ It seems they do not have big communication problems. ➢ In some cases, they have inconsistencies over the price, but this is not a big problem. ➢ They do not have serious inconsistency problems in this relationship.	➢ They do not have serious inconsistency problems. ➢ In some cases, the buyer has inconsistency problems with Clean System's lower level staff.	➢ Communication is positive with Clean System. ➢ In some cases, when products broke down, Semiconductor tried to communicate through the phone but failed. It might be due to their lack of product knowledge and also to ambiguities in communication.	➢ The equipment engineer does not have big communication problems with Clean System. ➢ In some cases, Clean System's lower level staff are unclear about some aspects of their products. ➢ No unclear communication influences this relationship.
Power/dependence	➢ Semiconductor places orders with Clean System, and Clean System provides Semiconductor with	➢ Semiconductor orders goods from Clean System, who is responsible for providing the after	➢ Semiconductor controls the after sales service requests and order placement; and Clean System controls	➢ Semiconductor gives Clean System some related product knowledge and order specifications; Clean	➢ When Semiconductor has problems with products bought from Clean System. Clean System always deals

	good products and customer service. ➢ Company size difference does not influence this relationship. ➢ Semiconductor is more influential in this relationship. It is Semiconductor who purchases products from Clean System. ➢ Semiconductor takes advantage from this relationship through getting cheaper and better products, and good customer service.	sales service that Semiconductor requests. ➢ Company size is not an important issue in this relationship. ➢ Semiconductor is most influential in this relationship through its influence on price and orders. ➢ Semiconductor gets benefits from this relationship in the areas of cheaper product and good customer service.	the provision of good product for Semiconductor. ➢ The relationship is not affected by company size. ➢ Semiconductor is most influential in this relationship and has influence on price and orders. ➢ The benefits of this relationship for Semiconductor are purchasing better and cheaper products, and good customer service.	System needs to meet the specifications and provide good after sales service. ➢ Relative company size is not important in this relationship. ➢ Semiconductor is most influential in this relationship. When Semiconductor meets problems, Clean System needs to deal with these problems quickly. ➢ The most important advantage from this relationship to Semiconductor is good customer service.	with these problems quickly. ➢ Semiconductor is most influential in this relationship through its customer service requests to Clean System. ➢ The key benefit to Semiconductor from this relationship is good customer service.

Appendix 15: Analysis and Interpretation from Supplier D's (Cooling) Perspective

Company Background

The company was established in 1987.
Major products: home electronic appliances, and electronics cooling fans.
Company turnover: around NT$ 1 billion per year (around £16.67 million per year).
The company has 200 employees.
The company has around 12 domestic customers, and the major markets are Japan, U.S.A., Mainland China, and Taiwan.

Relationship Background

Larger customer: customer D (Laptop).
Relationship duration: approximately five years.
Participants in this relationship: The vice-managing director (who is concurrently also the manufacturing director), domestic marketing manager, domestic sales person, R&D manager, all of whom are based in the Electronics Cooling Division. The managing director is responsible for the whole company's business management (Home Appliance and Electronics Cooling Divisions). The managing director only deals with especially important events or issues, such as customer complaints about Cooling's product quality or product specification, involving large scale returned goods. The vice-managing director and domestic marketing manager are mainly responsible for maintaining the relationship. The role of the domestic sales person is to assist the domestic marketing manger. The R&D manager focuses on technology problems.
Types of products sold to customer D (Laptop): cooling fans.

Supplier D (Cooling) Respondent Roles

Interviewees / Themes	Managing Director	Vice-Managing Director (Concurrently the Manufacturing Director)	Domestic Marketing Manager	Domestic Sales Person	R&D Manager
Respondent's Role	➢ Responsible for the whole company's business management (including the Home Appliance Division and the Electronics Cooling Division).	➢ Responsible for the Electronics Cooling Division's business management plan and for executing company policies.	➢ Responsible for the Electronics Cooling Division's sales in the domestic market.	➢ Assist domestic marketing manager to develop the domestic market.	➢ R&D of new products.

Supplier D's (Cooling) Perspective on the Characteristics of the Relationship

Themes \ Interviewees	Managing Director	Vice-Managing Director (Concurrently the Manufacturing Director)	Domestic Marketing Manager	Domestic Sales Person	R&D Manager
The Characteristics of the Relationship between Small Supplier D (Cooling) and Their Larger Customer D (Laptop)					
Mutuality	➢ Laptop gives up individual product standard goals to maintain the relationship. ➢ The relationship development is promoted by the continued effort to research and develop new products for Laptop. ➢ Cooling's main goals are enhancing company turnover and profit. ➢ Each company has	➢ Laptop gives up individual product standard goals to maintain the relationship. ➢ Relationship development is promoted by improvements in R&D capabilities. ➢ The main goals in Cooling are improving order placement and profit. ➢ Both companies have similar profitability	➢ Laptop gives up individual product technology goals to maintain the relationship. ➢ Relationship development is promoted by improvements in technological capabilities and increase in both companies' profits. ➢ The goals and interests of Cooling are enhancing business	➢ Laptop may not give up their individual goals for Cooling. ➢ The relationship development goal is the development of R&D capabilities. ➢ The goals and interests in Cooling are improving the company's business. ➢ Both companies have similar goals for increasing the benefits to their own company resulting in different	➢ In some cases, Laptop contributes technological solutions to Cooling's problems. ➢ The relationship development goal is the continued R&D of new products. ➢ Both companies have similar goals in the R&D of better products for Laptop and different goals on product specification, which Laptop is always changing.

	similar goals of increasing profit, which leads to different goals for price. ➢ Cooling contributes most and Laptop gains most.	goals, and as a result, different requirements for the price of products. ➢ Both parties contribute and gain in this relationship.	achievement and profit. ➢ The companies have dissimilar goals on price. ➢ Cooling contributes more and Laptop gains more.	goals for the price of Cooling's products. ➢ Both parties contribute and gain in this relationship.	➢ The R&D manager is not sure who contributes and gains most in this relationship, due to the limited scope of his job relative to the wider context of the inter-organisation relationship.
Particularity	➢ Based on individual transactions. ➢ The relationship with Laptop is tolerable. ➢ Not very secure with any of Electronics Cooling Division's customers.	➢ Based on individual transactions. ➢ The relationship with Laptop is adequate. ➢ Not very stable with any of Electronics Cooling Division's customers.	➢ Relies on each transaction. ➢ The relationship with Laptop is moderate. ➢ It is very difficult to compare the relationship with Laptop and that with other customers.	➢ Based on individual transactions. ➢ The relationship with Laptop is moderate. ➢ The relationship with Laptop and those with other customers are similar.	➢ Based on individual transactions. ➢ The relationship with Laptop is tolerable. ➢ Not sure how this relationship compares with other relationships.
Trust	➢ Cooling has built up trust with Laptop over the several years of the	➢ Cooling trusts Laptop to gives them orders. ➢ Cooling can	➢ Laptop places regular orders with Cooling. ➢ Trust is involved in this	➢ No big problems over the past several years' relationship.	➢ No problems over the past several years' relationship.

	relationship. ➢ Positive trust can improve both companies' business development.	competently serve Laptop's orders.	regular order placement.	➢ Trust can improve both companies' profits.	➢ Trust can help the R&D manager's R&D direction.
Cooperation	➢ The cooperation with Laptop is tolerable. ➢ Positive cooperation can improve both businesses.	➢ It is believed that positive cooperation can increase both companies' profits. ➢ Positive cooperation can increase both companies' competitive ability.	➢ Cooling tries to cooperate with Laptop. ➢ Improved cooperation adds value to the relationship.	➢ Positive cooperation can enhance both companies. ➢ Building cooperation with Laptop will result in orders for Cooling.	➢ Positive cooperation can help the R&D manager develop new and improved products, this can also lead to greater understanding of Laptop's requirements and wants.
Inconsistency	➢ The focus of the managing director seems to be on wider overseas business. ➢ The internal communication seems to be dealt with by the vice-managing director.	➢ In some cases, they have inconsistencies over price negotiation and product quality. ➢ Until now, there have been no serious communication problems influencing	➢ The general communication problem is related Cooling's misinterpretation of Laptop's requested product specifications.	➢ If they have any communication problems, the vice-managing director and domestic marketing manager will address them, such as customer request to	➢ No serious inconsistency exists in their relationship. ➢ In some cases, the R&D manager does not very clearly understand Laptop's product requirements, because

	➢ The managing director only deals with exceptional circumstances such as large scale return of goods.	the relationship with Laptop. ➢ In some cases, the marketing manager has reported ambiguous information to the vice-managing director.		change product specifications. ➢ The main inconsistency comes from poor communication between the domestic marketing manager and their department staff.	of ambiguous or inaccurate reporting by their domestic marketing department.
Power/dependence	➢ Laptop controls order placement. ➢ This has nothing to do with relative size of the two companies. ➢ Laptop is most influential in this relationship, because Cooling is dependent on order placement.	➢ Cooling controls production; Laptop controls order placement. ➢ Company size does not influence this relationship. ➢ Laptop is most influential in this relationship since it controls orders.	➢ Cooling controls product quality; Laptop controls order placement. ➢ Difference in company size does not influence this relationship. ➢ Laptop is most influential in this relationship through its control of the placing of orders.	➢ Cooling controls delivery on time; Laptops controls order placement. ➢ Laptop is most influential in this relationship, as it influences product specifications.	➢ Cooling controls R&D of the products that the customer wants and needs; Laptop controls order placement. ➢ Cooling's R&D tends to Laptop's wants and needs.

Supplier D's (Cooling) Perspective on Relationship Development Impacts on the Small Supplier D (Cooling)

Interviewees / Themes	Managing Director	Vice-Managing Director (Concurrently the Manufacturing Director)	Domestic Marketing Manager	Domestic Sales Person	R&D Manager
Relationship Development Impacts on the Small Supplier D (Cooling)					
Operations	➢ Aspects of relationship development programmes with customers are dealt with by the vice-managing director in each division. ➢ Cooling strongly believes that the company needs to meet the particular standards for Laptop. ➢ Cooling has strict quality control, and has ISO certification. ➢ Cooling's operation	➢ Cooling has discussed next year's orders with Laptop. ➢ Definitely need to meet the particular standards for Laptop. ➢ Every department has different efficiency evaluation criteria and they have applied just-in-time methods. ➢ Cooling hopes their quality control can reach zero-defect.	➢ Cooling has only discussed price and product quality with Laptop. ➢ Absolutely need to meet the particular standards for Laptop. ➢ Laptop does not expect Cooling to undertake any efficiency measures for this relationship. ➢ Cooling's defective product percentage is very high. ➢ Cooling's operation	➢ There are no relationship development programmes with any suppliers or customers. ➢ Definite need to apply ISO standards for Laptop (strong tone). ➢ Cooling has applied just-in-time methods and the marketing department has to report sales to the vice-managing director every month. ➢ Laptop always	➢ Cooling has never attended relationship development programmes with any suppliers or customers. ➢ Cooling had to apply ISO standards for Laptop. ➢ R&D achievements are reported to the vice-managing director every six months. ➢ Cooling's operation strategies do not influence the relationship with

	strategies put customers first.		strategies are reducing the cost and adding additional value.	complains about the high rate of defects in Cooling's products.	Laptop.
Technology	➢ Technological capabilities need to improve.	➢ Improving technology can help Cooling build positive relationships with customers. ➢ Laptop hopes Cooling will continue to improve their technology.	➢ Improving technology can advance the relationship with customers. ➢ Laptop hopes Cooling will constantly improve their technology.	➢ Cooling must constantly improve their technological capability.	➢ Cooling is weak in technological capability. ➢ Laptop hopes Cooling will constantly improve their technology and continue to supply them with good products.
Innovation	➢ Cooling has compiled basic budgets for the R&D department. ➢ Cooling's R&D tends to customer's needs and wants. ➢ Continuing innovation can improve the relationship with all customers.	➢ Cooling's R&D capability needs improvement. ➢ Cooling continues to study new business opportunities. ➢ Continuing introduction of new products can improve the relationship with	➢ Cooling always visits their customers, and gets market information from customers. ➢ Continuing study of new developments and market trends. ➢ Laptop hopes Cooling will continue to	➢ Cooling does not have special product innovation, and R&D of new products is driven by customer's needs and wants. ➢ Improving innovation can improve the relationship with the customer.	➢ Cooling continues to study new developments. ➢ There is continuous R&D of new products.

	➢ Laptop hopes Cooling will continue to provide improved new products and innovation.	customers.	introduce new products.		
Customer Service	➢ Cooling deals with customer's problems immediately. ➢ The level of customer service can result in future orders.	➢ Cooling processes customer complaints immediately. ➢ The level of customer service will influence the relationship with Laptop. ➢ Laptop hopes Cooling will always deal with problems immediately.	➢ Keep in touch with customer regularly. ➢ The level of customer service is very important for future order placement. ➢ Laptop hopes Cooling can improve their customer service.	➢ When the domestic sales person receives any customer complaints, the domestic sales person will pass on it to relevant department immediately. ➢ Certainly, customer service is very important, perhaps to help improve the relationship and develop customer loyalty.	➢ When the R&D manager receives customer complaints from the marketing department, the R&D manager will deal with problems as soon as possible. ➢ Lack of customer service is perceived to result in lost business. ➢ If the R&D manager does not provide good customer service, the vice-managing director will take disciplinary action.

Price	➢ Cooling's pricing strategy is to match market prices and cover their costs. ➢ Pricing strategies are similar to those of larger suppliers. ➢ If the price is too high, Laptop will buy goods from other suppliers. ➢ Of course, customers always want cheap prices.	➢ Pricing strategies refer to the relationship between costs and prices within an area of business. ➢ Cooling's pricing strategy is to undercut other larger suppliers. ➢ Laptop's purchase price policy is "the cheaper the better". ➢ Customers generally wish to buy from cheap but good quality suppliers.	➢ Pricing strategies are decided by the managing director and vice-managing director. ➢ The domestic marketing manager thinks their prices are similar to those of other larger suppliers. ➢ If price is too high, customers will buy goods from other suppliers.	➢ Pricing strategies are decided at a senior management level. ➢ Price may be a little cheaper than other suppliers. ➢ Laptop buys goods from the cheapest supplier that can meet their quality standards.	➢ The managing director and vice-managing director decide the prices. ➢ The R&D manager does not know about pricing strategies compared with other competitors.
Distribution Channel	➢ The vice-managing director of the Electronics Cooling Division is in charge of distribution strategies. ➢ If Cooling cannot deliver goods on time, this will influence the	➢ Cooling uses a fixed contract delivery company to deliver their goods. ➢ Larger suppliers' distribution channels are stronger than Cooling's.	➢ Cooling has a fixed contract with a delivery company. ➢ Larger suppliers' distribution channels are more developed than Cooling's.	➢ Cooling has signed a contract with a delivery company. ➢ The domestic sales person thinks the distribution strategies of Cooling are similar to other larger	➢ There was no comment on this question, as this is outside the remit of the R&D manager.

	relationship with Laptop.			suppliers.	
Products	➢ Firstly, Cooling collects market information and then researches and develops the products that customers' need and want. ➢ Product strategies are weaker than those of larger suppliers. ➢ Laptop hopes Cooling will offer good and cheap products.	➢ Cooling's product strategy is to develop products to meet customer's needs and wants. ➢ Their product strategies are weaker than those of other larger suppliers. ➢ If product standards cannot reach Laptop's criteria, then Laptop will not give Cooling orders. ➢ Laptop hopes Cooling will continue to research new products.	➢ Cooling is weak in product development strategies. ➢ Compared with larger suppliers, Cooling is weak in product strategies. ➢ If Cooling cannot offer Laptop better products, Cooling will lose the orders from Laptop.	➢ Product strategies are to continuously R&D new products. ➢ Larger suppliers have more resource and better product strategies compared with Cooling. ➢ If Cooling cannot meet customer's requirements, Laptop may consider buying goods from other suppliers.	➢ Cooling is weak in R&D of new products. ➢ If Cooling cannot research and develop better products, Laptop will not continue to give Cooling orders. ➢ Laptop hopes Cooling will continue to research new and better products.
Capabilities	➢ Cooling has professional staff in every department.	➢ Limited finance means Cooling cannot offer employee training.	➢ The Company does not have excellent employee training.	➢ Company does not have employee training.	➢ Cooling has lacked specialised employee training.

	➢ Cooling has required management personnel to participate in some relevant external training courses. ➢ Cooling's technology is tolerable. ➢ There is no specific programme to develop managerial abilities.	➢ Company needs to continuously research and develop new products. ➢ There is no budget to develop managerial abilities. ➢ The company needs to improve its company culture to recognise and foster its values and standards.	➢ Company needs to improve specialised technological abilities. ➢ The domestic marketing manager does not seem to know about any plans for the development of managerial abilities. ➢ Cooling seems not to know customer's expectations of their values and standards.	➢ Product technology abilities are weak. ➢ The domestic sales person does not know about the development of managerial ability. ➢ High rates of staff turnover in marketing department. ➢ Lower level employees in marketing department are not valued by the company culture.	➢ They are weak in product technology knowledge. ➢ Within the content of R&D the focus is to support the R&D manager to attend external workshops and development programmes. ➢ Internal culture needs to change.

Appendix 16: Analysis and Interpretation from Customer D's (Laptop) Perspective

Company Background

The company was established in October of 1983.
Major products: tablet personal computers (PCs), liquid crystal display (LCD) PCs, laptops, and information appliances.
Company turnover: around NT$ 12 billion per year (about £200 million per year).
The company has 2000 employees.
The company's major markets are in Europe, U.S.A., Mainland China and Taiwan.

Relationship Background

Small supplier: supplier D (Cooling).
Relationship duration: approximately five years.
Participants in this relationship: The purchasing manager and his staff are mainly responsible for maintaining the relationship.
Types of products bought from supplier D (Cooling): cooling fans.

Customer D (Laptop) Respondent Roles

Interviewees / Themes	Vice-Managing Director	Purchasing Manager	Buyer	Manufacturing Director	R&D Manager
Respondent's Role	➢ Responsible to assistant managing director for management and future development of the company.	➢ Management of the purchase of important components that the company needs.	➢ Purchasing general computer components.	➢ Managing production and quality control.	➢ R&D of new products.

Customer D's (Laptop) Perspective on the Characteristics of the Relationship

Themes \ Interviewees	Vice-Managing Director	Purchasing Manager	Buyer	Manufacturing Director	R&D Manager
The Characteristics of the Relationship between Small Supplier D (Cooling) and Their Larger Customer D (Laptop)					
Mutuality	➢ Cooling concedes lower prices in order to maintain the relationship. ➢ The goals developed with Cooling involve the supply of higher quality products at lower prices. ➢ Both companies have a similar goal of making profits for their own company, but different goals related to the required price. ➢ Laptop contributes most and Cooling gains	➢ In some cases, Cooling reduces the price to maintain the relationship. ➢ The goals and interests are that Cooling provides stable quality and cheaper products. ➢ Both companies have the goal of increasing profits. This means they have different goals on price. ➢ Laptop contributes most and Cooling gains most.	➢ Cooling concedes on price in order to maintain the relationship. ➢ The goals and interests for Cooling are that Cooling offer cheap and good quality products. ➢ They don't have shared goals, and have sharply different goals on product prices. ➢ Cooling contributes most and Laptop gains most.	➢ Cooling has given up their insistence on minimum order placement in order to maintain the relationship. ➢ The shared goals and interests are delivery of goods on time and the acceptance of small orders. ➢ Both companies have a similar goal of increasing profits. ➢ Not sure who contributes or gains most.	➢ The R&D manager seems not very interested about the mutuality with Cooling. ➢ Both companies have the similar goal of increasing their benefits from the relationship. ➢ Both companies contribute and gain from this relationship.

	most.				
Particularity	➢ Based on individual transactions. ➢ The relationship with Cooling is moderate compared with those with other suppliers.	➢ Based on individual transactions. ➢ Cheaper price and high quality make the relationship worth keeping.	➢ Based on individual transactions. ➢ The relationship with Cooling is adequate. ➢ The relationship is tolerable compared with those with other suppliers.	➢ The manufacturing director seems unsure about the particularity of business transactions with Cooling. ➢ The relationship with Cooling is tolerable. ➢ The relationship with Cooling is adequate compared with other suppliers.	➢ The R&D manager seems does not seem to know about the particularity of business transactions with Cooling. ➢ The R&D manager seems not to be interested in the relationship with Cooling, or in that with other suppliers.
Trust	➢ Cooling has not caused serious problems during several years' relationship. ➢ The vice-managing director requires the purchasing department to sign a contract for any business	➢ Cooling delivers goods on time and at a cheaper price than its competitors. ➢ A signed contract for each business transaction is company policy.	➢ Cooling is trusted to deliver goods on time. ➢ Buyer trusts any suppliers who are able to meet their delivery time, price, and quality standards.	➢ Cooling is trusted to accept small orders. ➢ The acceptance of small orders is a key reason for the manufacturing director to trust a supplier.	➢ Cooling is trusted because their goods are tolerable and there have been no serious problems during the past years' relationship. ➢ Trust is a very important reason to continue the

	transactions.				development of the relationship.
Cooperation	➢ Cooling always cooperated well with Laptop.	➢ The long-term cooperation depends on Cooling continuing to meet Laptop's price and other requirements. ➢ Positive cooperation can bring both companies' profits.	➢ Low price is the key reason to maintain long-term cooperation. ➢ Cooling always delivers goods on time.	➢ Positive cooperation can help keep a long-term relationship with Cooling. ➢ The long-term cooperation should provide high quality and delivery of goods of on time.	➢ Long-term cooperation depends on the cheap prices, better quality, and continued delivery of goods on time.
Inconsistency	➢ The communication with Cooling is tolerable. ➢ There are no important inconsistencies in the relationship.	➢ They do not have serious communication problems. ➢ In some cases, there are conflicts over price.	➢ Communication with Cooling is adequate. ➢ The most important conflicts arise during price negation. ➢ They do not have serious inconsistency problems in this relationship.	➢ The manufacturing director is unsure of the quality of communication with Cooling, because he does not communicate very often with Cooling. ➢ In some cases, they have inconsistencies in the product	➢ The R&D manager is hardly involved in communication with Cooling.

				specification.	
Power/dependence	➢ Laptop controls order placement; Cooling controls delivery of goods on time. ➢ Relative company size is not important. ➢ Laptop is most influential in this relationship, since Laptop places orders for goods with Cooling. ➢ Laptop takes advantage from this relationship by getting cheap products.	➢ Laptop controls order placement and price; Cooling controls delivery of goods on time. ➢ The relationship is not affected by the relative size of the two companies. ➢ Laptop is more influential in this relationship. It is Laptop who purchases products from Cooling. ➢ The benefit of this relationship for Laptop is purchasing cheap products.	➢ Laptop places orders with Cooling, and Cooling provides Laptop with good products at cheaper prices than their competitors. ➢ Relative company's size is not important. ➢ The reason Laptop is dominant in the relationship is that they are the customers. ➢ The most important advantage from this relationship to Laptop is that Cooling's product prices are lower than those of other suppliers.	➢ Laptop places orders with Cooling, and Cooling delivers goods on time for Laptop. ➢ Laptop is most influential in this relationship, especially on price and order placement. ➢ The key benefit to Laptop from this relationship is Cooling's acceptance of small orders.	➢ Laptop controls order placement and product specification; Cooling controls delivery of goods on time. ➢ Smaller suppliers are weak in technology compared to larger suppliers. ➢ The benefit of this relationship is cheap prices compared to other suppliers.

Appendix 17: Analysis and Interpretation from Supplier E's (Transformer) Perspective

Company Background

The company was established in 1991.
Major products: transformers, power supplies, and integrated circuit (IC) boards.
Company turnover: around NT$ 20 million per year (around £0.33 million per year).
The company has 50 full-time employees.
The company's major market place is the domestic market. They have around 20 domestic customers.

Relationship Background

Larger customer: customer E (Power Supply).
Relationship duration: approximately two years.
Participants in this relationship: The managing director and marketing manager are mainly responsible for maintaining the relationship. The R&D manager only deals with technology problems. The quality control manager only participates to address complaints on product quality and attends Power Supply's component purchasing quality management meeting.
Types of products sold to customer E (Power Supply): transformers, power supplies, and integrated circuit (IC) boards.

Supplier E (Transformer) Respondent Roles

Interviewees / Themes	Managing Director	Marketing Manager	Quality Control Manager	R&D Manager	Production Manager
Respondent's Role	➢ Management and plan for the whole company, developing new customers and maintaining the relationship with established customers.	➢ Responsible for the company's sales achievement and maintaining the relationship with customers.	➢ Responsible for product quality.	➢ R&D of new products.	➢ Mainly responsible for production and seeking home workers and small manufacturers to help his production from raw materials to semi-finished products.

Supplier E's (Transformer) Perspective on the Characteristics of the Relationship

Interviewees / Themes	Managing Director	Marketing Manager	Quality Control Manager	R&D Manager	Production Manager
The Characteristics of the Relationship between Small Supplier E (Transformer) and Their Larger Customer E (Power Supply)					
Mutuality	➢ Power Supply gives up their insistence on their preferred price to maintain the relationship with Transformer. ➢ The relationship development goal is to sincerely offer good products and service to Power Supply. ➢ The main goal for Transformer is improving business profits. ➢ Each company has similar goals of	➢ Sometimes Power Supply gives up the insistence on its preferred price to maintain the relationship with Transformer. ➢ The relationship development goal is to continue to improve the technology. ➢ Transformer's main goals are enhancing company business achievements and profits. ➢ Both companies have	➢ Power Supply maybe concedes on price to keep the relationship with Transformer. ➢ The relationship development goals are stable quality and improving technology. ➢ Of course, the main goal in Transformer is improving profit. ➢ Both companies have similar product quality goals. ➢ Both parties contribute and gain in this relationship.	➢ The R&D manager is not sure how, or if, Power Supply gives up their individual goals for the relationship. ➢ The relationship development goal is the development of new and better products. ➢ Companies have the same goal of profit maximisation, and different goals related to the price of Transformer's products.	➢ The production manger does not know in which ways Power Supply gives up their individual goals for the relationship. ➢ Both companies have similar goals for increasing the benefits to their own company. ➢ The production manager is not sure who contributes or gains most in this relationship, due to the nature of this job and its limited scope

	increasing their business profit which leads to different goals for price. ➢ Transformer contributes most and Power Supply gains most in this relationship.	similar profitability goals, and as a result, different requirements for the price of products. ➢ Transformer strongly believes that Transformer contributes more and Power Supply gains more.		➢ Transformer contributes more and Power Supply gains more.	relative to the wide context of the inter-organisation relationship.
Particularity	➢ Based on individual transactions. ➢ Very secure with Power Supply. ➢ The managing director believes that all of the relationships with their customers are secure. ➢ Transformer has high particularity since its products are customised designs.	➢ Based on individual transactions. ➢ Very secure in this relationship. ➢ Transformer builds a very strong relationship with all of their customers. ➢ They have high particularity in product development.	➢ Relies on each transaction. ➢ Very secure with Power Supply. ➢ The quality control manager seems not very sure how this relationship compares with other customers, because he is only responsible for the product quality.	➢ Based on individual transactions. ➢ Very secure between the two parties. ➢ Transformer has very secure relationships with all of their customers.	➢ Based on individual transactions. ➢ The relationship with Power Supply is secure. ➢ The production manager does not know how this relationship compares to those with other customers, because he only deals with

					production.
Trust	➢ The managing director trusts Power Supply for its positive reputation and punctual payment. ➢ Transformer has built a positive relationship with Power Supply.	➢ The marketing manager trusts Power Supply in the areas of goodwill and regular placement of orders. ➢ The marketing manager believes they trust each other.	➢ Power Supply is the bigger company in this business area. ➢ The quality control manager believes the managing director has built a positive relationship with customers and Transformer's products are fine.	➢ Transformer trusts Power Supply, because Power Supply is the large company in this business area and has goodwill. ➢ They trust each other.	➢ Power Supply has credibility in the business.
Cooperation	➢ The managing director strongly believes they have positive cooperation. ➢ The managing director believes that positive cooperation creates maximum profit for both partners. ➢ Transformer has built a	➢ The marketing manager believes they have positive cooperation. ➢ Positive cooperation can improve the relationship for both sides.	➢ The quality control manager believes they have positive cooperation, because Transformer's quality control is very good. ➢ Positive cooperation can improve development of both companies.	➢ Positive cooperation can build a long-term relationship with Power Supply. ➢ Positive cooperation gives the R&D manager a sense of business requirements for the design of new products.	➢ They have positive cooperation, because the production manager always delivers goods on time. ➢ Positive cooperation can improve the confidence of both sides.

	positive relationship with Power Supply and they are like a friend.				
Inconsistency	➢ There are no serious communication problems influencing the relationship with Power Supply. ➢ An internal communication problem is related to Transformer's lower level staff reporting incorrect information to their managing director.	➢ No serious communication problems exist in this relationship. ➢ The main inconsistency comes from poor communication between the marketing manager and their internal lower level staff.	➢ The communication with Power Supply is fine. ➢ In some cases, lower level administration has reported ambiguous information to the quality control manager.	➢ No serious inconsistency exists in their relationship.	➢ Communication with Power Supply is fine. ➢ Communication problems are internal to the to production department, who's staff have conflicts with outside workers.
Power/dependence	➢ The power is fairly evenly balanced in this relationship, because Transformer has strong technology capabilities.	➢ Power Supply controls order placement; Transformer controls design and production of the products. ➢ Difference in company	➢ Power Supply controls order placement; Transformer controls product quality. ➢ This has nothing to do with relative size of the	➢ Power Supply controls order placement; Transformer controls the supply of good products. ➢ Company size does not	➢ Power Supply controls order placement; Transformer controls delivery of goods on time. ➢ Power Supply is

	➢ Company size does not influence this relationship. ➢ The important benefit in this relationship is increasing company profits.	size does not influence this relationship. ➢ The power is fairly evenly balanced in this relationship. ➢ The key benefit in this relationship is profit for Transformer.	two companies. ➢ It is very difficult to say who is most influential in this relationship. ➢ The key benefit from this relationship is regular order placement from Power Supply.	influence this relationship. ➢ Maybe Power Supply is a little more influential in this relationship. ➢ The R&D manager gets benefit from this relationship in that it improves his R&D knowledge and abilities.	possibly most influential in this relationship. ➢ The key benefit in this relationship is raising the profits of the company.

Supplier E's (Transformer) Perspective on Relationship Development Impacts on the Small Supplier E (Transformer)

Interviewees / Themes	Managing Director	Marketing Manager	Quality Control Manager	R&D Manager	Production Manager
Relationship Development Impacts on the Small Supplier E (Transformer)					
Operations	➢ The managing director only discusses product standards with his customers, but he has attended Power Supply's quality management meetings (for bought-in components). ➢ Transformer strongly believes that the company needs to meet the particular standards for Power Supply. ➢ Transformer has applied product safety standards, such as the	➢ The marketing manager has regular meetings with customer, but only discusses order placement and product standards. ➢ Absolutely need to meet the particular standards for Power Supply. ➢ Transformer has applied safety standards. ➢ The marketing manager reports sales to the managing	➢ The quality control manager has attended Power Supply's supply quality management meeting, as this is required by Power Supply. ➢ Transformer had to apply product safety standards for Power Supply. ➢ The quality control manager has reported quality control performance to the managing director. ➢ Their quality control is	➢ The R&D manager has meetings with customers and discusses product design. ➢ Transformer needs to meet particular standards for Power Supply. ➢ The R&D manager reports R&D performance to the managing detector. ➢ Quality control is very important for the company. ➢ The company's	➢ The production manager does not attend the relationship development programmes with customers. ➢ Definitely need to apply product safety standards for Power Supply. ➢ Quality control is fine in their company.

	U.S. Underwriters Laboratory (UL) and the European Commission's (CE) safety marking schemes. ➢ Customers do not require Transformer to undertake any efficiency measures, but the managing director has required each department to issue regular efficiency reports. ➢ Transformer has very strong quality control. ➢ Transformer's operation strategies focus on technology development.	director every month. ➢ Quality control is very strict in their company. ➢ The core operation strategy of Transformer is to continue technological development.	very strong. ➢ The Company's major operation strategy is continuous technology development.	operation strategies are to put the customer first, and to constantly improve R&D technology abilities.	
Technology	➢ Transformer's technology	➢ Technology developments are very	➢ Transformer's technology is strong.	➢ Technology development is very	➢ Transformer pays increasing attention to

	development approach is to cooperate with their customer to meet the needs of their market. For example, if a customer's products sell to developed countries, technology will be very important; if a customer's products sell mostly to underdeveloped countries, technology will be less important.	➢ important. ➢ Power Supply hopes Transformer will continue to improve their technology.	➢ Improving technology can improve the relationship with customers.	important for Transformer. ➢ Technical development can contribute to increase in the companies business.	technological development. ➢ Technology is a very important asset in maintaining the relationship with Power Supply.
Innovation	➢ Company needs to improve marketing innovation. ➢ Transformer's innovation is driven by customer needs. ➢ Customers have confidence in their R&D and technology	➢ Transformer continues to study commercial opportunities. ➢ The company has done some innovative in marketing, but not much. ➢ Power Supply hopes Transformer will	➢ Continuing innovation can improve the relationship with all customers. ➢ Power Supply hopes Transformer will continue to innovate to improve product quality.	➢ Continuing innovation can improve the relationship with Power Supply. ➢ Power Supply hopes Transformer will continue to innovate.	➢ Innovation is very important for the company. ➢ The production manager is not sure about the customer's innovation expectations.

	capabilities. ➢ The company has no website.	continue innovation in technology.			
Customer Service	➢ Transformer's customer service is reactive rather than proactive, but they deal with customer's problems immediately. ➢ The managing director strongly believes that positive customer service can improve the relationship with customers. ➢ Transformer accepts small orders.	➢ They deal with customer's problems promptly. ➢ Positive customer service can support a long-term and stable relationship with customers. ➢ Customer likes Transformer offering excellent customer service.	➢ Transformer processes customer complaints immediately. ➢ Poor customer service will influence the relationship with customers. ➢ The quality control manager thinks the customer's service expectation is that product quality can reach zero defects.	➢ The R&D manager deals with customer's problems immediately. ➢ The R&D manager thinks customer's expect Transformer to continue to improve R&D capabilities.	➢ Transformer delivers goods on time. ➢ The customer expects delivery on time.
Price	➢ Pricing strategy is strongly influenced by the quantity of a customer's orders. ➢ It is very difficult to	➢ The managing director decides prices. ➢ Transformer's prices are very difficult to compare with other	➢ Pricing strategies are determined by the managing director. ➢ The quality control manager does not	➢ The R&D manager supplies data on material costs for the managing director. ➢ The R&D manager	➢ The production manager does not know what the pricing strategies are, but he supplies data on

	compare the price with other suppliers. ➢ Customers compare prices, but do not let Transformer know competitor prices. ➢ Every supplier has different product technology and design, so prices are not directly comparable.	suppliers, because their product standards are different. ➢ Customers do compare prices, but seem very confident in Transformer's products. ➢ Certainly the customer would like to have cheaper prices, but Transformer's product technology is good.	know how their prices compare with those of other suppliers. ➢ The quality control manager is not sure about the customer's pricing expectations.	does not know how the price compares with other suppliers and is unsure how price influences the relationship. ➢ The R&D manager does not know customer's pricing expectations.	production costs to the managing director, who determines pricing policy how much he pay for home workers and small manufacturing.
Distribution Channel	➢ They have a fixed contract with a delivery company. ➢ Their distribution strategies are similar to those of other suppliers. ➢ Power Supply does not complain about Transformer's	➢ Transformer has a contract with a delivery company. ➢ Transformer's distribution strategies are similar to those of other suppliers. ➢ The customer main concern is that goods be received on time.	➢ There was no comment on this question, as this is outside the remit of the quality control manager.	➢ There was no comment on this question, as this is outside the remit of the R&D manager.	➢ The production manager is only responsible for the delivery of goods on time.

	distribution methods.				
Products	➢ Their product design depends on customer's needs. ➢ Transformer's products do not have direct competitors from larger suppliers, because their products are customised. ➢ Transformer never sells identical products to more than two customers, and this customisation product strategy is a key influence on the relationship. ➢ The managing director believes the best products are those the customer finds satisfactory.	➢ The product strategy aims to supply customer's needs and wants. ➢ They do not have larger competitors in their product range. ➢ Transformer does not sell the same product to more than two customers. This is the informal policy in this area of business. ➢ Transformer's customers are satisfied with their products. ➢ The marketing manager believes their product technology is good.	➢ Transformer's product strategy is to develop products to meet customer's needs and wants. ➢ There is only one company that has similar products to Transformers, located in the same city. ➢ Power Supply requires exclusive supply of Transformer's products, so when they buy any type of product from Transformer, Transformer cannot sell this product to other customers. ➢ Customers hope Transformer always	➢ The R&D manager collects information on new products on the market, and then researches customer preferences. ➢ Their products are very characteristic and competitive. ➢ The customer hopes Transformer can provide a greater range of products.	➢ Transformer's products are good.

	➢ Only one company located in the same city, has similar products to Transformer.		has new products.		
Capabilities	➢ Transformer has supported management participation in outside training programmes. ➢ Transformer's product technology is driven by customer needs. ➢ The managing director has considered a programme for developing managerial abilities, but not yet implemented it.	➢ Transformer only has training at the management level. ➢ The marketing manager believes their technology is good. ➢ Lower level employees show limited commitment to the company.	➢ Only some key staff have technical knowledge in Transformer. ➢ The company has relatively few personnel with a professional level of technical ability. ➢ The company need to improve the position of lower level employees in the company culture.	➢ Company technology is over-reliant on certain key personnel. ➢ The R&D manager is not aware of any planned development of managerial ability, but the company has sent the R&D manger to some relevant organisations for training. ➢ Lower level employees are not valued by the company culture.	➢ Transformer does not have employee training for lower level staff. ➢ The production manager thinks Transformer's technology is fine. ➢ The company needs to improve its company culture to recognise and foster the value of lower level staff.

Appendix 18: Analysis and Interpretation from Customer E's (Power Supply) Perspective

Company Background

The company was established in 1978.
Major products: power supply products, opto-electronic components, modules, and systems.
Company turnover: around US$ 3.7 billion per year (about £1850 million per year).
The company has 49000 employees.
The company markets its products globally.

Relationship Background

Small supplier: supplier E (Power Supply).
Relationship duration: approximately two years.
Participants in this relationship: The purchasing manager and purchasing department are mainly responsible for maintaining the relationship, but for large orders they have to report to the vice-managing director. The component quality control manager is responsible for monitoring the quality of products that they purchase from their suppliers.
Types of products bought from supplier E (Power Supply): transformers, power supplies, and integrated circuit (IC) boards.

Customer E (Power Supply) Respondent Roles

Interviewees / Themes	Vice-Managing Director	Component Quality Control Manager	Purchasing Manager	Buyer	R&D Manager
Respondent's Role	➢ Responsible for assisting the managing director in the general running of the business.	➢ Responsible for building a Supply Quality Management System, monitoring products purchased, and insisting on constant quality improvement by their suppliers.	➢ Purchasing components.	➢ Purchasing transformers, power supplies, and integrated circuit (IC) boards.	➢ Responsible for design, development and R&D of new products.

Customer E's (Power Supply) Perspective on the Characteristics of the Relationship

Interviewees / Themes	Vice-Managing Director	Component Quality Control Manager	Purchasing Manager	Buyer	R&D Manager
The Characteristics of the Relationship Between Small Supplier E (Transformer) and Their Larger Customer E (Power Supply)					
Mutuality	➢ Transformer concedes lower prices when Power Supply places big orders. ➢ Power Supply's main goals and interests are purchasing good products and Transformer always provides good technology for them. ➢ Both companies have a similar goal of improving technology, but different goals on price. ➢ Transformer	➢ The component quality control manager is not sure what individual goals Transformer gives up to maintain the relationship, because he only deals with monitoring products purchased, and insisting on constant quality improvement by suppliers. ➢ Power Supply always places orders with Transformer. ➢ The goals and interests	➢ Transformer reduces the price when Power Supply places big orders. ➢ Power Supply always buys components from Transformer. ➢ The goals and interests are that Transformer offers good quality products at a competitive price. ➢ Both companies have a similar goal, in that they both need profits for their own company, which results in	➢ Transformer makes concessions on price to maintain the relationship. ➢ The goal developed is that Transformer provides Power Supply with good product technology. ➢ Transformer contributes most and Power Supply gains most.	➢ Maybe Transformer reduces the price to maintain this relationship. ➢ The goal developed is that Transformer offers good products. ➢ The goals and interests for Power Supply are that Transformer offers more types of products. ➢ Power Supply contributes most and Transformer gains most.

	contributes most and Power Supply gains most.	for Power Supply are that Transformer's products can reach zero defects. ➢ They have similar goals for product quality. ➢ Both companies contribute and gain in this relationship.	opposite goals for product price. ➢ Transformer contributes most and Power Supply gains most.		
Particularity	➢ Based on individual transactions. ➢ The relationship with Transformer is positive. ➢ The relationship with Transformer is secure compared with those with other suppliers. ➢ The vice-managing director requires Transformer to commit to an exclusive supply	➢ Maybe based on individual transactions. ➢ The relationship with Transformer is secure. ➢ The relationship is fine compared with those with other suppliers.	➢ Based on individual transactions. ➢ The relationship with Transformer is very secure. ➢ The relationship with Transformer is very secure compared with those with other suppliers. ➢ The products sold to Power Supply are customised.	➢ Based on individual transactions. ➢ The relationship is very secure. ➢ The relationship is secure compared with other suppliers. ➢ Power Supply's components are customised.	➢ Based on individual transactions. ➢ The relationship is secure. ➢ The relationship is secure compared with other suppliers.

	of particular components. When they sell a product to Power Supply, they cannot sell it to other customers.				
Trust	➢ Power Supply trusts Transformer to keep their promise not to sell product sold to Power Supply to other customers. ➢ Power Supply always places orders with Transformer.	➢ Power Supply trusts Transformer to supply good quality products. ➢ The component quality control manager thinks Power Supply trusts Transformer.	➢ Power Supply trusts Transformer's product technology, customer service, and their friendship. ➢ Power Supply trusts Transformer to supply good product technology and act like a friend.	➢ Power Supply trusts Transformer's product quality, technology, and delivery of goods on time. ➢ Buyer believes Power Supply trusts Transformer.	➢ Power Supply trusts Transformer's product technology. ➢ Positive trust can improve both companies' profits.
Cooperation	➢ Positive cooperation can bring both companies' growth in business. ➢ If Transformer continues to cooperate	➢ Positive cooperation can increase both companies' profits. ➢ Positive cooperation is to the advantage of both sides.	➢ Transformer has positive cooperation with Power Supply. ➢ Positive cooperation can help maintain a long-term business	➢ They seem to have positive cooperation. ➢ Positive cooperation will benefit both companies.	➢ Transformer shows positive cooperation with Power Supply, and always gives Power Supply technology support.

	with Power Supply, Power Supply will continue to give them orders.		relationship.		➢ Positive cooperation benefits both sides.
Inconsistency	➢ The vice-managing director doesn't often communicate with Transformer, because he only deals with large orders. ➢ The vice-managing director does not know of any inconsistency in the relationship with Transformer.	➢ In some cases, they have conflicts over product quality. ➢ They do not have serious inconsistency.	➢ Power Supply does not have serious communication problems with Transformer. ➢ They do not have inconsistency problems in this relationship.	➢ Communication with Transformer is tolerable. ➢ In some cases, Transformer's lower level staff are unclear about some aspects of their products.	➢ Power Supply does not have big communication problems with Transformer.
Power/dependence	➢ Transformer provides Power Supply with good product technology, and Power Supply places orders with Transformer. ➢ Company size	➢ Transformer provides Power Supply with good product quality, and Power Supply places orders with Transformer. ➢ Relative company size	➢ Transformer offers Power Supply good products. ➢ Company size is not an important issue in this relationship, because Transformer's product	➢ Transformer controls the product quality and customer service. ➢ Power Supply maybe is a little more influential in this relationship. ➢ Power Supply gets	➢ Transformer gives Power Supply good products. ➢ The relationship is not affected by company size, because Transformer's

	difference does not influence this relationship. ➢ The partners are equally influential in this relationship. ➢ The key benefit to Power Supply from this relationship is increasing company profits.	is not important in this relationship. ➢ The component quality control manager is not very sure who is most influential in this relationship, because he only deals with quality problems in products purchased from suppliers. ➢ The most important advantage from this relationship to Power Supply is improving company profits.	technology capabilities are good. ➢ Power is evenly balanced and both parties help each other. ➢ Of course, the benefits of this relationship for Power Supply are improving profits.	benefits from this relationship in the area of better products.	technology capabilities are good. ➢ The power is balanced in this relationship. ➢ The most important advantage from this relationship to the R&D manager is the efficient execution of his product designs.

Appendix 19: Cross-Case Analysis and Interpretation of the Relationship between Small Suppliers and Their Larger Customers

Relationship Duration

Cases / Themes	Case A (Chip & Resistor)	Case B (Bright Light & Diode)	Case C (Clean System & Semiconductor)	Case D (Cooling &Laptop)	Case E (Transformer & Power Supply)
Relationship Duration	➢ Approximately three years.	➢ Approximately five years.	➢ More than ten years.	➢ Approximately five years.	➢ Approximately two years.

The Characteristics of the Relationship between Small Suppliers and Their Larger Customers

Cases / Themes	Case A (Chip & Resistor)	Case B (Bright Light & Diode)	Case C (Clean System & Semiconductor)	Case D (Cooling &Laptop)	Case E (Transformer & Power Supply)
Mutuality	**Supplier** ➢ In some cases, Resistor makes concessions on price and delivery date. ➢ The relationship development goal is to set up a strategic alliance. ➢ Resistor seems only interested in their company development rather than in relationship development. ➢ Chip contributes most and Resistor gains most. **Customer**	**Supplier** ➢ In some cases, Diode contributes technological solutions to Bright Light's problems. ➢ Companies have the same goal of profit maximisation, and different goals related to the price of Bright Light's products. ➢ Bright Light contributes more and Diode gains much more from the relationship. **Customer**	**Supplier** ➢ Sometimes Semiconductor gives up the insistence on its preferred price to keep the relationship with Clean System. ➢ The relationship development goal is to obtain mutual benefit from the relationship. ➢ Each company has similar goals of increasing their business profit which leads to different goals for price. ➢ Clean System	**Supplier** ➢ Laptop gives up individual product technology goals to maintain the relationship. ➢ Relationship development is promoted by improvements in R&D capabilities and technological capabilities. ➢ Both companies have similar profitability goals, and as a result, different requirements for the price of	**Supplier** ➢ Sometimes Power Supply gives up the insistence on its preferred price to maintain the relationship with Transformer. ➢ The relationship development goal is to continue to improve the technology. ➢ Transformer's main goals are enhancing company business achievements and profits. ➢ Each company has

	➢ Chip has given up their insistence on price and a minimum order size to maintain the relationship. ➢ Resistor's main goals and interests are that Chip provides low prices, good product quality, good customer service, and delivers goods on time. ➢ Chip contributes most and gains most in this relationship. **Overall** ➢ Chip has given up their insistence on price and a minimum order size; Resistor makes concessions on price and delivery date to maintain the	➢ In some cases, Bright Light gives up their insistence on their preferred price to maintain the relationship with Diode. ➢ The goal of development is low prices. At the same time, Bright Light has to meet Diode's quality requirements. ➢ Diode contributes most, and Bright Light gains most. **Overall** ➢ In some cases, Bright Light gives up their insistence on their preferred price to maintain the relationship with	contributes more and Semiconductor gains more. **Customer** ➢ In some cases, Clean System gives up their insistence on the price to maintain the relationship with Semiconductor. ➢ The goals developed are that Clean System offers cheaper prices and good after sales service to Semiconductor. ➢ Clean System contributes most and Semiconductor gains most. **Overall** ➢ They both give up insistence on their	products. ➢ Cooling contributes more and Laptop gains more. **Customer** ➢ In some cases, Cooling reduces the price to maintain the relationship. ➢ The goals and interests are that Cooling provides stable quality and cheaper products. ➢ Both companies have the goal of increasing profits. This means they have different goals on price. ➢ Laptop contributes most and Cooling gains most. **Overall** ➢ In some cases, Laptop	similar goals of increasing their business profit which leads to different goals for price. ➢ Transformer contributes most and Power Supply gains most. **Customer** ➢ Transformer reduces the price when Power Supply places big orders. ➢ The goal developed is that Transformer provides Power Supply with advanced product technology. ➢ Both companies have a similar goal, in that they both need profits for their own company,

	relationship. ➢ Similar goals and common interest are not established yet. ➢ Resistor seems only interested in their company development rather than in relationship development. ➢ Chip believes that Chip contributes most and Resistor gains most, whereas Resistor thinks Chip contributes most and gains most in this relationship.	Diode. Diode contributes technological solutions to Bright Light's problems. ➢ Similar goals and common interests are not established, and the relationship seems insecure. ➢ From Bright Light's viewpoint, Bright Light contributes more and Diode gains much more; from Diode's viewpoint Diode contributes more, and Bright Light gains more.	preferred price to maintain the relationship with each other. ➢ The main goals and interests of Semiconductor are that Clean System provides cheaper and better products; the main goals for Clean System are continued profitability of both companies. ➢ Clean System contributes most and Semiconductor gains most.	gives up individual product standard goals; Cooling reduces the price to maintain the relationship. ➢ The relationship development goal for Cooling is improvements in technological capabilities; for Laptop it is Cooling's continued provision of stable quality and cheaper products. ➢ Both companies have similar profitability goals, and as a result, different requirements for the price of products. ➢ They have different views on who	which results in opposite goals for product price. ➢ Transformer contributes most and Power Supply gains most. **Overall** ➢ Sometimes, both of them give up the insistence on their preferred price to maintain the relationship. ➢ The relationship development goal is to continue to improve the technology. ➢ Both companies have similar profitability goals, and as a result, different requirements for the price of

				contributes most and who gains most in this relationship.	products. ➢ Transformer contributes most and Power Supply gains most.
Particularity	**Supplier** ➢ Based on individual transactions. ➢ The relationship with Resistor is secure. ➢ Chip has a secure relationship with all of their customers. **Customer** ➢ Based on individual transactions. ➢ The relationship with Chip is secure. ➢ Cheap price and positive customer service make it worth maintaining the relationship.	**Supplier** ➢ Based on individual transactions. ➢ Not very secure between two parties. ➢ Not very secure with any of Bright Light's customers. **Customer** ➢ Based on individual transaction. ➢ The relationship with Bright Light is not very secure. ➢ The relationship is not very secure compared with other suppliers. **Overall**	**Supplier** ➢ Based on individual transactions. ➢ Very secure with Semiconductor. ➢ Clean System has very secure relationships with all of their customers. **Customer** ➢ Based on individual transactions. ➢ The relationship with Clean System is secure. ➢ The relationship with Clean System is secure compare with those with other suppliers.	**Supplier** ➢ Relies on each transaction. ➢ The relationship with Laptop is moderately secure. ➢ The relationship with Laptop and those with other customers are similar. **Customer** ➢ Based on individual transactions. ➢ Cheaper price and high quality make it worth keeping the relationship. **Overall**	**Supplier** ➢ Based on individual transactions. ➢ Very secure with Power Supply. ➢ Transformer has very secure relationships with all of their customers. ➢ Transformer has high particularity since its products are customised designs. **Customer** ➢ Based on individual transactions. ➢ The relationship with Transformer is very

	Overall ➢ Based on individual transactions. ➢ High particularity due to the low product price. ➢ The relationship is secure between the two parties.	➢ The relationship is based on individual transaction. ➢ Lack of particularity. ➢ The relationship is not very secure in case B.	**Overall** ➢ Based on individual transactions. ➢ The relationship is secure between the two parties. ➢ High degree of particularity.	➢ Based on individual transactions. ➢ The relationship is moderately secure in case D. ➢ Lacks particularity. ➢ Cooling does not have a very secure relationship with any of the Electronics Cooling Division's customers.	secure. ➢ The relationship with Transformer is very secure compared with those with other suppliers. ➢ The products sold to Power Supply are customised. **Overall** ➢ Based on individual transactions. ➢ Their relationship is very secure. ➢ Transformer has high particularity since its products are customised designs.
Trust	**Supplier** ➢ Chip trusts Resistor due to the long-term relationship and their positive reputation.	**Supplier** ➢ Signing a contract with the customer in every business transaction is the company policy.	**Supplier** ➢ Clean System trusts Semiconductor due to their long-term relationship and	**Supplier** ➢ Cooling trusts Laptop to gives them orders. ➢ Cooling can competently serve	**Supplier** ➢ Transformer trusts Power Supply in the areas of goodwill and regular placement of

	Customer ➢ Resistor trusts Chip's long-term business relationship and cheap price. **Overall** ➢ Chip trusts Resistor's goodwill, and Resistor trusts Chip's price competence.	**Customer** ➢ Trust Bright Light's price, delivery and service. Besides, Bright Light is able to accept small orders. ➢ Diode signs a contract with Bright Light in every business transaction. **Overall** ➢ Diode trusts Bright Light on price, service attitude, and timely delivery. ➢ Before business transaction, Bright Light always makes inquiries about new customers. ➢ Trust is contractually based.	positive reputation. **Customer** ➢ Semiconductor trusts Clean System's price and customer service. **Overall** ➢ Clean System trusts Semiconductor's goodwill, and Semiconductor trusts Clean System's customer service competence.	Laptop's requirements. ➢ Cooling signs a contract with Laptop in every business transaction. **Customer** ➢ Cooling delivers goods on time and at a cheaper price than its competitors. ➢ A signed contract for each business transaction is company policy. **Overall** ➢ Cooling trusts Laptop to give them orders. ➢ Laptop trusts Cooling to deliver goods on time and at a cheaper price than its competitors. ➢ Trust is based on	orders. **Customer** ➢ Power Supply trusts Transformer's product technology, customer service, and their friendship. **Overall** ➢ Transformer trusts Power Supply's goodwill; Power Supply trusts Transformer's product technology competence.

				contracts.	
Cooperation	**Supplier** ➢ Chip does their best to meet Resistor's requirements. ➢ Positive cooperation creates maximum profit for both partners. **Customer** ➢ If Chip always keeps positive cooperation with Resistor, Resistor will always place orders with them. ➢ Positive cooperation can keep Resistor buying goods from Chip. **Overall** ➢ Chip seems more cooperative than Resistor; Resistor seems more interested	**Supplier** ➢ Bright Light does his best to meet Diode's requirements. ➢ It is believed that positive cooperation can improve the relationship and increase both companies' profits. **Customer** ➢ Long-term cooperation depends on cheap prices. ➢ The managing director states that if Bright Light cannot completely cooperate with Diode, Diode will replace them. **Overall** ➢ Diode's long-term	**Supplier** ➢ Clean System believes they have positive cooperation. ➢ Positive cooperation creates maximum profit for both partners. **Customer** ➢ It is believed positive cooperation can improve mutual profitability and maintain a long-term relationship. ➢ Positive cooperation means positive after sales service and rapid repair when products break down. **Overall** ➢ They seem to have positive cooperation.	**Supplier** ➢ The cooperation with Laptop is tolerable. ➢ Cooling tries to cooperate with Laptop. ➢ Improved cooperation adds value to the relationship. **Customer** ➢ The long-term cooperation depends on Cooling continuing to meet Laptop's price and other requirements. ➢ Low price is the key reason to maintain long-term cooperation. **Overall** ➢ Cooling has always cooperated well with Laptop. ➢ Laptop's long-term	**Supplier** ➢ They have positive cooperation. ➢ In some cases, they have cooperation in product development. **Customer** ➢ They seem to have positive cooperation. ➢ Transformer shows positive cooperation with Power Supply, and always gives Power Supply technology support. **Overall** ➢ They have positive cooperation. ➢ The cooperation in this relationship is evident in product development.

	in its benefits. ➢ Case A appears to show limited cooperation in the relationship.	cooperation with Bright Light is dependent on price. ➢ Case B seems to show little cooperation and a rather distant relationship between the partners.	➢ They believe positive cooperation can improve mutual profitability and maintain a long-term relationship.	cooperation depends on Cooling continuing to meet Laptop's price and other requirements.	
Inconsistency	**Supplier** ➢ No serious communication problems exist between them. ➢ The main inconsistency comes from poor internal communication between Chip's domestic marketing department and other departments. **Customer** ➢ Resistor does not have	**Supplier** ➢ The general communication requirement is related to negotiations on price. ➢ A lack of marketing department product knowledge can create communication problems with customers. ➢ The marketing manager has experienced	**Supplier** ➢ No serious communication problems exist between them. ➢ The main inconsistency comes from poor communication between the Clean System management and their lower level staff. **Customer** ➢ In some cases, they have inconsistencies	**Supplier** ➢ In some cases, they have inconsistencies over price negotiation and product specifications. ➢ The commonest communication problem is related Cooling's misinterpretation of Laptop's requested product specifications. ➢ The main inconsistency comes from poor	**Supplier** ➢ There are no serious communication problems influencing the relationship with Power Supply. ➢ The main inconsistency comes from poor communication between Transformer's lower level staff and its management. **Customer** ➢ Power Supply does not have serious

	serious communication problems with Chip. ➢ There are some cases of inconsistent product labelling. **Overall** ➢ They do not have serious communication problems. ➢ There have been some cases of incorrect product labelling. ➢ The main inconsistency comes from poor internal communication in Chip between the domestic marketing department and other departments.	interpersonal inconsistencies with Diode. ➢ Internal communication problems also exist in Bright Light. ➢ High staff turnover has contributed to a lack of clarity about Diode's requirements. **Customer** ➢ Normally, if conflicts arise, they are overpricing. ➢ If they have serious inconsistency, Diode may consider changing supplier. **Overall** ➢ Case B main inconsistencies arise during price	over the price, but this is not a big problem. ➢ In some cases, the buyer has inconsistency problems with Clean System's lower level staff. ➢ In some cases, when products broke down, Semiconductor tried to communicate through the phone but failed. It might be due to their lack of product knowledge and also to ambiguities in communication. **Overall** ➢ No serious communication problems exist between them. ➢ In some cases, they	communication between the domestic marketing manager and their department staff. **Customer** ➢ The most important conflicts arise during price negation. ➢ In some cases, they have inconsistencies in the product specification. ➢ They do not have serious communication problems. **Overall** ➢ There are no serious inconsistencies in their relationship. ➢ The most important conflicts arise during price negotiation and product specification.	communication problems with Transformer. ➢ In some cases, Transformer's lower level staff are unclear about some aspects of their products. **Overall** ➢ No serious inconsistency exists in this relationship. ➢ The general communication problem is related to Transformer's lower level staff reporting incorrect information to their management levels.

		negotiation. ➢ Bright Light marketing manager has experienced interpersonal inconsistencies with Diode. ➢ Internal communication problems also exist in Bright Light. ➢ High staff turnover in Bright Light has contributed to a lack of clarity about Diode's requirements.	have inconsistencies over the price, but this is not a big problem. ➢ The main inconsistency in this relationship comes from poor communication between Clean System's management levels, their lower level staff and Semiconductor.	➢ The main inconsistency in Cooling comes from poor communication between the domestic marketing manager and their departmental staff.	
Power/dependence	**Supplier** ➢ Chip controls providing cheap product price and good product quality; Resistor controls order placement.	**Supplier** ➢ Bright Light controls the products quality; Diode controls the final price of the products and order placement. ➢ Diode is most	**Supplier** ➢ Clean System controls the provision of good customer service for Semiconductor. ➢ Semiconductor is most influential in this	**Supplier** ➢ Cooling controls product quality, delivery on time, and catering to the customer's wants and needs; Laptop controls	**Supplier** ➢ The power is fairly evenly balanced in this relationship, because Transformer has strong technology capabilities. ➢ Power Supply controls

	➢ Company size does not influence this relationship. ➢ Resistor is most influential in this relationship since they control order placement. **Customer** ➢ Resistor controls order placement, and Chip controls product price and customer service. ➢ Company size is not an important issue in this relationship. ➢ Resistor is most influential in this relationship and has influence on orders. ➢ Resistor gets benefits from this relationship in the area of cheap	influential in this relationship through its influence on orders and price. ➢ Diode buys goods from cheap suppliers without considering the relationship with Bright Light. ➢ Company size difference did not influence this relationship. **Customer** ➢ Diode controls the price and the order for goods, and Bright Light controls the quality of the products. ➢ Company's size is not important. ➢ Diode is more influential in this	relationship through its control of the placing of orders. ➢ Clean System R&D tends to aim at providing Semiconductor's needs and wants. ➢ This has nothing to do with relative size of the two companies. **Customer** ➢ Semiconductor controls the after sales service requests and order placement; and Clean System controls the provision of good product for Semiconductor. ➢ Semiconductor is most influential in this relationship and has	order placement. ➢ Difference in company size does not influence this relationship. ➢ Laptop is most influential in this relationship, as it influences product specifications and order placement. **Customer** ➢ Laptop places orders with Cooling, and Cooling provides Laptop with good products at cheaper prices than their competitors. ➢ Relative company size is not important. ➢ Laptop is more influential in this relationship. It is	order placement; Transformer controls design and production of the products. ➢ Company size does not influence this relationship. **Customer** ➢ Transformer provides Power Supply with positive product quality, and Power Supply places orders with Transformer. ➢ Company size is not an important issue in this relationship. ➢ Power is evenly balanced and both parties help each other. **Overall** ➢ Transformer provides Power Supply with

	product. **Overall** ➢ Case A shows slight interdependence. ➢ Chip controls providing cheap product price, product design and good product quality; Resistor controls order placement. ➢ Difference in company size does not influence this relationship. ➢ Resistor is most influential in this relationship through its control of the placing of orders. ➢ Resistor takes advantage from this relationship by getting cheap products.	relationship. It's Diode who purchases products from Bright Light. **Overall** ➢ Diode's power is greater than Bright Light, since they controls orders, product standards and can dictate the final price of the products; Bright Light seems to depend on Diode and depend on Diode's orders. ➢ The size difference does not influence this relationship.	influence on price and orders. ➢ Company size is not an important issue in this relationship. **Overall** ➢ Case C shows slight interdependencies. ➢ Semiconductor controls the after sales service requests and product development; and Clean System controls the provision of good customer service for Semiconductor. ➢ Semiconductor may depend on replacement components. ➢ Clean System R&D tends to aim at providing	Laptop who purchases products from Cooling. **Overall** ➢ Cooling controls product quality, delivery on time, and catering to the customer's wants and needs; Laptop controls order placement and product specifications. ➢ Company size does not influence this relationship. ➢ Laptop is most influential in this relationship through its control of the placing of orders and product specifications.	positive product technology, and Power Supply places orders with Transformer. ➢ Company size does not influence this relationship. ➢ The partners are equally influential in this relationship.

			Semiconductor's needs and wants. ➢ Company size does not influence this relationship.		

Relationship Development Impacts on the Small Suppliers

Cases / Themes	Case A (Chip & Resistor)	Case B (Bright Light & Diode)	Case C (Clean System & Semiconductor)	Case D (Cooling &Laptop)	Case E (Transformer & Power Supply)
Operations	➢ There are no relationship development programmes with any suppliers or customers. ➢ The company needs to meet particular standards for Resistor. ➢ Chip does not apply just-in-time methods. ➢ Every department in Chip has a different efficiency evaluation. ➢ There are no serious quality problems, because Chip has an automated production system.	➢ No plans for programmes of relationship development with any customers. ➢ Strongly believe that the company meets the particular standards of Diode. ➢ The president requires each department to issue regular efficiency reports. ➢ Quality control is not stable. ➢ Bright Light is still learning and improving its operations.	➢ Clean System runs relationship development programmes with their customers. ➢ Clean System strongly believes that the company needs to meet the particular standards for Semiconductor. ➢ Semiconductor does not expect Clean System to adopt any efficiency measures for the relationship. ➢ Every department has a different efficiency evaluation.	➢ Cooling does not run relationship development programmes with any suppliers or customers. ➢ Absolutely need to meet the particular standards for Laptop. ➢ Laptop does not expect Cooling to undertake any efficiency measures for this relationship. ➢ Cooling does not have any efficiency measures for the relationship. ➢ Every department has	➢ Transformer does not run relationship development programmes with any suppliers or customers, but Power Supply runs a Supply Quality Management System. ➢ Transformer strongly believes that the company needs to meet the particular standards for Power Supply. ➢ Transformer has applied electronics safety standards manufacturing, such as UL and CE.

	➢ Chip's operations are building a long-term relationship with all customers.		➢ Clean System has applied just-in-time manufacturing. ➢ Quality control is stable in Clean System. ➢ Clean System's operations are building long-term relationships with all customers.	different efficiency evaluation criteria and they have applied ISO certification and just-in-time methods. ➢ Cooling's defective product percentage is very high. ➢ Cooling's operation strategies are reducing the cost and adding additional value.	➢ Power Supply does not require Transformer undertake any efficiency measures, but the managing director has required each department to issue regular efficiency reports. ➢ Transformer has strict quality control. ➢ Transformer's operation strategies are focused on technology development.
Technology	➢ Technology depends on the customer's need. ➢ Technology development is very important to keep the long-term relationship with Resistor.	➢ Technology ability needs to improve. ➢ Increasing technology can make for a more stable relationship with customers.	➢ Technical development can contribute to increase in the companies business. ➢ Semiconductor hopes Clean System will continue to improve their technology.	➢ Cooling is weak in technological abilities. ➢ Improving technology can advance the relationship with customers. ➢ Laptop hopes Cooling will constantly improve	➢ Transformer's technology development approach is to cooperate with their customer to meet the needs of their market. For example, if a customer's products

				their technology.	sell to developed countries, technology will be very important; if a customer's products sell mostly to underdeveloped countries, technology will be less important.
Innovation	➢ Chip is weak in marketing innovation. ➢ Chip's product innovation is driven by customer needs and wants. ➢ Resistor hopes Chip will continue innovation in products.	➢ Bright Light is weak in management and product innovation. ➢ Bright Light has no website. ➢ Receiving new information and also understanding customer needs. ➢ Diode has high innovation expectations.	➢ Clean System's innovation is totally reliant on the managing director's market sense. ➢ There is a lack of innovation from their lower level staff. ➢ Clean System's product innovation tends to customer's needs and wants. ➢ Semiconductor has high expectations of Clean System innovation.	➢ Cooling does not have special product innovation, and R&D of new products is driven by customer's needs and wants. ➢ Cooling's R&D capability needs improvement. ➢ Laptop hopes Cooling will continue to introduce new products.	➢ Transformer needs to improve marketing innovation. ➢ Transformer is confident in its product innovation. ➢ Transformer has no website.

Customer Service	➢ Chip deals with customer's problems immediately. ➢ Positive customer service can support a long-term and stable relationship with customers. ➢ Resistor's customer service expectation is high product quality and delivery of goods on time.	➢ Deal with customer service issues in 24 hours even through the weekend. ➢ Bright Light's customer service is positive. ➢ It is believed good customer service can make customers take the initiative in asking for new products.	➢ Clean System processes customer complaints immediately. ➢ It is strongly believed that good customer service can support a long-term and stable relationship with customers. ➢ It is believed customer service can increase business achievement.	➢ Cooling processes customer complaints immediately. ➢ The level of customer service will influence the relationship with Laptop.	➢ Transformer's customer service tends to be reactive, but they deal with customer's problems immediately. ➢ Transformer is strongly believed that positive customer service can improve the relationship with customers. ➢ Transformer accepts small orders.
Price	➢ Chip's pricing strategy is to undercut other suppliers in similar areas of business. ➢ If Chip's price is too high, Resistor will tell them. ➢ Chip always compares prices within the same area of business. This	➢ Pricing strategies refer to the relationship between costs and prices within an area of business. ➢ The president decides the price. ➢ Pricing strategies are similar to those of larger suppliers.	➢ Clean System's pricing strategy is to match market prices and cover their costs. ➢ Clean System's product prices are cheaper than larger suppliers. ➢ Semiconductor believes the product prices from Clean	➢ Pricing strategies refer to the relationship between costs and prices within an area of business. ➢ Cooling's pricing strategy is to undercut other suppliers. ➢ Laptop buys goods from the cheapest	➢ Pricing strategies refer to the quantity of customer's order placement, product material and product quality. ➢ It is very difficult to compare the price with other suppliers. ➢ Every supplier has

	ensures Chip's prices are not too high.	➢ Diode wants Bright Light to offer a cheap price. ➢ Diode always compares the prices of different suppliers.	System are fair. ➢ Semiconductor thinks "the cheaper the better" on prices.	supplier that can meet their quality standards.	different product technology and design, and accordingly has different prices.
Distribution Channel	➢ Chip has a fixed contract with a delivery company. ➢ The distribution strategies are similar with other suppliers. ➢ Chip's distribution strategies do not influence this relationship.	➢ Fixed express delivery company or personal delivery (urgent request or because it's coincidentally convenient). ➢ Distribution strategies are similar with other suppliers.	➢ Clean System has signed a contract with a delivery company. ➢ The larger competitors of Clean System are overseas and they use sea transportation to deliver their goods. ➢ Semiconductor does not have any complaints about Clean System's distribution methods.	➢ Cooling uses a fixed contract delivery company to deliver their goods. ➢ Larger suppliers' distribution channels are stronger than Cooling. ➢ Cooling always delivers goods on time.	➢ Transformer has a contract with a delivery company. ➢ Transformer's distribution strategies are similar to those of other suppliers. ➢ Power Supply does not complain about Transformer's distribution methods.
Products	➢ Chip's product strategies are to develop high standards	➢ Product strategies are weak. ➢ Product standards do	➢ Product strategies are weaker than those of other larger suppliers.	➢ Cooling is weak in product development strategies.	➢ Their product design depends on customer's needs.

	and high values. ➢ Product strategies are similar to those of other suppliers. ➢ Resistor hopes chip will continue to research new products.	not meet Diode's requirements. ➢ Cannot research and develop special "custom products". ➢ Bright Light's products are suitable for sale in underdeveloped countries.	➢ Clean System's product strategies are developed to meet customer's needs and wants. ➢ In some cases, Clean System is unable to provide the products that Semiconductor wants. ➢ Semiconductor hopes Clean System will continue to research new products.	➢ Their product strategies are weaker than those of larger suppliers. ➢ If product standards cannot reach Laptop's criteria, then Laptop will not give Cooling orders. ➢ Laptop hopes Cooling will continue to research new products.	➢ Transformer's products do not have direct competitors form larger suppliers, because their products are customised. ➢ Transformer never sells identical products to more than two customers, and this customisation product strategy is a key influence on the relationship. ➢ Only one company located in the same city, has similar products to Transformer.
Capabilities	➢ Chip has lacked specialised employee training in lower level staff.	➢ Not enough funds for employee training. ➢ Not enough professional	➢ Clean System has lacked specialised employee training for lower level staff.	➢ Limited finance means Cooling cannot offer employee training. ➢ Company needs to	➢ Transformer does not have employee training for lower level staff. ➢ Transformer has

	➢ Company needs to improve specialised technology capabilities. ➢ The development of managerial abilities in Chip is based on recruiting specialised management employees. ➢ Lower level employees are not valued by the company culture.	knowledge of technologies. ➢ Asking industrial circles experts and professor from university for product technology guidance. ➢ No plan to develop managerial abilities. ➢ The president holds the entire power. ➢ There is a high staff turnover. ➢ Internal culture needs to change.	➢ Company technology is over-reliant on certain key personnel. ➢ Company send management level staff to external training organisations to participate in job-related training. ➢ The company needs to improve its company culture to recognise and foster the value of lower level staff.	improve specialised technological abilities. ➢ There is no budget to develop managerial abilities. ➢ The company needs to improve its company culture to recognise and foster its values and standards.	supported management participation in outside training programmes. ➢ Transformer's product technology is driven by customer needs. ➢ Transformer has considered a programme for developing managerial abilities, but not yet implemented it. ➢ The company need to improve the position of lower level employees in the company culture.

The Relationship Development Process between Small Suppliers and Their Larger Customers

Cases / Themes	Case A (Chip & Resistor)	Case B (Bright Light & Diode)	Case C (Clean System & Semiconductor)	Case D (Cooling &Laptop)	Case E (Transformer & Power Supply)
The Pre-relationship Stage (Awareness)	➢ Chip's initial contact with Resistor was based on a close personal friendship between the two company presidents, who played golf together in the U.S.A.	➢ The initial contact was instigated by a phone call and follow-up visit from Bright Light marketing manager, who found Diode in industry directories. Besides, the Bright Light president is a friend of Diode's managing director.	➢ Clean System made initial contact with Semiconductor through electronics trade exhibitions.	➢ The initial contact was through industry directories. Cooling's vice-managing director established a friendly relationship with Laptop's purchasing manager and made many visits to Laptop with his domestic marketing manger.	➢ Transformer's initial contact with Power Supply was via a Transformer customer who introduced Transformer to Power Supply.
The Exploratory Stage (Exploration)	➢ Not classified in this stage.	➢ Can be classified in this stage.	➢ Not classified in this stage.	➢ Can be classified in this stage.	➢ Not classified in this stage.
The Developing Stage (Expansion)	➢ Can be classified in this stage.	➢ Maybe very difficult to enhance in the developing stage, because Bright Light is	➢ Can be classified in this stage.	➢ They may reach the developing stage, if Cooling can develop in its core capabilities and	➢ Can be classified in this stage.

		very weak in their core capabilities and in the areas of employees' knowledge and skills, technology, managerial systems, and company culture.		in the areas of employees' knowledge and skills, technology, managerial systems, and company culture.	
The Stable Stage (Commitment)	➢ They may be enhanced and develop to the sable stage, if Chip can improve their core capabilities in lower level staff.	➢ Maybe very difficult to move to the stable stage, because Bright Light is very weak in their core capabilities and in the areas of employees' knowledge and skills, technology, managerial systems, and company culture.	➢ Case C maybe will improve the positive advantage for the companies and develop to the stable stage, if Clean System can improve in its lower level staff's core capabilities and in the areas of employees' knowledge and skills, technology, managerial systems, and company culture.	➢ They may reach the stable stage, if Cooling can develop their core capabilities in the areas of employees' knowledge and skills, technology, managerial systems, and company culture.	➢ Maybe can improve to the stable stage, if Transformer can improve its core capabilities in the areas of employees' knowledge and skills, technology, managerial systems, and company culture in their lower level staff.
Dissolution	➢ Case A would not be	➢ Maybe very easy to	➢ The relationship in	➢ May be easily broken,	➢ Case E appears to be

	very difficult for the dominant partner, Resistor, to dissolve, since its advantage to them is largely based on the price competence of the supplier, Chip.	dissolve, because their relationship is based on continuous price negotiation and Bright Light is uneasy about its relationship with Diode.	case C may not be very vulnerable to dissolution, because Clean System has strong customer service and lower prices than larger suppliers.	as the relationship is based on the price rather than the product quality.	relatively difficult to dissolve, This is because the customised nature of the supplied products, and the technological competence of the supplier.