THE THAI BUYER'S SELECTION CRITERIA TOWARD INDUSTRIAL MACHINERY FROM JAPAN, GERMANY, AND UNITED STATES: AN INVESTIGATION ON THAI TEXTILE COMPANY

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THIS RESEARCH ARTICLE WAS FUNDED BY MINISTRY OF UNIVERSITY AFFAIRS

December 24, 2002
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ABSTRACT

The main objective of this study was to investigate the nature and relative importance of selection criteria of a foreign supplier of industrial machinery products in both supplier and product characteristics among Japanese, the United States, and German exporters. The research model and research hypotheses were developed of three industrial buying behavior concepts; one by Webster & Wind (1972), one by Sheth (1973), and one by Samli, Grewal & Mathur (1988). The survey method was used in this research study through a personal interview of 310 textile companies that imported textile machinery product from Japan, United States, and Germany. The statistical technique of an analysis of co-variance (ANCOVA) was used in this research study to analyze the dependent variable (matrix) and independent variable (group category and matrix). The results indicated that there was a significant difference between selection criteria and decision making for buying industrial machinery products by Thai import purchasing managers. There were significant difference of product characteristics and supplier’s country image among Japanese, the United States, and German exporters by Thai import purchasing managers’ perceptions. Meanwhile the satisfactory with a past purchase and supplier’s characteristics show a no direct effect on the selection decision on a foreign supplier
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CHAPTER ONE
INTRODUCTION

Problem

Global economic and business conditions have forced international business researchers to study the international dimensions of business and marketing. Unfortunately, the increased study of the international dimensions of business have focused on exporting and export activities, while the buyer’s (importer’s) processes and its management have been ignored. Despite that, understanding of buyer (importer) behavior is necessary for developing effective export strategies. As Ghymn (1980) stated, “international marketing should be a tool valuable to both exporters (sellers) and importers (buyers) in theory and practice. Therefore, international marketing should include the importing process and its management (p.262).”

Ghymn (1980); Garrett (1985); Habte-Glorgis (1986); and Deng (1987) have attempted to study importer buying behavior in order to provide some understanding of the decision criteria used to evaluate and select foreign suppliers. Moreover, there are only a few existing research studies that have investigated the selection criteria used by Thai import companies. Thus, the researcher will investigate what selection criteria are used to evaluate the foreign suppliers by Thai import companies, especially textile industrial machinery products. In 1996, more than 60 percent of the total imports of industrial machinery products in Thailand come from the following countries—Japan, the United States, and Germany (Business Economic Department of Thailand, 1996). Among these three major industrial machinery product exporters to Thailand, Japanese exporters have the largest market share followed by United States, and the German
exporters. Therefore, the researcher will examine how Thai import purchasing managers perceive both supplier and product characteristics of these three major textile machinery exporters. The results of this investigation can help both suppliers—the United States, and Germans, strengthen the weak points of their products and suppliers attributes in order to compete with Japanese exporters. Eventually, they can get higher market shares in the Thai textile machinery market. On another hand, the higher the competition, the more benefit to the consumers (Thai import companies). Higher competition of textile machinery exporters generates more opportunity, and more potential choices for Thai import companies to have a good product, and a good supplier.

In addition, importer’s buying behavior is very complex. Study needs to be done not only of foreign supplier decision criteria but also the influence of various individual, organizational, and situational factors on the evaluation and selection decisions for foreign suppliers.

Finally, individual factors may have significant effects on buying behavior such as individuals’ perceptions, beliefs, personality, experience, and so on. The present study emphasizes only individuals’ perceptions on country-of-origin stereotypes and experience of past purchasing (loyalty concept) that have influenced on selection decisions of suppliers by Thai import companies. As Jolibert & Lohnes (1982) found, country-of-origin effects have played an important role in the perception process of American and French purchasing managers for evaluating industrial products made in England, France, West Germany, Japan, and the United States. Similarly, Wind (1970) noted that the concept of loyalty is one of the major determinants in industrial buying decisions. These researchers found that both country-of-origin effects and past
purchasing experiences have a significant effect on industrial buyers' decisions. There are, however, no research studies on the importance of the impact of country-of-origin stereotypes and loyalty concepts for Thai import companies when making decisions in buying textile machinery products from foreign suppliers. Thus, Thai import purchasing managers' perceptions of country-of-origin images and past purchasing experiences in buying industrial machinery products are investigated in this research study.

Problem Background

As global economic growth occurs, international trade is becoming increasingly important (Beamish, Killing, Lecraw, & Crookell, 1991). This leads to high competition in the world market. The understanding of marketing in all cultures is a significant element to consider in all exporting firms in any firm or nation. Many firms and nations need to improve their abilities to compete successfully in the international marketplace in order to capture a larger market share.

Today, some of the less developed countries (LDCs) have emerged in the world market as a large proportion of the consumers in international marketplaces, especially in Asian countries. These consumers have increased their purchasing power in world trade. Thailand is one Asian country that has increased its role as an importer and exporter in the world market. Thailand has drastically increased its amount of importation since 1991.
Table 1

Thai Importation by Commodity Group in 1996-2001 (Billion baht.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Industrial Goods</th>
<th>Consumer Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>1,833</td>
<td>279</td>
<td>151</td>
</tr>
<tr>
<td>1997</td>
<td>1,924</td>
<td>256</td>
<td>161</td>
</tr>
<tr>
<td>1998</td>
<td>1,774.1</td>
<td>169.7</td>
<td>154.5</td>
</tr>
<tr>
<td>1999</td>
<td>1,907.7</td>
<td>151.8</td>
<td>159.7</td>
</tr>
<tr>
<td>2000</td>
<td>2,494.2</td>
<td>222.3</td>
<td>199.6</td>
</tr>
<tr>
<td>2001</td>
<td>2,756.7</td>
<td>269.9</td>
<td>224.9</td>
</tr>
</tbody>
</table>


The table 1 indicates that Thailand is likely to be a huge market in the future. It is an exciting marketing for exporting countries. This is particularly true for industrial products that are of major importance in the business system of the nation. The understanding of Thai industrial importers’ buying behavior is necessary to the success of the Thai market.

There are three Thai major industrial exporting countries—Japan, the United States, and Germany. These three countries are considered the biggest exporters of industrial products to Thailand. Table 2 shows the amount of Thailand’s importation of industrial machinery from these three countries between year 1996 through year 2001.

Table 2

Thai’s Importation of Industrial Machinery in 1990-2001 (in Billion Baht)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Japan</td>
<td>518</td>
<td>492</td>
<td>420.3</td>
<td>464.4</td>
<td>615.7</td>
<td>616.5</td>
</tr>
<tr>
<td>USA</td>
<td>229</td>
<td>267</td>
<td>249.7</td>
<td>243.5</td>
<td>293.6</td>
<td>318.7</td>
</tr>
<tr>
<td>Germany</td>
<td>93</td>
<td>91</td>
<td>76.2</td>
<td>60.2</td>
<td>78.4</td>
<td>113.8</td>
</tr>
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</table>

Table 2 indicates that Japan is the largest exporter of industrial machinery to Thailand, while the United States and Germany are the second and third exporters of industrial machinery, respectively. Thus, in order to be competitive exporters, these three major exporting industrial countries should understand Thai importer buying behavior and the important variables involving supplier selection decisions. This information can lead them to be leading exporters in the Thai market and other Asian countries.

Similarly, as the growth rate of Thai’s importation has continued to increase, the selection of foreign suppliers or exporters will become more important than ever. Consequently, Thai import companies’ purchasing managers have to seek out the best supplier in order to obtain competitive advantage in the international marketplace. Therefore, an understanding of the elements of product and supplier selection criteria can help to make buying decisions more effective and efficient.

Understanding the conceptual models of organizational buying behavior by Webster & Wind’s (1972); Sheth’s model (1973); and Samli, Grewal, & Mathur’s model (1988) can add to the understanding of exporting in general. Another important approach to the study of importers’ perceptions is the work of Khanna (1986); Ghymn (1983); and Yavas (1987) who found that the importers’ perceptions of exporters have strongly affected the importers’ purchasing decisions. In addition, other factors that may influence Thai importer purchasing managers’ perceptions are the impact of country-of-origin, impact of price and quality, impact of risk, impact of the loyalty concepts, and the impact of governments and regulations (White, 1979; Shipley, 1985; Sweeney, Mathews & Wilson, 9173; Bubb & Rest, 1973; and Samli, Grewal & Mathur, 1988).
Literature Review

In the past two decades, many researchers have created models of buying behaviors such as Robinson, Faris & Wind’s buygrid model (1967); Wind’s industrial source loyalty model (1970); Webster & Wind’s organizational buying behavior model (1972); Sheth’s industrial buying behavior model (1973); and Samli, Grewal & Mathur’s integrative model of international industrial buyer behavior (1988). The following paragraphs present the principals of organizational buying behavior as espoused by Webster & Wind (1972). His model indicates two important points of organizational buying behavior.

First, according to the model the organizational buying process has four stages: 1) problem recognition, 2) assignment of buying authority and responsibility, 3) a search process for identifying product offerings and for establishing selection criteria, and 4) choice process for evaluation and selection of alternative suppliers.

Webster & Wind’s model (1972) is a principal theoretical base of organizational buying behavior, which has been extensively studied by the other researchers. For example, Sheth (1973) developed a model of industrial buyer behavior which consists of four essential components: 1) expectations of individuals involved in the decision, 2) organizational buying processes, 3) the decision-making processes, and 4) situational factors. Later, Samli, Grewal & Mathur (1988) proposed an integrative model of international industrial buyer behavior that included six groups of factors influencing buying units functions. They are individual factors, organizational factors, environmental factors, societal/cultural factors, government roles and regulation, and uncertainty factors.
In addition, supplier selection is an important phase of the organizational buying process (Nydick & Hill, 1992). These researchers found that buyers generally establish a set of selection criteria to evaluate the potential suppliers. They also indicated that the basic criteria are price, product quality, delivery, and service. Similarly, Mummalaneni, Dubas, Chao, and Chiang-nan (1996) stated that purchasing managers need to periodically evaluate supplier performance in order to retain those suppliers who meet their requirements in terms of several performance criteria. There are six attributes that are frequently used as performance criteria. They are on-time delivery, quality, price/cost targets, professionalism, responsiveness to customer needs, and long-term relationships with the purchasing company. Many existing researches have studied various criteria used to select and evaluate suppliers—for example the ten important vendor performance characteristics of Wind, Green & Robinson (1968), the seventeen vendor attributes of Lehmann & O’Shaughnessy (1974), the twenty vendor performance attributes of Dempsey (1978), etc.

In an era of global sourcing, the buyers (importers) cannot only consider the importance of supplier selection criteria, but they also consider other important factors such as country-of-origin effects, loyalty effects, the impact of risk, and the impact of government and regulation. This research study emphasizes only the impact of country-of-origin, and the impact of loyalty. For the past three decades, the effect of a product’s country-of-origin on buyer perceptions and evaluations has been one of the most widely studied phenomena in the international business, marketing, and consumer behavior literatures (Schooler’s 1965; Nagashima, 1970; and Bilkey & Nes, 1982). For instance, Lawrence, Marr & Prendergast (1992) concluded that country-of-origin stereotyping is
often a determining factor in the buying process. Similarly, Loyalty is the behavior of choosing the same industrial product or supplier as the previous one. When consumers, or industrial buyers, gain experience and confidence in the products or services, a repeat purchase is made (Cunningham, 1956). This is known as brand or consumer loyalty. Industrial source loyalty can directly affect industrial buyer behavior (Wind, 1970). Bubb & Rest (1973) concluded that loyalty is one of the major determinants in industrial buying decisions.

Research Questions

The following are the research problems of the present study:

- What are the important criteria that influence Thai import purchasing managers selection decisions for buying textile machinery products?
- Do Thai import purchasing managers differ in their evaluation of these three Thai major exporters—Japanese, the United States, and German of textile machinery products on both supplier and product characteristics?
- Do country-of-origin (stereotypes) and past purchasing experience (loyalty concepts) influence supplier selection decisions by Thai import purchasing managers?

Purpose of the Study

This study focuses on the importer’s side of international trade by investigating Thai import buyer decisions’ criteria for selecting machinery product for textile industry from Japanese, the United States, and Germany.
Firstly, the purpose of this study is to find out what the important selection criteria are for foreign suppliers to Thai import purchasing managers for textile industry.

Secondly, this research surveys Thai import purchasing managers’ evaluations of Japanese, the United States, and German industrial exporters’ characteristics and the nature of their products (textile machinery product).

Finally, the importance of individual characteristics of Thai import purchasing managers perceptions are examined—for example purchasing experiences and stereotypes (country-of-origin).

Importance of the Study

As the market becomes globalization, an increasing number of firms that once concentrated on domestic sourcing are now seeking their supply bases from around the world (Min, 1994). To remain competitive, Thai textile companies should select the best of both suppliers and products with regards to significant factors, the environment, and situations. Thus, the study of selection criteria can help Thai textile companies choose the best alternative choices for their productions. To transact with a good supplier and quality product can assist the Thai textile company in competing with other companies in the world market, and lead to company success. Moreover, this generates higher benefits and profitability for the company in the trading business.

On another hand, the understanding of both the perception of Thai import companies’ purchasing managers and the buying behavior of Thai import organizations can also help the three major industrial exporters—Japan, the United States, and Germany to develop an effective marketing strategies to succeed in the Thai market.
Kraft & Chung's study (1992) supported the importance of this statement. They found that the understanding of Korean importers' perceptions of exporters and the exporter's products could help the United States exporters improve their ability to meet the requirements and succeed in Korean markets. Similarly, Chao, Schuing, Dubas & Mummalaneni (1993) noted that an understanding of the decision processes and decision criteria of Chinese purchasing managers can be essential to American marketers because of the trend toward a globalization of business practices and cultures.

**Limitations/ Delimitations**

Most of the empirical research studies to date concern consumer behavior for selecting consumer products. This research study focuses on organization buying behavior (Thai import companies) for selecting industrial suppliers and products. Thus, the research finding results cannot be generalized to consumer buying behavior and consumer products. In addition, the researcher will examine the research hypotheses from both a supplier and product characteristics perspective, through only three major Thai industrial exporting countries--Japan, the United States, and Germany. Consequently, the results cannot be used to judge all other exporting countries such Korea, China, Canada, or Britain on both supplier and product characteristics.

Usually, there are many factors that influence Thai import companies' decisions for selecting foreign suppliers such as individual factors, organizational factors, social factors, environmental factors, uncertainty factors, and governmental factors (Samli, Grewal, & Mathur, 1988). This study emphasizes only individual factors involving past
purchasing experiences, and stereotypes (country-of-origin images). Clearly, there may be other factors that influence buying decisions.

The present study uses survey instruments to collect the data by personal interviews. Consequently, there may be interviewer biases that lead to distortions of the research findings. Due to Thai economy's crisis in the mid-year of 1997, it made Thai currency (baht) depreciate against the United States currency (dollar). Besides, Thai government changed the exchange rate from basket rate to floating rate. This has directly impact for Thai importing firms.

Definitions

- Country-of-Origin can influence the market's perception of the product (Samiee, 1994). As competition in global markets increases, multinational companies manufacture products worldwide. Consumers may form positive or negative perceptions of a product.

- Industrial Products are “purchased for business use and thus sought, not as an entity in itself, but as part of a total process (Cateora, 1996, p.413).”

- Perceptions is “the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world (Schiffman & Kanuk, 1994, p.664).” Two individuals can view the same event at the same time but each of them may report a different story. Each story can vary because each participant perceived the event in a different way. Individuals’ perceptions are based on the person’s needs, wants, values, and personal experiences, not based on objective
reality (Schiffman & Kanuk, 1994). What consumers think can affect their actions and buying behavior so consumers' perceptions are important to marketers.

- Stereotypes can be defined as “individuals tend to carry pictures in their minds of the meanings of various kinds of stimuli. These stereotypes serve as expectations of what specific situations or people or events will be like and are important determinants of how much such stimuli are subsequently perceived (Schiffman & Kanuk, 1994, p.667).”
CHAPTER TWO

LITERATURE REVIEW

Historical Background to Thailand’s Garment and Textile Industry

Although Thailand has a long history of textile production, the modern garment and textile industry was established relatively late compared with other Asian countries (Koomsup, 1973). The country’s first textile machines included 3,232 spindles and 72 looms, all imported from Germany by the Ministry of Defense in 1936 for military purposes (Koomsup, 1973). It was not until 1946 that modern privately-owned textile mills began to operate, with a total capacity of 3,600 spindles. The first privately-owned modern textile mills were, in fact, established by a local entrepreneur in response to textile shortages during the Second World War (TDRI, 1992).

After 1946, the industry expanded rapidly, particularly in mechanized spinning, with the number of spindles increasing to 43,000 in 1952. Production collapsed however in the late 1950s due to competition from low cost imported cotton textile from Pakistan. The price of imported cotton yarn was 25-30 percent below that domestically produced yarn. As a result, several Thai spinning mills went bankrupt and had to be closed down. The Thai government reacted by giving protection to the industry for the first time, imposing the Import Restriction Act on cotton yarn imports in 1955. The Act was amended to include fabrics in 1957 (TDRI, 1992).

Imported tariffs and the introduction of the Investment Promotion Act in 1960 encouraged investment. The textile mills closed during the 1950s were taken over and expanded by local entrepreneurs, and by Chinese entrepreneurs from Shanghai and Hong
Kong. Three Pioneer firms were established mainly for cotton textile. A few years later, joint venture with Japanese firms became important in man-made fibers (TDRI, 1992).

**Overview of the Structure of the Textile Industry in Thailand**

The textile in a broad sense include five industries; man-made fiber, dying and finishing, spinning, weaving and garment manufacture. The textile and garment industry has become particularly important to the Thai economy since the mid of 1980 (TTIS Textile Digest, 2000). The industry has grown rapidly that it contributes highest share of manufacturing Gross Domestic Product (GDP) and highest employment in manufacturing sector.

Most Thai textile firms are located in or around Bangkok. There are many firms in garment and weaving. There are at least 2,000 garment firms, ranging from those with less than 10 sewing machines to those with more than 1,000. The garment industry is characterized by low capital and simple technology. In some areas there are no appreciable entry costs as the minimum efficient scale of production is low (TDRI, 1992).

Leading technology in garment production has become more capital intensive as micro-electronic related innovations has developed. Computerized machines help the processes of designing, grading and cutting, while automatic machines, robots and computerized sewing machines can assemble parts of the garment. Such innovations can save 4-10 percent of material costs and 21-70 percent of labor costs (TDRI, 1992).
Problems

Although the Thai Textile industry has grown rapidly to become a major industrial sector, it is faced with major problems as summarized below (TTIS Textile Digest, 2000):

1) Most Thai textile export products are commodity types and therefore subject to fierce competition and lower prices;

2) Lack of product diversity and quality items due to shortage of technical manpower and modern technology.

3) Declining competitiveness, especially compared to countries with low labor costs. Since current wage rates in the textile industry are relatively high, they contribute to rising production costs;

4) Most factories have little or no R&D activities and lack testing facilities for basic quality control.

5) High dependency on imported raw materials such as high quality fabrics/ yarns.

6) The adoption of new technologies is still limited by high investment costs and changes in fashion (TDRI, 1992).

7) Small garment firms are heavily engaged in sub-contracting. These firms undertake the more highly skilled components of orders and the sub-contractors mostly household firms, undertake the less skilled work (TDRI, 1992).

8) Weaving has fewer firms than the garment component of the industry as it requires more capital and higher technology. Some firms with old semi-automatic and automatic looms produce for the highly protected domestic market and for the nearby countries while large weaving firms with modern machine
produce both for export and for the domestic market. There is a broad weaving technology in Thailand, but it is concentrated in the labor intensive of available technologies. Thailand is also competitive in weaving because of the wide range of alternative technologies available and labor cost advantage (TDRI, 1992).

The Role of Textile Industry in Thailand

The impact of the textile industry on the Thai economy in terms of value-added, employment, and export earnings is clearly evident from the following facts and figures (TTIS Textile Digest, 2000):

1) The highest percentage of GDP contribution in the manufacturing sector 16% of total manufacturing value-added in 1998;

2) The highest employment rate in the manufacturing sector – 1.1 million employees or 24.7% of total industrial workforce in 1999.

3) A major source of export income 195,303.3 million bath or 8.8% of total export value in 1999.

Textile Garment Production and Export

Textile and garment production has grown rapidly with the expansion of both domestic and export order. Thai textiles output is expected to continue to grow rapidly over the next few years. Capacity, including the number of spindles, looms, and synthetic fibres, is also likely to expand, given rapid investment growth.

Thai clothing and textile industries have become increasingly export-oriented during the 1990. In 1999, fiber export totaled 257,230.4 tons worth 8,248.8 million baht.
Of this amount, 242,395.9 tons were manmade fiber worth 7,350.9 million baht. The figures for wools and cotton exports were 4,928.2 tons worth 805.9 million baht and 633 tons worth 16.9 million baht, respectively (TTIS Textile Digest, 2000).

The figures for yarn in 1999 were 235, 557.1 tons worth 16,921.6 million baht. Of this amount, 192,430.3 tons were man-made yarns valued at 11,755.5 million baht and worth 34,660.2 tons of cotton yarn worth 3,475.1 million baht.

Export of fabrics in 1999 totaled 167,632.9 tons worth 33,436.8 million baht, comprising 106,795.5 tons of man-made fabrics worth 19,866.1 million baht, 49,945,1 tons of cotton fabrics worth 10,869.6 million baht, and 10,225.1 tons of knitted fabrics worth 2,124 million baht (TTIS Textile Digest, 2000).

Thailand’s clothing export in 1999 totaled 168,342.2 tons valued at 114,577.5 million baht, equivalent to 58.7% of total textile export value. Of this total, 68,591.1 tons were clothing made of woven fabrics and 99,751.1 tons of knitted fabrics, value at 53,167.4 million baht and 61,410.1 million (TTIS Textile, Digest, 2000).

Government’s Policy

Under the 7th and 8th National Economic and Social Development Plans (1992-1996 and 1997-2001), guidelines for development policies generally related to the industry as following:

1) Improve international competitiveness such as increase productivity by applying modern technology and machinery; upgrading skills and introducing modern management techniques; moving into higher value added products; upgrading the
quality and standard products; promoting foreign investment; and encouraging Thai industries to invest abroad.

2) Relocating textile and clothing industry, especially small and medium scale enterprises, to rural areas;

3) Conserve the environment and natural resources by introducing new technology to save raw materials, water and energy;

4) Penetrate both traditional and new market by using more aggressive marketing strategy.
Newly Industrialized Economies (NIEs) in East Asia had experienced similar structures when they were at the early stage of industrialization. The NIEs began with the labor-intensive garments industry. Only when these countries became more industrialized did they move to textiles and then man-made fibre. Japan has now reached the highest stage of development. Its main production is now man-made fibre and it has also become a net importer of garments (Yamawaki, 1991). Anderson and
Park (1991) described that textile and garment industries in the Republic of Korea and Taiwan are going in the same direction.

The structure of the Thai industry is in line with the country’s current stage of industrial development and resource endowments. Therefore, an imbalance within the industry as its structure may not provide an enough foundation for future development when Thailand reaches a highest level of industrialization. Government policy has to some extent influenced the structure of the industry.

In addition to tariff protection, the government has given various forms of assistance to both textile and garment industries. Textiles were among the first industry to promote under the Industrial Promotion Act of 1960. However, the promotion has been inconsistent.

**Conceptual Framework and Theory**

Due to the increasing importance of international trade, studies of organizational buying behavior have increased the significance of international marketing studies. Ghymn (1980); Garrett (1985); Habte-Gorgis (1986); and Deng (1987) have attempted to study the decision criteria used for evaluating and selecting of foreign suppliers by importers. This review will focus on the previous research of organizational buying behavior, emphasizing the impact of the buying center on organization buying decision, the selection criteria influencing importers’ purchasing decisions for foreign suppliers, the impact of country of origin, the impact of product price and quality, the impact of risk, and the impact of government regulations. Finally, this research study will investigate Thai import companies’ purchasing managers perceptions toward Japanese,
the United States, and German exporters on both supplier and product characteristics in Thai textile industry.

**Organizational Buyer Behavior**

Importers buying behavior is considered one form of organizational buying behavior. Studies of organizational buying behavior indicate that the organizational buying process is very complex. Buying behavior is also different for different products, organizations, industries, and buying situations (Wind & Thomas, 1980).

Webster & Wind (1972) define organizational buying behavior as "the decision-making process by which formal organizations establish the need for purchased products and services, and identify, evaluate, and choose among alternative brands and suppliers (p.11).” They group the organizational buying behavior models into four major types: 1) task-oriented models, 2) nontask-oriented models, 3) decision process models, and 4) complex or general models. Task-oriented models focus only on one specific situation variable, such as price or total cost associated with a particular purchase, whereas nontask-oriented models focus on a set of variables that are primarily non-rational variables such as emotion, personal goals, and internal politics.

Moreover, they describe decision process models as organizations’ decision-making processes as carried out by individuals who cause a complicated interaction between the differences in personal and organizational goals. Earlier, Webster (1965) presented a model of the organizational buying process which was based on a behavioral theory of the firm. The four stages of organizational buying processes were: 1) problem recognition, 2) assignment of buying authority and responsibility, 3) a search process for
identifying product offerings and for establishing selection criteria, and 4) a choice process for evaluation and selection of alternative suppliers. In the complex models, Webster & Wind (1972) determined that

"The need to purchase products or services, communications among those members of the organization who are involved in the purchase or will use the product or service, information-seeking activities, the evaluation of alternative purchasing actions, and the working out necessary arrangements with supplying organizations" (p.1).

With respect to the general model, they pointed out that organizational buying behavior was influenced by four main classes of factors. They were individual, social, organizational, and environmental.

Later, Sheth (1973) developed a model of industrial (organizational) buyer behavior by using a stimulus-response approach. His model was based on three aspects of organizational buyer behavior: 1) the psychological world of the organizational buying process, 2) the conditions of joint decision-making, and 3) the process of joint decision-making. The model was divided into four essential components:

*Expectations of the individual involved in the decision*: Sheth (1973) felt that expectations were "the perceived potential of alternative suppliers and brands to satisfy a number of explicit and implicit objectives in any particular buying decision (p.52)." The explicit objectives or criteria include product quality, delivery time, after-sale service, and price. The implicit criteria include reputation, size, location, reciprocity, relationship with a supplier, and personality and the expertise of the sales representative. Besides the expectations of decision-making, participants could be influenced by the functions of: The background of individuals (e.g., education, experience); information sources and the
extent of the search (e.g., types and number of information sources); perceptual
distortion; and satisfaction with past purchases.

*Organizational buying process*: There were two types of variables that
determined whether a buying decision is joint or autonomous. The two variables are
product specific, and company specific factors. The product specific factors include the
perceived risk variables in buying decisions, the type and importance of the purchase,
and the time pressure. The company specific factors include company orientation (e.g.,
technology, production, or service oriented), company size, and degree of centralization.
Sheth (1973) found that joint decision making was likely in large, highly centralized
companies that were technology oriented.

*The decision-making process*: This is the of initiation of the decision to buy,
gathering of information, evaluation of alternative suppliers, and resolving conflict
among the decision-making participants. The most important aspect of this process is the
assimilation of information, deliberation on it, and the consequent conflict. Sheth (1973)
discussed four types of conflict that influenced the process of joint decision-making and
their methods of resolution. The first type of conflict was the disagreement on
expectations about suppliers or their brands. This can be resolved by searching for more
information and/or seeking out other suppliers. The second type of conflict was
disagreement among the parties on some specific criteria for evaluating a specific
supplier. This can be resolved through persuasion. The third type of conflict was the
fundamental differences in buying goals or objectives among various parties. This can be
resolved through a bargaining process. The fourth type of conflict was disagreement in
decision-making styles. This can be resolved by politicking and back-stabbing tactics. In
conclusion, the first two types of conflicts—the disagreement on expectations about suppliers or their brands, and the disagreement among the parties on some specific criteria for evaluating a specific supplier can build a healthy organization but it is time consuming, whereas the last two types of conflicts—the fundamental differences in buying goals or objectives among various parties, and the disagreement in decision-making styles can make the organization suffer because both bargaining and politicking resolution are nonrational and inefficient methods.

Situational factors: Situational factors were considered as influential on supplier choices. They include temporary economic conditions, such as price controls, recession, internal strikes, foreign trade walkouts, machine breakdowns, and other related events; organization changes such as mergers or acquisitions; and ad hoc changes in the marketplace such as promotional efforts, introduction of a new product, and price changes in supplier industries. Sheth’s model can be shown as below:
Figure 2

Sheth (1973)'s Model of Industrial Buyer Behavior


In the last decade, Samli, Grewal & Mathur (1988) proposed an integrative model of international industrial buyer behavior. The model has four distinct features. First, it used an input-output format. The inputs in this model indicated the buying unit’s need and motivation to buy which is influenced by the following six factors:

*Individual factors:* Persons are brought up in different environments, where different beliefs, values, and norms exist. Culture influences many of these factors.
(Plummer, 1977; Wind, Douglas, & Perlmutter, 1973). The differences in culture and individual thinking result in the difference in individuals' perceptions that lead to different judgments. Individuals in the buying unit always conform to different values and needs in their work (Lee, 1966). Moreover, there are many individual factors that affect international buying processes such as interpersonal skills, leadership skills, level of education, and past experiences.

Environment factors: These can affect the buying decision in four ways: economic conditions of the countries—a boom, or recession; demand and supply of inputs and outputs; type of market—perfectly competitive, monopolistic, or oligopolistic; and the availability of information—good communication systems to collect data, assimilate it, analyze it, and incorporate it in buying decisions (Samli, 1968).

Organizational factors: “Organizational buying behavior is motivated and directed by the organization’s goals and is constrained by its financial, technological, and human resources (Webster & Wind, 1972, p.14).” Not only can the organization’s goals influence the buying unit, but they can also influence individual goals, attitudes, assumptions, and behaviors. The level of centralization in an organization affects a decision to be joint or autonomous. Finally, a company’s type of operations, and the organization’s norms and culture also affect the buying decision unit.

Societal/Cultural factors: Rick (1983) said that failure to understand cultural differences has led to many business blunders in international markets. There are four important classes of international factors that affect the characteristics of international buyer behavior. They are differences in the nations’ beliefs and values, different
attitudes toward life, different family patterns, and varied business practices in different countries.

_Uncertainty factors:_ There are four uncertainty factors that affect the organization buying decision. They are time pressure (time constraints to deliver the goods in order to satisfy production schedules and other business needs); perceived risk of the purchase; the type of purchase—a first time buy, modified rebuy, or a rebuy (Robinson, Faris, & Wind, 1967); and the value of the purchase. When dealing with a high value, high risk, and first time purchase, the buying unit needs to proceed carefully. As Speckman & Stern (1979) stated, “the greater the uncertainty and the concomitant need for greater information, the more likely it is that role prescription will be relaxed and joint participation in decision making will be emphasized (p.60).”

_Government and regulatory factors:_ Governments and their regulations have played an important role in the international market. There are many factors involved in governments and their regulations such as the ideology and policies of the country—capitalistic, socialistic, communistic, mixed economy, or dictatorships; legal constraints; trade restrictions in the form of tariffs and barriers; subsidiaries and tax incentives; the politics of the country; the bureaucracy levels of the country; the level of economic development of a country; the availability of foreign exchanges; and the stability of the government. Finally, the degree of the nation’s development (Less Developed Countries—LDC’s eastern or western bloc countries or Newly Industrial Countries—NIC’s) has a significant affect on the buying units.

The following figure shows the six groups of factors as outlined by Samli, Grewal, & Mathur (1988):
Figure 3


**Individual Factors**
1. background
2. self perception
3. leadership skills
4. educational skills
5. interpersonal skills
6. language
7. past experience

**Environmental Factors**
1. economic conditions
2. demand/supply of input and output
3. type of market
4. availability of information

**Organizational Factors**
1. goals and objectives
2. level of centralization
3. performance trend
4. competitive advantage
5. type of operation
6. organization climate

**Uncertainty Factors**
1. time pressure
2. perceived risk
3. type of purchase
4. value of purchase

**Societal/Cultural Factors**
1. beliefs
2. attitudes
3. family patterns
4. business practices

**Government and Regulatory Factors**
1. ideology and policy
2. legal constraints
3. trade restrictions (tariffs, barriers, etc.)
4. subsidies and tax benefits
5. policies
6. bureaucracy level
7. level of economic development
8. constraints in terms of foreign exchange
9. stability of government

All six international influencing factors can help or hurt the buying unit assess and choose the possible and optimal options if the information is accurate, quantifiable, verifiable, accessible, free from bias, comprehensive, appropriate, clear, precise, and timely. This information can reduce the level of uncertainty for making the decision. First, the output represented by the buying unit’s decision is influenced by the motivation and satisfaction of the individuals in involved in the buying unit. Second, the buying decision leads to certain outcomes, which might be of extrinsic or intrinsic value. The extrinsic outcomes received by the buying unit are pay raises, bonuses, promotion and recognition whereas intrinsic outcomes are those given by individuals to themselves (Petrock & Gamboa, 1976). If the buying unit perceives the outcomes to be equitable, these would increase their satisfaction level. Then, it would affect the motivation level of the buying unit members (Porter & Lawler, 1968). Because the strength of motivation at the international level could precede identification of needs. Then, needs lead to purchase. The buying unit has to respond to the organization’s needs. Nevertheless, there may be conflicts among the various members within the buying unit regarding a particular purchase. These conflicts can be resolved through negotiation. The negotiation process is affected by social influences, relationships among members, level of authority/status, information, leadership, image, and individual values. Then, the members of the buying unit attempt to reach consensus. If they cannot reach consensus, they should search for more information or forward the problem to a higher authority to solve the conflicts and facilitate the buying decision (Negandhi, 1978).

Third, Samli, Grewal & Mathur (1988) specified multi-attribute perspective through which a multiplicity of factors influence international industrial buyer behavior.
Fourth, Samli, Grewal & Mathur (1988) discussed the differences between domestic buying processes and international industrial buying processes focusing on a multitude of different influencing factors. Samli, Grewal & Mathur (1988) also present the international industrial buying process and the internal workings of the buying unit. They specify that buying units in international situations vary substantially with regards to size, versatility, diversification, group behavior, and synergism (Samli, Grewal, & Mathur, 1988).

**Supplier Decision Criteria**

Wind, Green, & Robinson (1968) investigated ten important vendor performance characteristics used by purchasing agents in making selection decision such as quality/price ratio of the product, delivery reliability, technical ability and knowledge, supply of information and market-services, general reputation, geographical location, technical innovativeness, extent of previous contact with the buyer, importance as a client, and extent of “personal benefits” supplied to the buyer.

These researchers examined the importance level of these ten vendor performance characteristics as seen by 20 purchasing agents. The results indicated that the most important vendor characteristics are product quality, then followed by product price, and delivery reliability. Later, Banville & Dornoff (1973) studied decision criteria used by industrial purchasing executives in selecting their suppliers. Their research objective was to determine the importance of twelve source selection criteria and the effect of company size and product types on the perceived importance of these criteria. These twelve criteria were classified into two groups:
- First, the economic criteria included service, quality, ability of the supplier to stand behind the product, low price, supplier reputation of fair dealing, newness of supplier, supplier credit, and reciprocity.

- Second, the non-economic criteria included friendship with the supplier, salesperson’s personality, prestige of dealing with the supplier, and the improvement of a buyer’s status within his/her company.

Banville & Dornoff (1973) studied from six southeastern states to rank the criteria influencing their purchase of different building material products. The research findings showed that respondents considered the product price as the most important selection criteria whereas reciprocity and the improvement of a buyer’s status with his/her company were the least important criteria. However, the respondents assigned different levels of importance to decision criteria when searching and selecting a source of supply for various products. The respondent’s firm size had no affect on the importance ranking of the selection criteria.

Similarly, Lehmann & O’Shaughnessy (1974) extended Banville & Dornoff’s research study (1973) by investigating industrial buyers’ importance evaluations of 17 attributes for four different types of industrial products. The following are the vendor attributes: (overall reputation of the supplier, financing terms, supplier’s flexibility in adjusting to the company’s needs, experience with supplier in an analogous situation, technical services offered, confidence in the salesman, convenience of placing order, data on reliability of the product, price, technical specifications, ease of operation or use, preferences of principal user of the product, training offered by the supplier, training time
required, reliability of delivery, ease of maintenance, and sale service expected after the date of purchase).

The four types of industrial products were routine-order products, procedural-problem products, performance-problem products, and political-problem products. The results showed 6 of 17 attributes which varied significantly across the four product types. These six attributes were financing, technical service, price, training offered, training required, and reliability of delivery. They found that both American and British purchasing agents assigned similar ratings to these attributes except for the service orientation. British purchasing agents appeared to be more service oriented.

Kiser, Rao, & Rao (1975) examined supplier attributes as the criteria for evaluating and selecting vendors by buying center members. In this study, there were 65 attributes examined in selecting suppliers for standard products and for special products. These 65 attributes were grouped into six broad categories as follows such as convenience-related attributes, economic financial attributes, caliber-capacity attributes (quality, technical ability, and capacity, image-dependability attributes, inter-corporate relation attributes (experience with supplier), and service related attributes. As a result, the research findings showed that both standard and special products were similar relative to the perceived importance of each attribute. The most important attributes categories for both standard and special products were image-dependability, followed by caliber-capacity, and convenience related attributes respectively.

Jackson, Burdick, & Keith (1985) studied the effect of different purchasing situations on industrial buyers’ evaluations of the importance of various components of supplier’s marketing mix—product, price, place, and promotion. Table 3 shows the 5
product types, 3 buyclass situations, and 4 marketing mix components in this study finding.

Table 3

The Effect of Different Purchasing Situations by Jackson, Burdick, & Keith (1985)

<table>
<thead>
<tr>
<th>Product Types</th>
<th>Buyclass Situations</th>
<th>Marketing Mix Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Major capital equipment</td>
<td>1. New buy</td>
<td>1. Supplier’s product efforts</td>
</tr>
<tr>
<td>4. Component parts</td>
<td></td>
<td>4. Supplier’s promotion efforts</td>
</tr>
<tr>
<td>5. Supplies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Chandrapalalert (2002). “The Thai Buyer’s Selection Criteria toward Industrial Machinery Product from Japan, Germany, and United States: An Investigation on Thai Textile Company”.

The findings showed that the supplier’s product efforts were the most important criteria for modified rebuy situations among these three buy class situations. In addition, supplier’s product efforts were considered to be most important in the purchase of major capital equipment, and the second most important in the purchase of minor capital equipment. Finally, the respondents perceived the supplier’s promotion efforts as the least important components among those four marketing mix components.

Similarly, Lehman & O’Shaughnessy (1982) investigated the decision criteria used in buying different categories of products. In this study, eight product attribute categories were based on four dimensions—standardization (standard vs. nonstandard products), makeup (simple vs. complex products), application (standard vs. novel products), and dollar commitment (low vs. high price products). The researchers found if the products became less standard, economic criteria would decrease in importance while performance criteria would increase in importance. Moreover, adaptive criteria were
important for all product attribute categories, except the simple standard products. In
general, buying style and the purchasing manager's background did not have any effects
on his/her rating of the choice criteria.

Standard criteria such as quality, price, and delivery are significantly important
criteria to be used for evaluating and the selection of suppliers, but they are not sufficient
for considerations to select the best alternative supplier choice. This emphasizes the
importance of the relationship between the buyers and sellers as a supplier's selection
criteria, especially in international industrial markets. Ford (1984) for instance, studied
the relationship between industrial buyers' assessments of suppliers' technical and
commercial skills and their assessments of the suppliers on other dimensions including
the commitment of the suppliers, the adaptability of the suppliers, the personal feeling
distance from buyers to suppliers, and the conflict between buyers and suppliers. Ford
concluded that the buyers' assessments of the technical and commercial skills of their
suppliers were strongly influenced by the suppliers' perceived commitment, distance-
reducing ability, adaptability, and conflict management. To be more competitive
suppliers should provide a good long-term relationship with their buyers through offering
value-added service, technology gains, process innovations, and other means of gaining
differential advantage. As Jackson (1985) said, the long-term relationship between
buyers and sellers could reduce risk, save switching costs, and improve services.
Moreover, Cateora (1990) found that there were many subjective exporter characteristics
influencing organizational buyers' decisions. He suggested that U.S. exporters had to
learn more about the impact of culture on their relationships with foreign buyers.
Likewise, Hawrysh & Zaichkowsky (1990) examined how culture and national
characteristics were reflected in various bargaining and negotiation procedure characteristics of American and Japanese businesspersons. The results suggested that Korean importers would prefer to buy from exporters in a similar culture, such as Japanese exporters rather than from American exporters.

In conclusion, all the above studies indicate that industrial buyers generally use various criteria to evaluate and select supplier choices by focusing on price, quality, and service (Lehmann & O'Shaughnessy, 1974; Webster, 1979). In terms of suppliers characteristics, there are both objective (value-added service, technological gains, etc.) and subjective (reputation, marketing practices, negotiation procedures, and interpersonal relationships) of characteristics that are considered as important criteria to in evaluating and selecting suppliers. In addition, Jefri (1989) stated that the decision criteria in industrial buying settings vary with the following three classes of variables: 1) individual characteristics including educational background, decision-making style, and experience; 2) situational characteristics including buyclass, product type, and importance of the purchase; 3) organizational characteristics including size, orientation, and type of industry. However, to select capable suppliers is one of the most important task for a purchasing manager because choosing the right suppliers for the companies leads to purchasing goals such as competitive price, good quality, service, and on-time delivery (Dobler, Lee, & Burt, 1984). Also, the industrial purchasing manager should realize that other variables influence perceptions toward foreign suppliers such as the impact of country-of-origin, the impact of culture, the impact of loyalty, the impact of risk and so on.
To expand the view of organizational buying behavior, we need to understand the individual psychological processes involved in perception. One important aspect of an individual's psychology is their stereotypes, because generally they can be psychological barriers in international trade (White, 1979). The stereotypical image may be of a country’s products, specific brands, or whatever the consumer deems appropriate about the groups. This tendency to group products or rely on stereotypical images has important implications for the competitive strength of a product. There is a lot of evidence that people in one country tend to have common notions about people in other countries, and also that these stereotypical evaluations carry over into the realm of product evaluations. Better understanding of these attitudes would be helpful in developing more effective marketing strategies for exporting products to other countries.

Relating to international studies of organizational purchasing behavior, Nagashima (1970) indicated that businesspeople develop general stereotypes of both industrial and consumer products. These stereotypes lead to preferences for purchasing specific products from specific countries. These stereotypes are created by many factors such as representative products, national characteristics, economic and political background, history, and traditions. This suggests that country of origin is naturally affected by the familiarity and availability of the country’s product and the stereotype of that country. Some representative products from a country can influence all of its total products’ image.
Impact of Country of Origin

One influence on the perception of subjective exporter characteristics is the exporter’s national location. A number of studies by Reierson, 1966; Nagashima, 1970; White, 1979; Morello, 1984; and Johansson, 1985 which might be characterized as “country of origin” or “made in” studies, have explored the impact of national location on organizational importer’s evaluations of exporters and their products. Many research studies of the “made in” concept can be classified into two groups: 1) the studies of consumers’ perceptions toward a specific country’s products (Bilkey & Nes, 1982, and Cordell, 1992), and 2) the studies focusing on organization buyers’ perceptions of products manufactured in a specific country (Nagashima, 1970, 1977; Cattin, Jolibert & Lohnes, 1982; Keown, 1985, Cavusgil & Yavas, 1987, Vernon-Wortzel, Wortzel & Deng, 1988; and McGuinness, Campbell & Leontiades, 1991).

Due to the fact that the present research study focuses on importers’ perceptions toward exporters, the studies of organization buyers’ perceptions was reviewed in the previous section. White & Cundiff (1978) investigated how product price and country of manufacture influenced the industrial buyers’ perceptions of product quality. To examine the industrial buyers’ purchasing decisions, they selected three specific products such as an industrial lift truck, metal working machine tool, and a dictation system. The results showed that there was a highly significant relationship between country of manufacture and perceived quality. But there was a less, but still significant relationship between price and perceived quality and the interaction between price and country of manufacture. They also suggested that manufacturers of products from certain countries
were affected by a built-in positive or negative stereotype regarding perceptions of product quality.

Moreover, other researchers conducted studies of perception of country-of-origin by industrial buyers and channel intermediaries including importers. For example, Cattin, Jolibert & Lohnes (1982) examined the perceptions of American and French industrial buyers by evaluating industrial products made in England, France, West Germany, Japan, and the United States. They found that both American and French buyers favor West German products. For Japanese products, French purchasing managers perceived them less favorably. They considered Japanese products as unreliable and using obsolete technology, while English products were perceived as luxurious and inventive products. These researchers concluded that country-of-origin played an important role in the perception process of purchasing managers, particularly in the assessment of the quality of the products. Yavas, Cavusgil & Tuncalp (1987) also have pointed out that country-of-origin effects were a significant factor in dealing with importers. These researchers found that Saudi importers were influenced by country-of-origin bias on the evaluation of foreign suppliers, while individual consumers were not influenced by country-of-origin bias.

Increased exposure of country-of-origin information can also change the criteria used in a buying process (Nagashima, 1977). In other words, the location of the production site can play a significant role in product and strategic decision making. Many studies indicate that a buyer's perception of foreign countries can affect evaluations of foreign products (Schooler, 1971; Gaedeke, 1973; and Niffenegger, White & Marmet, 1982). White (1979), for instance, stated that "perception is one of the most
important individual psychological processes used in exercising purchasing
responsibilities (p. 83).” His research findings showed that perception can be affected by
availability and familiarity of products as well as the country stereotype. Moreover,
country stereotype also plays a significant role in supplier selections of industrial buyers
(White, 1979).

There are two broad categories of products that were studied in term of country-
of-origin concepts. One is consumer products, and another one is industrial products.
Again, one of the research purposes here is to investigate the importers’ perceptions
toward industrial product exporters. Therefore, the literature of country-of-origin
concepts for products are reviewed.

Bilkey & Nes (1982) stated that country of origin had a considerable influence on
quality perceptions of a product. They also found that country of origin cues were biased
against products sourced in less developed countries. Similarly, Gaedeke (1973) found
that U.S. made products were perceived as being of higher quality than products made in
various less developed countries. Due to a hierarchy of biases, there was a positive
relationship between product evaluations and degree of economic development
(Krishnakumar, 1974; Schooler, 1971; Tongberg, 1972; Wang, 1978; and Hampton,
1977). Products from developing countries were rated as being inferior to those from
industrialized countries by Schooler, 1971; Tongberg, 1972; Wang & Lamb, 1983; and
Hampton, 1977. There were several other country characteristics that have caused
hierarchy biases such as cultural, and political systems (Wang & Lamb, 1983) and the
country’s belief system (Tongberg, 1972).
However, products made in more developed countries were not all evaluated equally (Bannister & Saunders, 1978; Darling, undated; Donoff, Tankersley & White, 1974; Hampton, 1977; Kincaid, 1970; Lillis & Narayana, 1974; Nagashima, 1970, 1977; Krishnakumar, 1974; Reierison, 1966; Schoole, 1971; Schooler & Wildt, 1968; Tongberg, 1972; Wang, 1978; White, 1979; White & Cundifffin 1978; and Yaprrak 1978). Consumers do not perceive all foreign products or all products from a given country as being the same. Etzel & Walker (1974) for instance, found that there was a significant difference between general country attitudes and specific product attitudes by country of origin.

Nevertheless, the impact of country of origin on the evaluation of product attributes is only one of several factors, which influence the selection of exporters by importers. The other variables were product price and quality.

**Impact of Price and Quality**

As one would expect, price is one of the important variables that affects buying decisions (Shipley, 1985). Traditionally, the normative view of the organizational buyer has made an assessment of product quality independently of the price. The reasoning is that they select a product of acceptable quality with the lowest price (Lee & Dobler, 1971). However, industrial buyers are influenced in their evaluation of product quality by information about product price also. The results from many studies on the effect of the relationship between price and perceived quality indicated that consumers' sometimes use price as an indicator of quality (Monore & Dodds, 1988).
As Alpert (1971) noted, one obvious implication of the research on price/quality relationships is that it is important to identify those market segments for which price/quality relationships were strong. This information could be used to develop an appropriate marketing mix to reach such market segments effectively. Engel, Kollat & Blackwell (1973) found that price was an indication of quality within certain upper and lower limits. Monroe (1973) also found that the price-quality relationship was mixed. There was an indication that a positive relationship existed, at least over some range of prices for some product categories. Similarly, White (1979) found that product quality was considered a key product attribute influencing buyers' decisions. He also found that the industrial products from France, England, and the United States were comparable. West German industrial products, on the other hand, were found to be of higher quality than the other three countries' products while industrial products from Italy were seen as having lower quality than those three countries.

The impact of price information on importer perceptions of quality has been studied rather extensively because there was no clear picture to indicate unequivocally whether a positive price and quality relationship existed, particularly in cases where other information cues were provided to the importer (Monroe, 1973; Monore & Dodds, 1988). In judging product quality based on other information cues such as product attributes, an individual's inclination to rely on price as an indicator of quality naturally should tend to decrease. Since importers exhibit different degrees of familiarity with products produced in different countries, their confidence in the ability of different countries to design or produce quality products also differs. One can also expect that the use of price as an indicator of quality may also differ for different countries' products.
Impact of the Loyalty Concept

Brand or consumer loyalty is the concepts in consumer behavior that explain the impact of the importer perceptions and attitudes toward favorable countries, and the buying decision process. In selecting products, consumers may decide to choose the same product to satisfy their needs. The same behavior occurs in the process of choosing an industrial product or supplier (Wind, 1970). Therefore, understanding how individuals reach their buying decisions can help industrial marketers develop suitable marketing strategies. Loyalty usually occurs when customers or industrial buyers gain experience and confidence in the products or services. It has been regarded as a statistic summarizing the results of a sequence of purchasing decisions (Cunningham, 1956). However, it is not just a matter of reducing price or changing product features. According to Reichheld (1993), loyalty could be earned by consistently delivering superior value. It can also be classified into: a) brand or consumer loyalty, and b) industrial source loyalty.

Brand (or consumer) loyalty has been used to explain consumer behavior in making a repeat purchase (Cunningham 1956, 1996; Lipstein, 1959; and Massy, 1966). Wind (1970) studied industrial source loyalty by directly applying the concept of loyalty to industrial buyer behavior. He found that source loyalty was based mostly on four sets of variables. They were: 1) the “traditional” task variables (price, quality, delivery, quantity, and service, 2) the buyer’s past experience, 3) the organizational variables, and 4) work simplification variables. He also examined the purchase of electronic components and the various factors influencing source loyalty and concluded that there was “substantial evidence for the existence of source loyalty... (p. 454).” By studying the
effect of loyalty on buying decision outcomes, Bubb & Rest (1973) concluded that loyalty is not just a summary of decision outcomes. It was also one of the major determinants in industrial buying decisions. Puto, Patton & King (1985) also found the existence of industrial source loyalty and Morris & Holman (1988) noted that industrial source loyalty tended to take more time to develop than consumer loyalty. However, the relationship between source and buyer could not be easily dissolved.

In attempting to explain the details of the country-of-origin effects, Johansson (1989) proposed the new model of the country-of-origin effects and coined the term country loyalty. As consumers gain more experience and confidence with a specific product from a specific country, they might develop a county loyalty. For example, Italian shoes, German beer, and Japanese automobiles are good representations of country loyalty.

Impact of Government and Regulations

The governments and their trade regulations play an important role in international markets. Governments in many countries distort trade and welfare arrangements to gain economic and political advantages or benefits. There are a number of government variables involved in trade such as the ideology and policies of the country, legal constraints, trade restrictions, subsidies and tax incentives, the politics of the country, bureaucracy level of country, the level of economic development, the availability of foreign exchange, and the stability of the governments. These variables have an influence on organizational buying decisions (Samli, Grewal, & Mathur, 1988). For example, legal constraints could inhibit buyers from purchasing from certain nations.
Moreover, a government can use a combination of tariff and non-tariff methods as trade restrictions to protect their domestic industries against foreign firms. A government can also reduce the amount of imports by imposing a high tariff rate that makes it more difficult for the importer to profit. An alternative method of restricting imports is nontariff trade barriers. Onkvisit, Shaw, & John (1988) pointed out that there are six major categories of non-tariff trade barriers:

1. Government participation in trade can range from simple guidance to state trading subsidies.
2. Customs and entry procedure barriers involve classification, valuation, inspection, documentation, license, and health and safety regulations.
3. Product requirements may apply to product standards, testing, specifications, and packaging, labeling, and marking.
4. Quotas, also known as quantitative controls, can be absolute, tariff, or voluntary.
5. Financial regulations can take the form of exchange controls, multiple exchange rates, prior import deposits, credit restrictions, and profit remittance restrictions.
6. There are various market-reserve policies and performance requirements.

Research Hypotheses

Based on the organizational buying behavior theories of Wind & Webster (1972), Sheth’s (1973) idea on the industrial buyer behavior, and an integrative model of international industrial buyer behavior proposed by Samli, Grewal & Mathur (1988); the following integrates these three concepts into the conceptual framework for this study.
Figure 4

**Importer Buying Behavior Process**

1. Problem Recognition
2. Assignment of Buying Authority and Responsibility
3. Search Process for Identifying Product Offering and for Establishing Selection Criteria  
   - 1) Selection Criteria
   - 2) Supplier Characteristics
   - 3) Product Characteristics
   - Buying Decision Influencing Factors
     - 1) Supplier Country of Image
     - 2) Past Purchasing Experience

Source: Chandrapalnert (2002). "The Thai Buyer's Selection Criteria toward Industrial Machinery Product from Japan, Germany, and United States: An Investigation on Thai Textile Company".

The model depicts the importer buying behavior of evaluating and selecting the best alternative suppliers. The model shows the organization buying process and the impacts of each stage which can be explained as follows:

- First stage, problem recognition is the need to purchase products or services.
- Second stage, assignment of buying authority and responsibility occurs.
Third stage, the search process begins to identify product offerings and for establishing selection criteria, this involves both selection criteria and information sources. In the present research study, the focus is only on the selection criteria of suppliers and product characteristics as the determinants of importer’s selection decisions.

Fourth stage, the choice process for evaluation and selection of alternative suppliers is influenced by six major factors. They are individual, organizational, social, environmental, uncertainty, and government factors. The present study emphasizes individual factors that influence the individual’s perceptions, particularly stereotypes and purchasing experience related to loyalty concepts.

The preceding research empirically investigated the various supplier selection factors as presented. The present research examines who participates in the purchasing process and decisions, what are the important criteria for evaluating and selecting the suppliers, and how individual factors influence the organizational buying decision. The following paragraphs talk about each of the research hypotheses with a brief explanation for each area of interest.

Section One: Buying Decision Influencing Factors

There are six major factors influencing organizational buying behavior. They are individual factors, environmental factors, organizational factors, societal/cultural factors, uncertainty factors, and government and regulatory factors (Samli, Grewal & Mathur, 1988). The present research study will focus only on individual factors which involve perceptions (stereotypes), and purchasing experience (loyalty concept).
Stereotypical images can be affected by the individual’s perception of country-of-origin information (White, 1979). Johansson & Thorelli (1984) studied the effects of country stereotypes on product positioning in the perceptual space. He found that country-of-origin images or stereotypes have influenced buyers on product evaluation. Khanna (1986) also investigated the country-of-origin image with two sampling groups. The first sampling group was compound of chief executives from 93 companies located in four markets—Thailand, Singapore, the Philippines, and Japan. The second sampling group was compound of top managers responsible for international/export operations of 140 Indian business firms. One of Khanna’s (1986) hypotheses found that “the country-of-origin image is not so important in the buyer evaluation process when import firms are making import decisions (p.32).” His research suggested that 87 percent of the importers felt that the country-of-origin export image was a very important factor while dealing with new companies but not so important while dealing with old companies. Because of the importance of country-of-origin stereotypes, the following hypothesis will be examined:

\[ H_1: \text{There is a significant difference between country-of-origin stereotypes and the selection decision of a foreign supplier by Thai importer purchasing managers/members.} \]

Besides, the impact of country-of-origin stereotypes of Thai importer purchasing manger/member’s perceptions, loyalty effects have influenced supplier selection. Bubb & Rest (1973) make the point that loyalty is one of the major determinants in industrial buying decisions. Some industrial marketing executives regard loyalty as affecting the current solution (Sunday Time, 1972). Based on these statements, the following
hypothesis are formulated to test the importance of loyalty concepts on Thai importer buying decisions:

\[ H_2: \text{There is a significant difference between the past purchasing experiences of Thai importer purchasing manager/member's and selection decisions of foreign suppliers.} \]

Section Two: Selection Criteria

Due to the complexity of foreign supplier selection, there are many factors that have influenced foreign supplier selection decisions. However, to large of a number of criteria can cause complications and make it difficult for decision makers to reach decisions. As Miller (1956) noted “most decision makers cannot simultaneously handle more than seven to nine factors when making a decision (p.84).” Thus, this study considers the most important decision making criteria to examine Thai import company buyer behavior.

The literature review suggested many selection criteria that are used for decision making across different product categories, or buying situations. Hence, general themes of foreign supplier selection criteria for industrial products were investigated, regardless of differences in product categories and buying situations. Lehman & O'Shaughnessy (1982) stated that the key factors influencing supplier selection decisions were price, quality, delivery, and service. Later, Deng & Garrett (1985) found that product quality, price, and delivery performance were the most important criteria in foreign supplier sourcing decisions. Besides, the consideration of the important selection criteria of price, quality, delivery, and service; supplier characteristics are also important factors in an
industrial commodity market. Hokey (1994) indicated that the supplier’s ability to provide the necessary technical assistance must be factored into the international supplier selection decision. Therefore, this research hypothesis will only test the most important selection criteria:

H₃: There is a significant difference between selection criteria and a purchasing decision of buying textile machinery products by Thai import companies.

In addition, this research study will investigate Thai import purchasing managers’ perceptions of both supplier and product characteristics from Japan, the United States, and Germany. These three countries are considered major industrial exporters to Thailand. Based on this fact, the researcher is interested in examining how Thai import purchasing managers select to purchase the product from these three exporters regarding both supplier and product characteristics using the following:

H₄: There is a significant difference between supplier characteristics among Japanese, the United States, and German and purchasing decision.

H₅: There is a significant difference between product characteristics among Japanese, the United States, and purchasing decision.
CHAPTER THREE: METHODOLOGY

The integration of three industrial buying behavior concepts; one by Webster & Wind (1972), one by Sheth (1973), and one by Samli, Grewal & Mathur (1988) are the main conceptual frameworks used to develop importer buyer behavior models and research hypotheses for this study. The main purpose of the research hypotheses is to investigate how Thai import purchasing managers’ perceptions affect the selection of foreign suppliers among Japanese, the United States, and German exporters on textile industrial machinery products in Thailand. The survey method is used in this research study.

The methodology section includes the research design, the research procedures, and data processing and analysis techniques. The research design section includes sampling procedures, and size, development of the survey research instrument, data collection analysis procedures. The data processing and analysis section discussed statistical techniques to be used in the study. All these processes are detailed here in chapter three.

Research Design

The research design section includes sampling procedures and size, the development of the data collection approaches, the development of the survey instrument, and a discussion of the procedures. The data processing and analysis section discusses statistical techniques to be used in the study. All are detailed as follow:
Population and Sampling Procedures

Like most of the international business field, most studies in this field use a cross-sectional in procedure. However, this study uses primary data based on the survey result. The population of this study, therefore, was textile company operating in Thailand. The sampling frame used to select respondents for this research was obtained from two directories. The names and addresses of the textile company in Thailand were obtained from these directories. The 2001 edition of the "Thailand Textile Institute" (THTI) and the "Directory of Thai Industry and Business 2001" was used. When this research began, the 2001 sample frame was the most current information available. The Thailand Textile Institute (THTI) listed the company addresses and telephone numbers in Thailand for each of the firms in textile business. This was supplemented by the Directory of Textile Firms Operating in Thailand (Ministry of Commerce).

Management level positions (purchasing managers and above), who were involved in the purchasing decision-making, were selected as the respondents to represent the sampled textile companies. The actual respondents would be the persons who most frequently interacted with the suppliers. In this case, the purchasing managers, who worked in purchasing department, and above including, directors of international operations, general managers, managing directors, board of directors, vice-presidents, presidents, and CEO's were, therefore, determined to be the most likely persons within the organization to have contact with the parent firms. This is in line with the work of John (1984), who makes a strong case for selecting knowledgeable respondents. The choice of this rather exclusive respondent group is based on the belief that people in these
sensitive positions are the most cognizant about global investment projects and the dynamics of the overall foreign entry decision process (Kim & Hwang, 1992).

For selecting the respondents from the sample frame, systematic random sampling technique was used to reduce and to increase generalizabilities of the research results. Each of the 2,500 textile companies listed in the sample frame was numbered, a random and then every 3rd name was selected to be included in the sample. All members of the population had an equal and independent chance of being included in the sample. The sample size used in this research was 310 textile companies, which is about 12.4 percent of the total target population. This sample size was adequate and large enough to be representative of the population.

Procedures

Personal interviews with the respondents were used to collect the data for this research study. The personal interview method was used in order to gain a high response rate. However, normally personal interviews are not considered cost effective in the Thailand for survey questions. Due to the unique aspect of the Thai culture, personal interviews are very popular methods used to collect data. Kuntonburt (1997) said that in Thailand, personal interviews are considered more socially acceptable and as cost-effective and cost-efficient when compared to mailed questionnaires or telephone interviews.

For this study, there were three steps in the data collection process. First, the questionnaire was delivered through the mail to a specific person within the organization who participated in purchasing decision for imported products. A cover letter was
enclosed with the questionnaire to inform the respondent of the objectives, significance, and usefulness of the research, and to ask the respondents to participate by allowing an appointment to be schedule with the interviewers. The letter also contained the appointment time schedules for the respondent to consider. This was done to increase the credibility of the research and to have the right person answer the questions.

Second, the interviewers made a phone-call to each respondent to arrange an interview appointment. This phone call was also used to reassure the respondents of the importance of the study and help them feel comfortable about answering the questions.

Third, six interviewers were selected and trained to conduct the personal interviews by a research instructor who had a clearly understanding of this research study. The interviewers were given a clear explanation of all questions on the questionnaire, as well as the procedures for data collection. This training of interviewers was used to reduce the misinterpretation of questions by the respondents, as well as to decrease the rate of unanswered questions.

The questionnaire was first developed in the Thai language. Prior to the data collection stage, 30 sets of questionnaire are out to 30 Thai textile purchasing managers to be certain that every single question would be fully understood. Subsequently, content validity and reliability was used to check to be certain that the data the collection form was valid. In detail, the panel of evaluator each question in the instrument and the research objectives to make sure that things to be measured were measured and would yield the best possible results for generalization. Eventually, 350 copies of Thai version questionnaires were sent to all individuals involved in this study.
The questionnaire was designed to be completed through personal interview. Besides, this can reduce the misinterpretation of questions' contents. It can also create more truthful responses because the obtained data in a personal interview can help keep respondents' answers a confidential. In general, the response rate of personal interview is high as 75-90 percents (Ary, Jacobs & Razavich, 1990) so it is not necessary to have a follow-ups for non-responses.

Data Processing and Analysis

The most appropriate analytical tool for testing all hypotheses (H₁-H₄) is analysis of co-variance (ANCOVA) because it is used to measure the significant difference between matrix variables and category variables. This hypothesis will be supported if each of the independent variables significantly relate to the dependent variable at p<.05. Similarly, statistical significance level or p<.05 would be the sole indicator of accepting or rejecting the hypothesis.

In conclusions, the following table shows the statistical techniques and their purpose for the present research hypotheses:
Table 4:

Statistical Techniques used to Analyze Data

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analysis of Covariance (ANCOVA): This technique was used for hypotheses</td>
<td>To test the hypothesis that has only one dependent variable and one category variable and matrix variable.</td>
</tr>
<tr>
<td>one to five</td>
<td>- $H_1$: There is a significant difference between country-of-origin stereotypes and the purchasing decision of a foreign supplier by Thai import purchasing managers.</td>
</tr>
<tr>
<td>- $H_2$: There is a significant difference between past purchasing experience</td>
<td>- $H_1$: $(IV) = \text{Group Category}$, $(DV) = \text{Matrix}$</td>
</tr>
<tr>
<td>and the purchasing decision of a foreign supplier by Thai import</td>
<td></td>
</tr>
<tr>
<td>purchasing managers</td>
<td>- $H_2$: $(IV) = \text{Group Category}$, $(DV) = \text{Matrix}$</td>
</tr>
<tr>
<td>- $H_3$: There is a significant difference between selection criteria and a</td>
<td>- $H_3$: $(IV) = \text{Matrix}$, $(DV) = \text{Matrix}$</td>
</tr>
<tr>
<td>purchasing decision making for buying industrial machinery products by</td>
<td></td>
</tr>
<tr>
<td>Thai import purchasing managers.</td>
<td></td>
</tr>
<tr>
<td>- $H_4$: There is a significant difference between suppliers/exporters among</td>
<td>- $H_4$: $(IV) = \text{Matrix}$, $(DV) = \text{Matrix}$</td>
</tr>
<tr>
<td>Japanese, the United States, and German and purchasing decision by</td>
<td></td>
</tr>
<tr>
<td>Thai import purchasing managers.</td>
<td></td>
</tr>
<tr>
<td>- $H_5$: There is a significant difference between product characteristics</td>
<td>- $H_5$: $(IV) = \text{Matrix}$, $(DV) = \text{Matrix}$</td>
</tr>
<tr>
<td>among Japanese, the United States, and German and purchasing decision by</td>
<td></td>
</tr>
<tr>
<td>Thai import purchasing managers.</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER FOUR: FINDINGS

This chapter presents the results of the data collection and statistical analysis. First, the chapter begins with a brief restatement of the purpose of the study. Second, the measurement of reliability and validity is presented, followed by a frequency distribution. Third, the results of the tests of the research hypotheses are discussed in detail. Finally, the chapter concludes with a summary of the findings.

Restatement of the Purpose

This study focused on the importer’s side of international trade by investigating Thai import purchasing managers’ decision processes for selecting foreign suppliers among Japanese, the United States, and German industrial exporters.

First, the purpose of this study was to find out what the important selection criteria are for foreign suppliers to Thai import purchasing managers.

Second, this research surveyed Thai import purchasing managers' evaluations of Japanese, the United States, and German industrial exporters' characteristics and the nature of their products (industrial machinery).

Finally, the importance of individual characteristics of Thai import purchasing managers perceptions were examined—for example purchasing experiences and stereotypes (country-of-origin).

Reliability and Validity Tests

This research study used Cronbach's alpha to measure the internal consistency of the instruments, which are "the most accepted formula for assessing reliability of a
measurement scale with multi-point items (Peter, 1979, p.8)." Table 6 displays the coefficient alpha of all multi-item variables in this research questionnaire. The coefficient alpha of the "selection criteria" variable was .83.

However, the coefficient alphas of perception of supplier characteristics of Japanese, the United States, and German exporters were .71, .73, and .77 respectively. The coefficient alphas of perception on product characteristics of Japanese, the United States, and German exporters were .65, .68, and .63 respectively. Since most constructs in the study had relatively high alpha coefficient scores, it ensured that the questions were quite reliable and useful for this and future research.

The content validity of the questionnaire was tested through personal interviews with three import experts, and two research experts in order to ensure that the questionnaire used appropriate wording and was sufficient to cover the research questions. Following this, the questionnaire was pretested using 30 respondents from the sample that all questions were readable and understandable to the respondents.

Table 5

<table>
<thead>
<tr>
<th>Coefficient of Reliability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
<td>Coefficient</td>
</tr>
<tr>
<td>Purchase Decision Participation</td>
<td>.83</td>
</tr>
<tr>
<td>Perception toward Foreign Supplier Characteristics:</td>
<td></td>
</tr>
<tr>
<td>Japan Exporter</td>
<td>.71</td>
</tr>
<tr>
<td>United States Exporter</td>
<td>.73</td>
</tr>
<tr>
<td>Germany Exporter</td>
<td>.77</td>
</tr>
<tr>
<td>Perception toward Foreign Product's Characteristics:</td>
<td></td>
</tr>
<tr>
<td>Japan Exporter</td>
<td>.65</td>
</tr>
<tr>
<td>United States Exporter</td>
<td>.68</td>
</tr>
<tr>
<td>Germany Exporter</td>
<td>.63</td>
</tr>
</tbody>
</table>
Frequency Distribution

The following tables present the general descriptive statistics for all 31 questions in the questionnaire. Questions 1-22 addressed the research hypotheses. Questions 23-26 addressed about the respondents' company profile and question 27-31 addressed the respondents' personal data.

Table 6

Frequency Distribution

<table>
<thead>
<tr>
<th>Questions</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1: The organizational position of the respondents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 = Staff</td>
<td>17</td>
<td>5.4</td>
<td>5.5</td>
<td>100</td>
</tr>
<tr>
<td>- 2 = Lower management</td>
<td>20</td>
<td>6.4</td>
<td>6.5</td>
<td>94.5</td>
</tr>
<tr>
<td>- 3 = Middle management</td>
<td>114</td>
<td>36.5</td>
<td>36.5</td>
<td>88.1</td>
</tr>
<tr>
<td>- 4 = Upper management</td>
<td>159</td>
<td>51.0</td>
<td>51.3</td>
<td>51.3</td>
</tr>
<tr>
<td>Q2: Level of participation for purchasing imported machinery products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 = Low</td>
<td>46</td>
<td>14.7</td>
<td>14.8</td>
<td>14.8</td>
</tr>
<tr>
<td>- 2</td>
<td>22</td>
<td>7.1</td>
<td>7.1</td>
<td>21.9</td>
</tr>
<tr>
<td>- 3</td>
<td>65</td>
<td>20.8</td>
<td>21.0</td>
<td>42.3</td>
</tr>
<tr>
<td>- 4</td>
<td>132</td>
<td>42.3</td>
<td>42.6</td>
<td>85.5</td>
</tr>
<tr>
<td>- 5 = High</td>
<td>45</td>
<td>14.4</td>
<td>14.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
<td>99.4</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Q3: The level of product value of last purchase</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 = less than 1,000,000 (baht)</td>
<td>129</td>
<td>41.3</td>
<td>42.4</td>
<td>42.4</td>
</tr>
<tr>
<td>- 2 = 1,000,001 - 4,000,000 (baht)</td>
<td>129</td>
<td>41.3</td>
<td>42.4</td>
<td>84.9</td>
</tr>
<tr>
<td>- 3 = 4,000,001 - 7,000,000 (baht)</td>
<td>33</td>
<td>10.6</td>
<td>10.9</td>
<td>95.7</td>
</tr>
<tr>
<td>- 4 = 7,000,001 -10,000,001 (baht)</td>
<td>5</td>
<td>1.6</td>
<td>1.6</td>
<td>97.4</td>
</tr>
<tr>
<td>- 5 = more than 10,000,000 (baht)</td>
<td>8</td>
<td>2.6</td>
<td>2.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Q4: Selection Criteria: Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 = Low</td>
<td>2</td>
<td>.6</td>
<td>.7</td>
<td>.7</td>
</tr>
<tr>
<td>- 2</td>
<td>8</td>
<td>2.6</td>
<td>2.6</td>
<td>3.3</td>
</tr>
<tr>
<td>- 3</td>
<td>165</td>
<td>52.9</td>
<td>54.3</td>
<td>57.6</td>
</tr>
<tr>
<td>- 4</td>
<td>57</td>
<td>18.3</td>
<td>18.8</td>
<td>76.3</td>
</tr>
<tr>
<td>- 5 = High</td>
<td>72</td>
<td>23.1</td>
<td>23.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>97.4</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

58
Q4.2: Quality
- 1 = Low
- 2
- 3 28 9.0 9.2 9.2
- 4 78 25 25.7 34.9
- 5 = High 198 63.5 65.1 100.0
Total 304 97.4 100.0

Q4.3: Distribution
- 1 = Low
- 2 11 3.5 3.7 3.7
- 3 136 43.6 45.2 48.8
- 4 98 31.4 32.6 81.4
- 5 = High 56 17.9 18.6 100.0
Total 301 96.5 100.0

Q4.4: Level Post Sale Service
- 1 = Low
- 2 5 1.6 1.7 1.7
- 3 132 42.3 43.6 45.2
- 4 87 27.9 28.7 73.9
- 5 = High 79 25.3 26.1 100.0
Total 303 97.1 100.0

Q4.5: Level of Technology of Supplier
- 1 = Low
- 2 19 6.1 6.3 6.3
- 3 144 46.2 47.5 53.8
- 4 66 21.2 21.8 75.6
- 5 = High 74 23.7 24.4 100.0
Total 303 97.1 100.0

Q5: Past Purchasing Experience (Japan)
No 100 32.1 37.3 37.3
Yes 168 53.8 62.7 100.0

Q6: The total amount of imported
Japanese industrial machinery products
during 1996-2001
- 1 = less than 1,000,000 (baht) 72 23.1 43.6 43.6
- 2 = 1,000,001 - 4,000,000 (baht) 65 20.8 39.4 83
- 3 = 4,000,001 - 7,000,000 (baht) 13 4.2 7.9 90.9
- 4 = 7,000,001 -10,000,001 (baht) 6 1.9 3.6 94.5
- 5 = more than 10,000,000 (baht) 9 2.9 5.5 100.0

Q7.1: Supplier’s Characteristic (Level of Technology of Japan)
- 1 = Low
- 2 1 3 .6 .6
- 3 52 16.7 31.0 31.5
- 4 84 26.9 50.0 81.5
- 5 = High 31 9.9 18.5 100.0
Total 168 53.8 100.0

59
Q7.2: Level of Trade Experience

<table>
<thead>
<tr>
<th>(Japan)</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 = Low</td>
<td>3</td>
<td>1.0</td>
<td>1.8</td>
<td>1.8</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>- 2</td>
<td>6</td>
<td>1.9</td>
<td>3.6</td>
<td>37.5</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td>- 3</td>
<td>66</td>
<td>21.2</td>
<td>39.3</td>
<td>82.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 4</td>
<td>30</td>
<td>9.6</td>
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Q7.3: Level of relationship with Japan

| - 1 = Low     | 11 | 3.5| 6.5| 6.5|
| - 2           | 10 | 3.2| 6.0| 12.5|
| - 3           | 49 | 15.7| 29.2| 41.7|
| - 4           | 61 | 19.6| 36.5| 78.0|
| - 5 = High    | 37 | 11.9| 22.0| 100.0|
| Total         | 168| 53.8| 100.0|

Q7.4: Level of imported machinery price from Japan

| - 1 = Low     | 4  | 1.3| 2.5| 2.5|
| - 2           | 78 | 25.0| 47.5| 50.3|
| - 3           | 49 | 15.7| 30.1| 80.4|
| - 4           | 32 | 10.3| 19.6| 100.0|
| - 5 = High    | 163| 52.2| 100.0|

Q7.5: Level of product quality of imported machinery from Japan

| - 1 = Low     | 19 | 6.1| 11.7| 11.7|
| - 2           | 76 | 24.4| 46.9| 58.6|
| - 3           | 67 | 21.5| 41.4| 100.0|
| - 4           | 162| 51.9| 100.0|

Q7.6: Level of product performance of imported machinery from Japan

| - 1 = Low     | 16 | 5.1| 9.9| 9.9|
| - 2           | 48 | 15.4| 29.6| 39.5|
| - 3           | 98 | 31.4| 60.5| 100.0|
| - 4           | 162| 51.9| 100.0|

Q7.7: Level of product reliability and durability of imported machinery from Japan

| - 1 = Low     | 25 | 8.0| 15.4| 15.4|
| - 2           | 44 | 14.1| 27.2| 42.6|
| - 3           | 93 | 29.8| 57.4| 100.0|
| - 4           | 162| 51.9| 100.0|

60
Q7.8: Product Design from Japan
- 1 = Low
- 2
- 3
- 4
- 5 = High
Total

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Q8: Past Purchasing Experience (USA)
No
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Q9: The total amount of imported the United States industrial machinery products during 1996-2001
- 1 = less than 1,000,000 (baht)
- 2 = 1,000,001 - 4,000,000 (baht)
- 3 = 4,000,001 - 7,000,000 (baht)
- 4 = 7,000,001 - 10,000,001 (baht)
- 5 = more than 10,000,000 (baht)

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Q10.1: Selection Criteria (Level of Technology of USA)
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- 2
- 3
- 4
- 5 = High
Total

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Q10.2: Level of Trade Experience (USA)
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- 4
- 5 = High
Total

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Q10.3: Level of relationship with USA
- 1 = Low
- 2
- 3
- 4
- 5 = High
Total

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Q10.4: Level of imported machinery price from USA
- 1= Low
  - 2
  - 3
  - 4
  - 5 = High
Total

Q10.5: Level of product quality of imported machinery from USA
- 1= Low
  - 2
  - 3
  - 4
  - 5 = High
Total

Q10.6: Level of product performance of imported machinery from USA
- 1= Low
  - 2
  - 3
  - 4
  - 5 = High
Total

Q10.7: Level of product reliability and durability of imported machinery from USA
- 1= Low
  - 2
  - 3
  - 4
  - 5 = High
Total

Q10.8: Product Design from Japan
- 1= Low
  - 2
  - 3
  - 4
  - 5 = High
Total

Q11: Past Purchasing Experience (Germany)
No
Yes

62
Q12: The total amount of imported the Germany industrial machinery products during 1996-2001
- 1 = less than 1,000,000 (baht) 23 7.4 30.7 30.7
- 2 = 1,000,001 - 4,000,000 (baht) 27 8.7 36.0 66.7
- 3 = 4,000,001 - 7,000,000 (baht) 17 5.4 22.7 89.3
- 4 = 7,000,001 - 10,000,001 (baht) 3 1.0 4.0 93.3
- 5 = more than 10,000,000 (baht) 5 1.6 6.7 100.0

Q13.1: Selection Criteria (Level of Technology of Germany)
- 1 = Low
- 2
- 3 19 6.1 26.0 26.0
- 4 35 11.2 47.9 74.0
- 5 = High 19 6.1 26.0 100.0
Total 73 23.4 100.0

Q13.2: Level of Trade Experience (GM)
- 1 = Low 5 1.6 6.8 6.8
- 2 32 10.3 43.8 50.7
- 3 28 9.0 38.4 89.0
- 4 8 2.6 11.0 100.0
- 5 = High 73 23.4 100.0
Total

Q13.3: Level of relationship with Germany
- 1 = Low 5 1.6 6.8 6.8
- 2 6 1.9 8.2 15.1
- 3 23 7.4 31.5 46.6
- 4 29 9.3 39.7 86.3
- 5 = High 10 3.2 13.7 100.0
Total 73 23.4 100.0

Q13.4: Level of imported machinery price from Germany
- 1 = Low
- 2
- 3 27 8.7 37.0 37.0
- 4 26 8.3 35.6 72.6
- 5 = High 20 6.4 27.4 100.0
Total 73 23.4 100.0

Q13.5: Level of product quality of imported machinery from Germany
- 1 = Low
- 2
- 3 3 1.0 4.1 4.1
- 4 24 7.7 32.9 37.0
- 5 = High 46 14.7 63.0 100.0
Total 73 23.4 100.0

63
Q13.6: Level of product performance of imported machinery from Germany
- 1 = Low
- 2
- 3 5 1.6 6.8 6.8
- 4 21 6.7 28.8 35.6
- 5 = High 47 15.1 64.4 100.0
Total 73 23.4 100.0

Q13.7: Level of product reliability and durability of imported machinery from USA
- 1 = Low
- 2
- 3 6 1.9 8.2 8.2
- 4 19 6.1 26.0 34.2
- 5 = High 48 15.4 65.8 100.0
Total 73 23.4 100.0

Q13.8: Product Design from Japan
- 1 = Low
- 2
- 3 37 11.9 50.0 55.4
- 4 16 5.1 21.6 77.0
- 5 = High 17 5.4 23.0 100.0
Total 74 23.7 100.0

Q14: Country of Origin Stereotypes (Country Image)
No 226 72.4 74.1 74.1
Yes 79 25.3 25.9 100.0

Q15: Which country is the best country image
Japan Supplier 35 11.2 43.8 43.8
USA Supplier 26 8.3 32.5 76.3
German Supplier 19 6.1 23.8 100.0
Total 80 25.6 100.0

Q16.1: Value imported from USA
40,000.00 1 .3 2.8 2.8
50,000.00 3 1.0 8.3 11.1
60,000.00 3 1.0 8.3 19.4
70,000.00 2 .6 5.6 25.0
80,000.00 1 .3 2.8 27.8
1,000,000.00 3 1.0 8.3 36.1
2,000,000.00 2 .6 5.6 41.7
2,500,000.00 1 .3 2.8 44.4
3,000,000.00 2 .6 5.6 50.0
3,656,565.99 1 .3 2.8 52.8
4,000,000.00 3 1.0 8.3 61.1
5,000,000.00 2 .6 5.6 66.7
6,000,000.00 2 .6 5.6 72.2
7,000,000.00 1 .3 2.8 75.0
9,000,000.00 1 .3 2.8 77.8
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**Q16.2: Percentage imported from Germany**

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**Q17: During 1996-2001, did you import industrial machinery products from Japan, USA, Germany, or etc.**

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**Q18: From Question 17, How many percentage account for purchasing machinery for that country**

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**Q19.1: The perceptions toward supplier’s characteristics**

- 1 = Low
- 2
- 3 = High

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**Q19.2: The perceptions toward product’s characteristics.**

- 1 = Low
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- 3
- 4
- 5 = High

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<td>1.7</td>
<td></td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>293</td>
<td>93.9</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q20: In 2001, did you import industrial machinery products from the same exporter in year 2000.

<table>
<thead>
<tr>
<th></th>
<th>226</th>
<th>72.4</th>
<th>74.6</th>
<th>74.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>24.7</td>
<td>25.4</td>
<td>100.0</td>
</tr>
<tr>
<td>No</td>
<td>30.3</td>
<td>97.1</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Range of Sales (Baht)</th>
<th>122</th>
<th>39.1</th>
<th>40.7</th>
<th>40.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 million</td>
<td>127</td>
<td>40.7</td>
<td>42.3</td>
<td>83.0</td>
</tr>
<tr>
<td>1-10 million Baht</td>
<td>20</td>
<td>6.4</td>
<td>6.7</td>
<td>89.7</td>
</tr>
<tr>
<td>40-70 million Baht</td>
<td>13</td>
<td>4.2</td>
<td>4.3</td>
<td>94.0</td>
</tr>
<tr>
<td>70-100 million Baht</td>
<td>18</td>
<td>5.8</td>
<td>6.0</td>
<td>100.0</td>
</tr>
<tr>
<td>More than 100 million</td>
<td>300</td>
<td>96.2</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Range of Sales (Baht)</th>
<th>104</th>
<th>33.3</th>
<th>39.2</th>
<th>39.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 million</td>
<td>137</td>
<td>43.9</td>
<td>51.7</td>
<td>90.9</td>
</tr>
<tr>
<td>1-10 million Baht</td>
<td>12</td>
<td>3.8</td>
<td>4.5</td>
<td>95.5</td>
</tr>
<tr>
<td>10-20 million Baht</td>
<td>6</td>
<td>1.9</td>
<td>2.3</td>
<td>97.5</td>
</tr>
<tr>
<td>More than 20 million</td>
<td>6</td>
<td>1.9</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>84.9</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Range of Sales (Baht)</th>
<th>140</th>
<th>44.9</th>
<th>51.3</th>
<th>51.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 million</td>
<td>100</td>
<td>32.1</td>
<td>36.6</td>
<td>87.9</td>
</tr>
<tr>
<td>1-4 million Baht</td>
<td>22</td>
<td>7.1</td>
<td>8.1</td>
<td>96.0</td>
</tr>
<tr>
<td>4-7 million Baht</td>
<td>6</td>
<td>1.9</td>
<td>2.2</td>
<td>98.2</td>
</tr>
<tr>
<td>7-10 million Baht</td>
<td>5</td>
<td>1.6</td>
<td>1.8</td>
<td>100.0</td>
</tr>
<tr>
<td>More than 10 million</td>
<td>273</td>
<td>87.5</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q24: How long your company has been in this business.

<table>
<thead>
<tr>
<th>Years</th>
<th>58</th>
<th>18.6</th>
<th>18.7</th>
<th>18.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>110</td>
<td>35.3</td>
<td>35.5</td>
<td>54.2</td>
</tr>
<tr>
<td>6-10</td>
<td>60</td>
<td>19.2</td>
<td>19.4</td>
<td>73.5</td>
</tr>
<tr>
<td>10-15</td>
<td>82</td>
<td>26.3</td>
<td>26.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
<td>99.4</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q25: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>220</th>
<th>70.5</th>
<th>71.0</th>
<th>71.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>90</td>
<td>28.8</td>
<td>29.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
<td>99.4</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q26: Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>2</th>
<th>.6</th>
<th>.6</th>
<th>.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 years</td>
<td>61</td>
<td>19.6</td>
<td>19.7</td>
<td>20.3</td>
</tr>
<tr>
<td>26-35 years</td>
<td>155</td>
<td>49.7</td>
<td>50.0</td>
<td>70.3</td>
</tr>
<tr>
<td>36-45 years</td>
<td>85</td>
<td>27.2</td>
<td>27.4</td>
<td>97.7</td>
</tr>
<tr>
<td>More than 55 years</td>
<td>7</td>
<td>2.2</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
<td>99.4</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Q27: Education  

<table>
<thead>
<tr>
<th>Education Level</th>
<th>1</th>
<th>.3</th>
<th>.3</th>
<th>.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Elementary School</td>
<td>33</td>
<td>10.6</td>
<td>10.9</td>
<td>11.2</td>
</tr>
<tr>
<td>- High School</td>
<td>257</td>
<td>82.4</td>
<td>84.5</td>
<td>95.7</td>
</tr>
<tr>
<td>- Bachelor Degree</td>
<td>13</td>
<td>4.2</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>304</td>
<td>97.4</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 (Part A) presents the descriptive statistics of the level of the organizational positions and the degree of participation in making decisions for buying industrial machinery products (questions 1 & 2). The level of the organizational position is classified into four levels (upper management, middle management, lower management, and staff) which are scored as 4, 3, 2, and 1, respectively. The degree of participation ranges from 1 (low) to 5 (high).

In addition, the table 6 also presents the descriptive statistics of the levels of industrial machinery product’s value for the last purchase and the degree of importance of selection criteria through questions 5. The levels of the industrial machinery product’s value (asked is classified into five levels (less than 1,000,000, 1,000,001-4,000,000, 4,000,001-7,000,000, 7,000,001-10,000,000, and more than 10,000,000 baht), which are scored as 1, 2, 3, 4, and 5, respectively. The selection criteria were measured by five items including product price, product quality, reliability of delivery, availability of after-sales service, and supplier technical skills. The scores ranged from 0 (not considered) to 5 (extremely important).

Table 6 (Part A) presents the descriptive statistics of the number of respondents who imported industrial machinery products from Japan in the last five years (in question 5), the monetary amount of the yearly imported industrial machinery products from Japan in last five years (in question 6) and both supplier and product characteristics of Japanese
exporters (in question 7). The yearly amount of the industrial machinery products imported from Japan was classified into five levels (less than 1,000,000, 1,000,001-4,000,000, 4,000,001-7,000,000, 7,000,001-10,000,000, and more than 10,000,000 baht) which are scored as 1, 2, 3, 4, and 5, respectively. Supplier characteristics were measured by three items including technical, commercial, and interpersonal skills (questions 7.1-7.3). The product characteristics were measured by five items including the product price, quality, performance, durability, and design. The score for each item of both supplier and product characteristics ranges from 1 (low) to 5 (high).

Table 6 (Part A) presents the descriptive statistics of the number of respondents who imported industrial machinery products from the United States in last five years (in question 8), the amount of the yearly importing industrial machinery products from the United States in last five years (in question 9) and both supplier and product characteristics of the United States exporters (in question 10). The monetary amount of the yearly imported industrial machinery products from the United States is classified into five levels (less than 1,000,000, 1,000,001-4,000,000, 4,000,001-7,000,000, 7,000,001-10,000,000, and more than 10,000,000 baht) which are scored as 1, 2, 3, 4, and 5, respectively. The supplier characteristics were measured by three items including technical, commercial, and interpersonal skills. The product characteristics were measured by five items including product price, product quality, product performance, product durability, and product design. The score for each item of both supplier and product characteristics ranges from 1 (low) to 5 (high).

In addition, the table also presents the descriptive statistics of the number of respondents who imported industrial machinery products from Germany in last five years
(in question 11), the monetary amount of the yearly imported industrial machinery products from Germany in last five years (in question 12) and both the supplier and product characteristics of German exporters (in question 13). The amount of the yearly imported industrial machinery products from Germany is classified into five levels (less than 1,000,000, 1,000,001-4,000,000, 4,000,001-7,000,000, 7,000,001-10,000,000, and more than 10,000,000 baht) which are scored as 1, 2, 3, 4, and 5, respectively. The supplier characteristics were measured by three items including technical, commercial, and interpersonal skills. The product characteristics were measured by five items including the product price, quality, performance, durability, and design. The scores for each item of both supplier and product characteristics ranges from 1 (low) to 5 (high).

The descriptive statistics for the number of respondents who had been effected by the supplier’s country image on industrial machinery products (in question 14), the ranking of the best country image to the least one among three exporting countries—Japan, the United States, and Germany (in question 15), and the percentage of imported industrial machinery products from those three major exporters—Japanese, the United States, and German exporters to the yearly total imports value in last five years (in question 16). The ranking of the best country image to the least one was scored from 6 (for the first rank), 4 (for the second rank), and 2 (for the third rank). The percentage of the importing industrial machinery products was categorized into five levels (100-76%, 75-51%, 50-26%, 25-1%, and 0%), which was scored as 4, 3, 2, 1, and 0, respectively.

The descriptive statistics for the respondents’ largest exporter in 1996 (in question 17), the percentage of purchase from this largest exporter in 1996 (in question 18), the
degree of satisfaction of the past purchasing experience for both supplier and product characteristics in 1996 (in questions 19).

The descriptive statistics of company profile (questions 21-27). Question 21 concerns annual sales (in baht) in 1996 which was categorized into five levels (less than 10,000,000, 10,000,001-40,000,000, 40,000,001-70,000,000, 70,000,001-100,000,000, and more than 100,000,000). Question 22 concerns the level of total imports (amount in baht) in 1996, which was categorized into five levels (less than 1,00,000, 1,000,001-10,000,000, 10,000,001-20,000,000, 20,000,001-30,000,000, and more than 30,000,000). Question 23 concerns the levels of total imports (amount in baht) of industrial machinery products in 1996 which was categorized into five levels (less than 1,000,000, 1,000,001-4,000,000, 4,000,001-7,000,000, 7,000,001-10,000,000, and more than 10,000,000). As the results shown, in 1996 most of the respondent firms were very large companies, which had more than a hundred million baht of annual sales. Moreover they also have high import values, which were more than 30 million baht in 1996. Specifically, the import value of industrial machinery products was more than 10 million baht. The results of question 24 indicated that most of the firms had been in the importing business more than 15 years.

Finally, the descriptive statistics of the respondents’ personal data including gender, age, education, and purchasing experience. The average age of the respondents is 35 to 45 years old. The average education level of the respondents is a bachelors degree. In conclusion, Table 6 (Part A) reported the descriptive statistics in more detail such as frequency, percentage, valid percentage for each item in the questionnaire.
Hypothesis Testing

There were five hypotheses that were tested in this research study. They are shown in Table 8. The results of these hypotheses are discussed one by one.

Table 7

<table>
<thead>
<tr>
<th>List of Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1:</strong> There is a significant difference between country-of-origin stereotypes and the purchasing decision of a foreign supplier by Thai import purchasing managers.</td>
</tr>
<tr>
<td><strong>H2:</strong> There is a significant difference between the past purchasing experiences and the selection decision of a foreign supplier by Thai import companies' purchasing managers/members.</td>
</tr>
<tr>
<td><strong>H3:</strong> There is a significant difference between selection criteria and purchasing decision for buying industrial machinery products by Thai import purchasing managers.</td>
</tr>
<tr>
<td><strong>H4:</strong> There is a significant difference in supplier characteristics among Japanese, the United States, and German suppliers/exporters by Thai import companies' purchasing managers/members' perceptions.</td>
</tr>
<tr>
<td><strong>H5:</strong> There is a significant difference in product characteristics among Japanese, the United States, and German suppliers/exporters by Thai import companies' purchasing managers/members' perceptions.</td>
</tr>
</tbody>
</table>
Table 8: Summary of Analysis of Co-Variance (ANCOVA) with Category and Metric Variables

Model Sig. = .000  
R-Square = .387  
Adjust R-Square = .342

<table>
<thead>
<tr>
<th>Category Variables</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Experience (Japan)</td>
<td>.974</td>
</tr>
<tr>
<td>Past Experience (US)</td>
<td>.531</td>
</tr>
<tr>
<td>Past Experience (Germany)</td>
<td>.609</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>.027</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metric Variables</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection Criteria</td>
<td>.000</td>
</tr>
<tr>
<td>Supplier Characteristics</td>
<td>.098</td>
</tr>
<tr>
<td>Product Characteristics</td>
<td>.005</td>
</tr>
</tbody>
</table>

Hypothesis One: There is a significant difference between country-of-origin stereotypes and the purchasing decision of a foreign supplier by Thai import purchasing managers. An Analysis of co-variance was conducted to evaluate the degree of participation in making the purchasing decision for buying industrial machinery products by Thai importer.
Table 9

ANCOVA Results for Testing Hypothesis One

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of Origin</td>
<td>1</td>
<td>4.660</td>
<td>4.999</td>
<td>.027</td>
</tr>
</tbody>
</table>

Note: Dependent variable: Purchasing Decision
Independent variable: Country of Origin

Thus, the null hypothesis was rejected and the alternative hypothesis (H₁) was supported; there is a significant difference between country of origin and the purchasing decision for buying industrial machinery products. At the .05 significant level, there is a significant positive relationship between the country of origin stereotypes and purchasing decision for buying industrial machinery products. According to the positive effects of the supplier’s country image, a favorable country image can increase the purchase volume of textile machinery products from those countries.

Hypothesis Two: There is a significant difference between the past purchasing experiences and the selection decisions of a foreign supplier by Thai imports’ purchasing managers/members. An analysis of co-variance (ANCOVA) was conducted to evaluate the prediction of selection decision of a foreign supplier by Thai import purchasing managers from their past purchasing experiences of Thai importer purchasing manager/member.

Accuracy in predicting degree of purchase decision participation was small. The correlation between past purchasing experiences of Thai importer and the selection decision of a foreign supplier by Thai importer purchasing managers was F (0.01, .393, .262), p = (.974, .531, .609).
Table 10

**ANCOVA Results for Testing Hypothesis Two**

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past Experience (Japan)</td>
<td>1</td>
<td>9.899</td>
<td>.001</td>
<td>.974</td>
</tr>
<tr>
<td>Past Experience (USA)</td>
<td>1</td>
<td>.366</td>
<td>.393</td>
<td>.531</td>
</tr>
<tr>
<td>Past Experience (Germany)</td>
<td>1</td>
<td>.244</td>
<td>.262</td>
<td>.609</td>
</tr>
</tbody>
</table>

**Note:** Dependent variable: Purchasing Decision
Independent variable: Past experience (Japan), Past experience (USA), and Past experience (Germany).

Thus, the null hypothesis was accepted and the alternative hypothesis (H₂) was rejected. There is a no significant difference between the past purchasing experiences and the purchasing decision of a foreign supplier by Thai import purchasing managers. The results of an analysis of co-variance indicated that there was no significant difference between those two variables. This can be explained by the fact that technology changes and upgrades all the time. In this circumstance, the past purchasing experience therefore does not influence the purchasing decision by Thai imported purchasing decision. As a result, the higher the degree of satisfaction of past purchasing experiences have not related to loyalty for a decision making of foreign supplier selection.

**Hypothesis Three:** There is a significant difference between selection criteria and purchasing decision for buying industrial machinery products by Thai import purchasing managers.

Table 11 indicated that all five selection criteria were significantly related to decision making for buying industrial machinery products by Thai import purchasing managers. Approximately .000 percent of the variance of the selection criteria were
accounted for by its difference with purchasing decision for buying industrial machinery products by Thai import purchasing managers.

Table 11

**ANCOVA Result for Hypothesis Three**

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection Criteria</td>
<td>1</td>
<td>38.465</td>
<td>41.263</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Note:** Dependent variable: Purchasing Decision for Buying Industrial Machinery Products

Independent variable: Selection Criteria (Product price, Product quality, Reliability of Delivery, Availability of After-Sales Service, and Suppliers' Technical Skills)

Thus, the null hypothesis was rejected and the alternative hypothesis (H3) was supported at sig. 0.00. There is a significant difference between selection criteria and purchasing decision for buying industrial machinery products by Thai import purchasing managers. As a result of the analyses, it was found that the selection criteria including the product price, quality, reliability of delivery, availability of after-sales service, and supplier technical skills were important to decision making for buying textile machinery products by Thai import purchasing managers. The research finding was along with many previous research by Shipley (1985), Lee & Dobler (1971), Monore & Dodds (1988), Lehmann & O'Shaughnessy (1974); and Webster (1979).

**Hypothesis Four:** There is a significant difference between supplier characteristics (supplier technical skills, commercial skills, and inter personal skills) among Japanese, the United States, and German suppliers/exporters and purchasing decision by Thai
import purchasing managers' perceptions. An analysis of co-variance (ANCOVA) was conducted to evaluate whether Thai import companies have purchasing decision related to supplier characteristics among Japanese, the United States, and German suppliers/exporters. The within-subjects factor was their involvement with Japanese, the United States, and German exporters, and the dependent variable was their perception ratings associated with each supplier characteristics including technical, commercial, and interpersonal skills. The means and standard deviations are presented in Table 13. Table 13 presented the results for the ANCOVA which indicated a significant effect, F (2.762), p = .098.

Table 12

ANCOVA Result for Hypothesis Four

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Characteristics</td>
<td>1</td>
<td>2.575</td>
<td>2.762</td>
<td>0.098</td>
</tr>
</tbody>
</table>

Note: Dependent variable: Purchasing Decision for Buying Industrial Machinery Products

Independent variable: Supplier's Characteristics (technical, commercial, and interpersonal skills).

Thus, the null hypothesis was accepted and the alternative hypothesis (H₄) was rejected. There is no significant difference between supplier characteristics among Japanese, the United States, and German suppliers/exporters and purchasing decision. These can be explained by the fact that most textile machinery suppliers have common similarities and strategies in their technical skills, commercial skills, and interpersonal skills related to this industry. The research finding was also along with Lehman &
O'Shaughnessy (1982), who investigated the decision criteria used in buying different categories of products. The researchers found if the products became less standard, economic criteria would decrease in importance while performance criteria would increase in importance. Therefore, the research findings show there was no significant difference (Sig = 0.098) between supplier characteristics and purchasing decision.

Hypothesis Five: There is a significant difference between product characteristics among Japanese, the United States, and German suppliers/exporters and purchasing decision by Thai import purchasing managers' perceptions. An analysis of co-variance (ANCOVA) to evaluate whether there is any significant difference between product's characteristics among Japanese, the United States, and German suppliers/exporters and purchasing decision-making. The within-subjects factor was their involvement with Japanese, the United States, and German exporters, and the dependent variable was their perception ratings associated with each product characteristic including the product price, quality, performance, durability, and design. The means and standard deviations across all are presented in Table 13. Table 14 presented the results for the ANCOVA which indicated a significant effect, F (7.925), p = .005.
Table 13

**ANCOVA Result for Hypothesis Five**

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product's Characteristics</td>
<td>1</td>
<td>7.387</td>
<td>7.925</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Note: Dependent variable: Purchasing Decision for Buying Industrial Machinery Products
Independent variable: Product’s Characteristics (product price, quality, performance, durability, and design).

Thus, the null hypothesis was rejected and the alternative hypothesis (H₄) was supported. There is a significant difference between product characteristics among Japanese, the United States, and German suppliers/exporters by Thai import purchasing managers' perceptions. The results of the mean ratings from Thai import companies on product characteristics indicated that Japanese exporters have the highest scores in total for product price, quality, performance, durability, and design, followed by German and the United States exporters, respectively.
Table 14

Summary of Hypothesis Testing Results

H1: Supported Significant at p<.05
(There is a significant difference between country of origin stereotypes and the degree of participation in purchasing decision of the buying for buying industrial machinery products).

H2: Unsupported Significant at p>.05
(There is no significant difference between past purchasing experiences and the purchasing decision of a foreign supplier by Thai import purchasing managers).

H3: Supported Significant at p< .05
(Due to the selection criteria explained only 5% of variation in product purchase value yielding a minimal effect size and p<.05, there is a significant difference between selection criteria and purchasing decision making for buying industrial machinery products by Thai import companies' purchasing managers/members).

H4: Unsupported Significant at p>.05
(There is no significant difference between supplier characteristics among Japanese, the United States, and German suppliers/exporters and purchasing decision by Thai import purchasing managers).

H5: Supported Significant at p<.05
(There is a significant difference between product characteristics among Japanese, the United States, and German suppliers/exporters and purchasing decision by Thai import purchasing managers).
CHAPTER FIVE
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter begins with a brief problem summary, a theoretical statement, and a methodology section, followed by the conclusion of the study. Then, the results of these research hypotheses will be discussed for managerial implications. Finally, the researcher sums up the chapter with recommendations for future research.

Summary

Since it is important to understand Thai import companies' decisions to select textile industrial machinery products, this research investigates the significant selection criteria used to evaluate foreign supplier of textile machinery products by Thai import purchasing managers. Moreover, this research also examines how Thai import companies evaluate three major textile machinery exporters—Japanese, the United States, and German exporters in both supplier and product characteristics. In addition, the country-of-origin stereotypes, selection criteria, and past purchasing experiences were examined.

The researcher bases the development of the research hypotheses on three major concepts:

1. Organizational Buying Behavior by Webster & Wind (1972)—two important organizational buying behavior concepts: organizational buying decision involving a
buying center, and the four stages of organizational buying process which are problem recognition, assignment of buying authority and responsibility, a search process for identifying product offering and for establishing selection criteria, choice process for evaluation and selection of alternative suppliers

2. *Industrial Buyer Behavior by Sheth (1973)*—four essential components—expectations of individual involved in the decision, organizational buying process, the decision-making process, and situational factors


In addition, *Nydick & Hill (1992)* asserted that supplier selection is the important phase of the organizational buying process. They also indicated that basic criteria generally used to evaluate the potential suppliers were price, product, quality, delivery, and service. However, there were many researches studied the decision criteria used to evaluate and select foreign suppliers (Ghymn, 1980; Garrett, 1985; Habte-Glorgis, 1968; and Deng, 1987)

Five hypotheses were thererfore investigated in order to answer the research questions. Data were obtained from three hundred Thai import purchasing managers through personal interviews. The data was analyzed by descriptive analysis, which included analysis of co-variance (ANCOVA) as the method to test all hypotheses.
Conclusion of Findings

First of all, the supplier’s country of image and the importer’s satisfaction positively affected a purchasing manager/member’s selection decision of a foreign supplier while past purchasing experience does not have any significant difference to purchasing decision of Thai purchasing managers. According to the positive effects of the supplier’s country image, a favorable country image can increase the purchase volume of textile machinery products from those countries.

On the other hand, satisfaction with a past purchase has a no effect on the selection decision on a foreign supplier. There was, however, very high correlation between the selection criteria on a foreign supplier of textile machinery products as measured by purchasing value scales. The study yielded several important findings and answered the previously --- research questions. It was found that the selection criteria including the product price, quality, reliability of delivery, availability of after-sales service, and supplier technical skills were important to decision making for buying textile machinery products by Thai import purchasing managers.

However, Thai import purchasing managers indifferently perceived those three industrial machinery exporters—Japanese, the United States, and German exporters in supplier characteristics including supplier technical skills, supplier commercial skills, and supplier interpersonal skills, while product characteristics including product price, product quality, product performance, product durability, and product design seem to influence in purchasing decision for Thai purchasing managers.
Implications

The findings of the study provide several managerial implications for foreign supplier (exporters) of industrial machinery products, specially in the Thai market. Moreover, the findings demonstrate the usefulness and applicability of the general models of organizational buying behavior of Webster & Wind (1972), Sheth (1973), and Samli, Grewal & Mathur (1988). First, foreign suppliers who would like to sell industrial machinery products to Thai import companies need to understand the uniqueness of the Thai organizational culture.

First, the study findings concerning the selection criteria used in making a decision for buying industrial machinery products suggested that these five selection criteria, i.e. price, product quality, reliability of delivery, availability of after-sales service, and supplier technical skills, are significantly important criteria used in making such decisions by Thai import companies. In spite of the fact that many previous research studies indicated that industrial buyers generally used various criteria to evaluate and select supplier choices by focusing on price, quality, delivery, and service (Webster, 1979, Nydick & Hill, 1992). The study findings could be useful to Thai import companies in developing and modifying their evaluation and selection strategies concerning foreign suppliers, especially, when they make a decision to buy an textile machinery product. Besides, there are various criteria used to select and evaluate suppliers such as the overall reputation of the supplier, financing terms, the supplier’s flexibility in adjusting to the company’s needs, experience with suppliers in an analogous situation, the technical services offered, confidence in the salesmen, convenience of placing orders, data on reliability of the product, price, technical specifications, ease of
operation or use, preferences of principal users of product, training offered by the
supplier, training time required, reliability of delivery, ease of maintenance, and sales
service expected after the date of purchase (Lehnmann & O’Shaughnessy, 1974). In the
highly competitive globalized market, Thai import companies need to regard all the
important selection criteria when making a decision for buying industrial machinery
products. For example, the economic and noneconomic criteria of Banvill & Dornoff
(1973), and convenience-related attributes, economic-financial attributes, caliber-
capacity attributes, image-dependability attributes, inter-corporate relations attributes,
and service related attributes of Kiser, Rao & Rao (1975). The better the supplier and
product you have, the higher benefits and profitability you gain, but all factors used to be
considered.

Second, an analysis of the perceptual similarities and differences in supplier and
product characteristics among Japanese, the United States, and German exporters
indicated that Thai import purchasing managers perceived Japanese, the United States,
and German exporters indifferently on all supplier characteristics including technical
skills, commercial skills, and interpersonal skills. In addition, the countries product were
perceived differently on product characteristics including the product’ price, product
quality, product performance, product durability, and product design. Furthermore, the
analysis indicated that Japanese exporters have the highest rating in both supplier and
product characteristics, followed by German, and the United States exporters. This is a
confirmation of the study of Paichit (1993) that Thai import companies preferred dealing
with Japanese exporters, rather than with the United States exporters. Thai import
companies also preferred to deal with Japanese exporters and Korean exporters in Kraft
Chung (1992). The findings also suggested that Thai import companies preferred dealing with Japanese exporters, rather than with German exporters. It is not surprising that the highest importing value of industrial machinery products is derived from Japan. There are some reasons why Thai import companies might have biased attitudes towards Japanese exporters. Clearly, the similarity between the Thai and Japanese cultures is one, in addition to the heavy investments by Japan in Thailand. Therefore, Japanese exporters should attempt to sustain their strength in order to be Thailand’s leading industrial machinery supplier, while German and the United States exporters should improve their perceived weaknesses in both supplier and product characteristics in order to gain their competitiveness. This is especially true, since Thailand’s industrial machinery market tends to grow.

Finally, the study found that a favorable country image have positively affected the purchasing decision on a foreign supplier of industrial machinery products by Thai import purchasing managers. The findings indicated that Japanese exporters have the highest rating among these three industrial machinery exporters in term of the supplier’s country image, followed by the United States and German exporters. Both the country images of Japanese, the United States, and German exporters were positive relationship to the purchasing selection decision of a textile machinery foreign supplier. This means the higher level of country-image of foreign exporters is, the greater sales volume they gain. In contrast, the higher the level of country image was for German exporters, the smaller the sales volume. Japanese and the United States exporters, then, should maintain their positive country image for Thai industrial machinery importers. This because a good country image seems to be a factor that can help them increase sales
volumes in Thai markets. For German exporters, they need to find what factors help them to increase their sales volume in Thailand such as distribution channels, advertising and promotional strategies, etc. Furthermore, the prospect study suggested that satisfactory past purchases positively affected the selection decision for a foreign supplier. When industrial buyers gain experience and confidence in the products or services they supply, loyalty is created (Cunningham, 1956). Similarly, Bubb & Rest (1973) found that loyalty is one of the major determinants in industrial buying decisions. The findings indicated that satisfactory past purchasing experiences directly no affect on repeat purchases (loyalty). Therefore, textile machinery foreign suppliers should sustain the strength of both their supplier and product characteristics such as high quality of products, high performance of products, good service, and good relationships with the customers in order to create loyalty with their customers. This can create a higher volume of purchases.

Limitations

There were several limitations in the generalizability of the study’s findings. The perception of only one individual of an importing firm was used to obtain the needed data. This is research limitation because usually there was more than one person participating in decision making regarding industrial machinery products. In addition, this study tested only five selection criteria. Perhaps other selection criteria were used by the Thai import purchasing managers in the present study.

Moreover, the investigation only looked at Japan, the United States, and Germany exporters to Thailand. The results, then, can not be generalized to any other industrial
machinery exporters in the same regions—such as Korean, Taiwanese, Dutch, and English exporters. Industrial machinery exporters in each country have different strengths and weaknesses in both of supplier and product attributes and this should be taken into consideration. For example, Taiwanese industrial machinery products are cheaper than Japanese, but Japanese products seem to have higher performance than their Taiwanese counterparts (Wetpanyawong, 1998).

Finally, the study’s results may not be applied to importers from other different countries with different cultures because each nation has a culture unique to itself. Different cultures demonstrate cultural elements in different shapes and forms. This creates differences in individuals’ perceptions, that leading to different judgments (Plummer, 1977; Wind, Douglas, & Perlmutter, 1973). Clearly, Thai importing firms have their own organizational cultures.

**Recommendations for Future Research**

Based on the research findings, the managerial implications, and the limitations of the study, the researcher presents the following recommendations for future research:

1. This study used the responses of only one participant in making buying decision of industrial machinery products within an importing firm’s buying center. Due to the fact that there is usually more than one participant making decisions within a buying unit, surveying multiple decision participants is highly recommended.

2. The study emphasized only textile machinery products considered as finished products. The study did not investigate across the different types of products—raw material, semi-finished, and finished products comparatively. Thus, future research
should investigate across all types of products. Furthermore, the study did not specify the buying situations, which are typically classified into three different types (new tasks, modified rebuys, and straight rebuys) (Robinson, Fairs, & Wind, 1967). Future studies of organizational buying behavior in different buying situations can help researchers better understand all types of buying behaviors. The findings from such studies could be beneficial to foreign exporters who are seeking to export their products into Thai markets.

3. The study concerned the following elements:

   a) five selection criteria, i.e. price, product quality, reliability of delivery, after-sales service, and supplier technical skills

   b) three supplier characteristics, i.e. technical skills, commercial skills, and interpersonal skills

   c) five product characteristics, i.e. product price, product quality, product performance, product durability, and product design

   However, there were various other criteria used to select and evaluate foreign suppliers in other research studies. For example, ten important vendor performance characteristics are used by Wind, Green & Robinson (1968), seventeen vendor attributes by Lehman & O'Shaughnessy (1974), and twenty vendor performance attributes by Dempsey (1978). Thus, extending this research to cover various selection criteria could lead to a more useful and comprehensive understanding of Thai import companies.

4. The results of this study might not be directly applicable to other importers from different cultures. This is because culture should be viewed as a unique entity. The replication of this study in different importing country settings could be enlightening. On
the other hand, this research looked into Thailand’s three major exporting machinery countries. Thus, the replication of this study in different exporting countries could generate different perspectives toward each exporter.

5. The present study focused only two individual factors, i.e. individual’s perceptions of country-of-origin stereotypes and past purchasing experiences. These factors have an effect on the selection decisions of foreign suppliers. Therefore, further studies should examine the effect of other individual factors in addition to those used in this study, such as the buyer’s personality; perceived role set; preference structures; motivations; cognitions; learning styles; decision styles; interpersonal skills, leadership skills, and level of education. There may be other important factors that affect industrial buying behaviors such as environmental factors, cultural factors, governmental factors, uncertainty factors, and etc.
References


Sewwney, Mathews, & Wilson, (1973).


Thailand Economic Indicator (2002). Bangkok Bank Research Department.


APPENDIX A
(Questionnaire English Version)
Appendix A: Questionnaire

1. What is your position in the organization? Please indicate the level of your position in the organization, and name your position.

   ......................... Upper management (President, Managing Director)
   ......................... Middle management (Managers)
   ......................... Lower management (Supervisor)
   ......................... Staffs (Executives)

2. Please indicate the degree of participation you had contributed for the most recent purchase decision.

   Degree of Participation
   
   Low 2 3 4 5
   1

3. Which of the levels of product’s value (in baht) that you had participated in making decision of the last purchase of industrial machinery product to your firm?

   Less than 1,000,000
   1,000,001 – 4,000,000
   4,000,001 – 7,000,000
   7,000,001 – 10,000,000
   more than 10,000,000

4. Which of the following criteria that you use to evaluate foreign suppliers when buying industrial machinery products? Please indicate the degree of importance of each criteria.

<table>
<thead>
<tr>
<th>Selection Criteria</th>
<th>Not Considered as Criteria</th>
<th>Extremely Unimportant Criteria</th>
<th>Unimportant Criteria</th>
<th>Important Criteria</th>
<th>Very Important Criteria</th>
<th>Extremely Important Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product’s Price</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product’s Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability Of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability Of after-sales Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier’s Technical Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. In last five year (1996-2001), did you purchase/import industrial machinery products from Japan?

   Yes, please further answer questions 6 and 7.

   No, please skip to answer questions 8.

<table>
<thead>
<tr>
<th>Amount Range</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1,000,000</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1,000,001 - 4,000,000</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4,000,001 - 7,000,000</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7,000,001 - 10,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>more than 10,000,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Please indicate your perceptions toward Japanese exporters, and their machinery products on the following characteristics:

**Japanese Exporters**

<table>
<thead>
<tr>
<th>Supplier Characteristics:</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skills</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Commercial skills</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product’s Characteristics:</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product’s price</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Product’s quality</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Product’s performance</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Product’s durability</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Product’s design</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. In last five years (1996-2001), did you purchase/import industrial machinery products from the United States?

- [ ] Yes, please further answer questions 9 and 10.
- [ ] No, please skip to answer questions 11.

9. Please estimate the yearly total amount (in baht) of importing the United States industrial machinery products in last five years (1996-2001).

<table>
<thead>
<tr>
<th>Amount Range</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1,000,000</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1,000,001 - 4,000,000</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4,000,001 - 7,000,000</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7,000,001 - 10,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>more than 10,000,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Please indicate your perceptions toward the United States exporters, and their machinery products on the following characteristics:

**The United States Exporters**

<table>
<thead>
<tr>
<th>Supplier Characteristics:</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skills</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Commercial skills</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product’s Characteristics:</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product’s price</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Product’s quality</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Product’s performance</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

101
Product’s durability 1 2 3 4 5
Product’s design 1 2 3 4 5

11. In last five years (1996-2001), did you purchase/import industrial machinery products from Germany?

__________  Yes, please further answer questions 12 and 13.
__________  No, please skip to answer questions 14.

12. Please estimate the yearly total amount (in baht) of importing German industrial machinery products in last five years.

__________  Less than 1,000,000
__________  1,000,001 - 4,000,000
__________  4,000,001 - 7,000,000
__________  7,000,001 - 10,000,000
__________  more than 10,000,000

13. Please indicate your perceptions toward German exporters, and their machinery products on the following characteristics:

German Exporters
Supplier Characteristics:
Technical skills Low 1 2 3 4 5
Commercial skills Low 1 2 3 4
Interpersonal skills Low 1 2 3 4 5

Product Characteristics:
Low 1 2 3 4 5
Product price
Product quality
Product performance
Product durability
Product design

14. For the selection decision of the foreign supplier of industrial machinery products, do the supplier’s country image have and effect on your buying decision?

__________  Yes, please further answer question 15 and 16.
__________  No, please skip to answer question 17.

15. Among the following countries of exporting firms who has the best country image based on your own perceptions? Please rank number 1 for the first place of the best country image, followed number 2, and 3 for the second, third place of the country images.

__________  Japanese exporters
__________  The United States exporters
__________  German exporters
16. Please give an estimate percentage of the purchase of importing industrial machinery products from the three following exporters to the yearly total value of your company’s imports of industrial machinery products in last five years (1996-2001).

<table>
<thead>
<tr>
<th>% of importing industrial machinery products</th>
<th>None (0%)</th>
<th>1-25%</th>
<th>26-50%</th>
<th>51-75%</th>
<th>76-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Exporter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The United States Exporters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>German Exporters</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

17. In 1996-2001, who was the largest supplier exporting industrial industrial machinery products to your company? Please indicate the country of your largest supplier who exported industrial machinery products to your firm.

Japan
The United States
Germany
Other country, please specify

18. Please indicate the level of percentage of the purchase form this supplier (from question 17) to the yearly total value of your company’s imports of industrial machinery products in 1996-2001?

1 - 25%
25 - 50%
51 - 75%
76 - 100%

19. Please indicate the degree of satisfaction of past purchasing experience in 1995 with the above supplier (from question 19) in overall of both supplier and its product characteristics.

<table>
<thead>
<tr>
<th>Supplier’s characteristics</th>
<th>Very Satisfactory</th>
<th>Neutral</th>
<th>Very Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product’s characteristics</th>
<th>Very Satisfactory</th>
<th>Neutral</th>
<th>Very Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

20. In 1996, is the largest supplies exporting industrial machinery products to your company the same exporter in last year 1995 (from question 19)?

Yes
No

21. What were your annual sales in 1996 (in Baht)?

less than 1,000,000
1,000,001 - 40,000,000
40,000,001 - 70,000,000
70,000,001 - 100,000,000
more than 100,000,000
22. The following amount of purchase (in Baht), which is the level of your firm’s total imports in 1996?

- less than 1,000,000
- 1,000,001 – 10,000,000
- 10,000,001 – 20,000,000
- 20,000,001 – 30,000,000
- more than 30,000,000

23. The following amount of purchase (in Baht), which is the level of your firm’s total imports of industrial machinery products in 1996?

- less than 1,000,000
- 1,000,001 – 4,000,000
- 4,000,001 – 7,000,000
- 7,000,001 – 10,000,000
- more than 10,000,000

24. How long has your company been in the importing business?

- 1 – 5 years
- 6 – 10 years
- 11 – 15 years
- more than 15 years

25. Your sex:

- Male
- Female

26. Your age:

- under 25
- 26 – 35
- 36 – 45
- 46 – 55
- over 55

27. Which is your level of education?

- Elementary School
- High School
- Bachelor Degree
- Higher than Bachelor Degree, please specify

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APPENDIX B
(QUESTIONNAIRE THAI VERSION)
Appendix B: Questionnaire Thai Version

แบบสอบถาม

1) กลุ่มสาระรู้สึกการบริหารงานและตำแหน่งของท่านในองค์กร
☐ระดับสูง  ☐ระดับกลาง  ☐ระดับต้น  ☐หน้างานบริหาร

2) ท่านมีส่วนร่วมในการตัดสินใจมากน้อยเพียงใดในการส่งจ้างลูกศิษย์หรือจ้างเอกชนที่นายจ้างจากต่างประเทศ
☐น้อยที่สุด  ☐น้อย  ☐ปานกลาง  ☐มาก  ☐มากที่สุด

3) กลุ่มระดับจำนวนมูลค่าสินค้าหรือจ้างจ่ายที่ท่านได้มีส่วนร่วมในการตัดสินใจหรือส่งจ่ายสูงสุด
☐น้อยกว่า 1 ล้านบาท  ☐1-4 ล้านบาท  ☐4-7 ล้านบาท
☐7-10 ล้านบาท  ☐มากกว่า 10 ล้านบาท

4) ท่านใช้หลักการใดบ้างในการประเมินผู้ถูกเลือกสิทธิ์หรือจ้างจ่ายจากต่างประเทศ
(กลุ่มสาระความสำคัญของแต่ละหลักการเลือกที่ใช้ในการพิจารณาผู้ถูกเลือกสิทธิ์)
หลักการในการเลือก  สำคัญน้อยมาก  สำคัญน้อย  สำคัญ  สำคัญมาก  สำคัญมากที่สุด
- ราคาสินค้า  ☐  ☐  ☐  ☐  ☐
- คุณภาพสินค้า  ☐  ☐  ☐  ☐  ☐
- การจัดการสินค้า  ☐  ☐  ☐  ☐  ☐
- การบริการหลังการขาย  ☐  ☐  ☐  ☐  ☐
- เทคโนโลยีของผู้ถูกเลือกสิทธิ์  ☐  ☐  ☐  ☐  ☐

5) ในระยะเวลา 5 ปี (2540 – 2544) ท่านได้มีการส่งจ้างหรือนำเข้าสินค้าหรือจ้างเอกชนจากประเทศญี่ปุ่นหรือไม่
☐ใช่ (กรุณาตอบคำถามข้อ 6 และ 7)  ☐ไม่ได้ใช่ (กรุณาข้ามไปตอบคำถามข้อ 8)
6) ในระยะเวลา 5 ปี (2540 – 2544) ท่านได้ส่งข้อหรือน้ำดื่มส่วนหรือจิบจากประกาศปู่ป้าหรือไม่
☐ น้อยกว่า 1 ล้านบาท  ☐ 1-4 ล้านบาท  ☐ 4-7 ล้านบาท
☐ 7-10 ล้านบาท  ☐ มากกว่า 10 ล้านบาท

7) กรุณาประเมินผู้จัดส่งสินค้าที่นิยม และเครื่องจักรกลที่น้ำดื่มจากประกาศปู่ป้าตามหลักการดังต่อไปนี้

- ท้องทะเลด้านท้องทะเล  ☐ ☐ ☐ ☐ ☐
- ท้องทางด้านท้องทราย  ☐ ☐ ☐ ☐ ☐
- ท้องทางความดันพัฒนาดีต่อ  ☐ ☐ ☐ ☐ ☐

8) ในระยะเวลา 5 ปี (2540 – 2544) ท่านได้มีการส่งข้อหรือน้ำดื่มส่วนหรือจิบจากประกาศปู่ป้าหรือไม่
☐ ใช่ (กรุณาตอบคำถามข้อ 9 และ 10)  ☐ ไม่ได้ซื้อ (กรุณาเขียนไปตอบคำถามข้อ 11)

9) ในระยะเวลา 5 ปี (2540 – 2544) ท่านได้ส่งข้อหรือน้ำดื่มส่วนหรือจิบจากประกาศปู่ป้าหรือไม่
☐ น้อยกว่า 1 ล้านบาท  ☐ 1-4 ล้านบาท  ☐ 4-7 ล้านบาท
☐ 7-10 ล้านบาท  ☐ มากกว่า 10 ล้านบาท
10) กรุณาประเมินผู้จัดส่งสินค้าหรือจ้างรถกลับที่นำเข้ามาจากประเทศสหรัฐอเมริกามีหลักตามหลักการดังต่อไปนี้

<table>
<thead>
<tr>
<th>ลักษณะของผู้จัดส่งสินค้า</th>
<th>น้อยมาก</th>
<th>น้อย</th>
<th>ปานกลาง</th>
<th>มาก</th>
<th>มากที่สุด</th>
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<tr>
<td>- ทักษะทางด้านเทคนิค (โลจิส)</td>
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<td>- ทักษะทางการค้า</td>
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<td>- ทักษะทางความสัมพันธ์ดีต่อ</td>
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<tr>
<th>ลักษณะของสินค้า</th>
<th>น้อยมาก</th>
<th>น้อย</th>
<th>ปานกลาง</th>
<th>มาก</th>
<th>มากที่สุด</th>
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<td>- ราคาสินค้า</td>
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<td>- คุณภาพสินค้า</td>
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<td>- ประสิทธิภาพการทำงานของสินค้า</td>
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<td>- ความทนทานของสินค้า</td>
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<td>- รูปแบบของสินค้า</td>
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</table>

11) ในระยะเวลา 5 ปี (2540-2544) ท่านได้มีการสั่งซื้อหรือนำเข้าสินค้าเครื่องจักรกลจากประเทศอเมริกาหรือไม่

- ใช่ (กรุณาตอบคำถามข้อ 12 แล้ว 13)  
- ไม่ได้ซื้อ (กรุณาเข้ามาไปตอบคำถามข้อ 14)

12) ในระยะเวลา 5 ปี (2540 – 2544) ท่านได้สั่งซื้อเครื่องจักรกลจากประเทศอเมริกาเป็นมูลค่าเท่าไร

- น้อยกว่า 1 ล้านบาท  
- 1-4 ล้านบาท  
- 4-7 ล้านบาท  
- 7-10 ล้านบาท  
- มากกว่า 10 ล้านบาท

13) กรุณาประเมินผู้จัดส่งสินค้าหรือรถกลับที่นำเข้าจากประเทศอเมริกามีหลักการดังต่อไปนี้

<table>
<thead>
<tr>
<th>ลักษณะของผู้จัดส่งสินค้า</th>
<th>น้อยมาก</th>
<th>น้อย</th>
<th>ปานกลาง</th>
<th>มาก</th>
<th>มากที่สุด</th>
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</thead>
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<tr>
<td>- ทักษะทางด้านเทคโนโลยี</td>
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<td>- ทักษะทางความสัมพันธ์ดีต่อ</td>
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</tbody>
</table>
14) ในกรณีด้านนี้เลือกผู้จัดส่งสินค้าเครื่องจักรกลจากประเทศภูมิภาค (Country’s image of exporters) มีผลกระทบต่อการดัดแปลงไข้ขี้สัตว์ของพืชหรือไม่
   □ มี (กรุณาตอบคำถามข้อ 15 และ 16) □ ไม่มี (กรุณาเข้าไปตอบคำถามข้อ 17)

15) ในพื้นที่สินค้าของท่าน ท่านคิดว่าประเทศผู้จัดส่งสินค้าเครื่องจักรกลต่อไปนี้มีภูมิภาคเป็นอันดับหนึ่ง ชั้นกับส่งออก และอันดับสาม (กรุณาใส่เลขหมาย 1,2 และ 3 ตามลำดับ)
   ............ผู้จัดส่งสินค้าผู้ใหญ่ ............ผู้จัดส่งสินค้าสหวรุ่งวโรกิจ ............ผู้จัดส่งสินค้าเยอรมนี

16) ในระยะเวลา (2540 – 2544) ท่านได้รับสินค้าเครื่องจักรกลจากประเทศต่อไปนี้เป็นมูลค่าเท่าใด
   กรุณาประเมินเป็น (%)  (โปรดคัดที่คุณมั่นใจ)

<table>
<thead>
<tr>
<th>น้ำหนักราคาประเทศ</th>
<th>มูลค่า (บาท)</th>
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<tbody>
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</tbody>
</table>

   - ผู้ใหญ่ ................. □  □  □  □  □
   - สำหรับบริษัท .......... □  □  □  □  □
   - เฮอร์มัน ............. □  □  □  □  □

17) ระหว่างปี 2540 – 2544 ผู้จัดส่งสินค้าเครื่องจักรกลจากประเทศใดต่อไปนี้เป็นผู้จัดจำหน่ายที่สุดของบริษัทท่าน
   □ ผู้ใหญ่ □ สำหรับบริษัท □ เฮอร์มัน □ ประเทศอื่น ๆ โปรดระบุ.....................
18) จากคำถามข้อ 17 ท่านได้สั่งเชียงสดีเครื่องจักรกลจากประเทศต่างกันเป็นจำนวนมูลค่าเท่าใด (เป็นเงินบาท) ในระยะเวลาปี 2450-2454 คิดเป็น เท่า% ของมูลค่าสินค้าเครื่องจักรกลที่นำเข้าจากต่างประเทศทั้งหมด

☐ 1-25%  ☐ 26-50%  ☐ 51-75%  ☐ 76-100%

19) จากคำถามข้อ 18 กรุณาระบุระดับความสัมพันธ์ของท่านที่มีต่อผู้จัดส่งสินค้าเครื่องจักรกลจากประเทศต่างๆ ชั่งดังนี้ โดยประเมินจากลักษณะของผู้จัดส่งสินค้า และอัคคีภพของสินค้าที่ท่านต้องการในปี 2450-2454

- ลักษณะของผู้จัดส่งสินค้า
  ☐ พอใจน้อยมาก  ☐ พอใจน้อย  ☐ พอใจ  ☐ พอใจมาก  ☐ พอใจมากที่สุด

- ลักษณะของสินค้า
  ☐ พอใจน้อยมาก  ☐ พอใจน้อย  ☐ พอใจ  ☐ พอใจมาก  ☐ พอใจมากที่สุด

20) ในปี 2454 ผู้จัดส่งสินค้าเครื่องจักรกลรายใหญ่ที่สุดของบริษัทนี้เท่าใดท่านเป็นรายเดียวในปี 2454 หรือไม่

☐ ใช่  ☐ ไม่ใช่

21) ท่านมียอดขายประจำปี 2454 เท่าใด

☐ น้อยกว่า 1 ล้านบาท  ☐ 1-4 ล้านบาท  ☐ 4-7 ล้านบาท

☐ 7-10 ล้านบาท  ☐ มากกว่า 10 ล้านบาท

22) ท่านมียอดขายประจำปี 2454 เท่าใด

☐ น้อยกว่า 1 ล้านบาท  ☐ 1-4 ล้านบาท  ☐ 4-7 ล้านบาท

☐ 7-10 ล้านบาท  ☐ มากกว่า 10 ล้านบาท

23) ท่านมียอดขายประจำปี 2544 เท่าใด (มูลค่าเป็นเงินบาท)

☐ น้อยกว่า 1 ล้านบาท  ☐ 1-4 ล้านบาท  ☐ 4-7 ล้านบาท

☐ 7-10 ล้านบาท  ☐ มากกว่า 10 ล้านบาท
24) บริเวณของท่านด้านบนหรือภูมิทัศน์บ้านเก่าได้
☐ 1-5 ปี ☐ 6-10 ปี ☐ 11-15 ปี ☐ มากกว่า 15 ปี

25) เพศ ☐ ชาย ☐ หญิง

26) อายุ ☐ ต่ำกว่า 25 ปี ☐ 26-35 ปี ☐ 36-45 ปี ☐ 46-55 ปี ☐ มากกว่า 55 ปี

27) การศึกษา
☐ ประถมศึกษา ☐ มัธยมศึกษา ☐ ปริญญาตรี
☐ สูงกว่าปริญญาตรี โปรดระบุ.............

@@@@@@@@@@@@@@@@@@@@@@@@@