

Logistics and Transport Management

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Evaluation of Suppliers on the Chinese Market

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Abstract

With the global economic development, international companies are faced with a variety of cultural dilemmas for which solutions are not readily available in the supply chain. “Doing Things in the Right Ways!” means you can achieve real success in different countries. But in fact it is difficult to control the whole supply chain for end manufacturing companies, which have more suppliers. How to select the suitable suppliers in different countries are therefore the challenging issues for the Multinational Corporations.

The main purposes of this thesis try to use conceptual tools to understand the dynamics of complex interdependence between culture, values, management philosophy, moral in China and focus on skills to evaluate and control effectively suppliers. From corporate and individual ethical misbehavior and responsible behavior we will identify how both corporations and individuals can influence supplier evaluation.

True partnerships are long-term collaborative relationships based on trust and a mutual desire to work together for the benefit of each partner and the partnership, but true partnerships are still rare. They believe in building on one another's strengths and increasing each other's business. They have corporate cultures that embrace partnering, and reject opposed or autocratic thinking. China's society is still a relationship society. So it is important to note that trust

does not occur between companies, but between people. Therefore, business is not really about companies, but about people, and those people must be committed to making relationships work.

Key Words: Supplier Evaluation, Culture, Partnership, Relationship

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Göteborg, November 2003



Fan Zejian



Zhang Weiwei

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Abbreviations

IFPMM	International Federation of Purchasing and Materials Management
MNC	Multinational companies
CFLP	China Federation of Logistics & Purchasing
GNP	Gross national product
MOFTEC	Ministry of Foreign Trade and Economic Cooperation
WTO	World Trade Organization
SOEs	State-Owned Enterprises
MOR	The Ministry of Railways
COSCO	China Ocean Shipping Company
Sinotrans	China National Foreign Trade Transportation Corporation
IDC	International Data Corporation
ERP	Enterprise resource planning
SETC	State and Economic Trade Commission
SDPC	State Development Planning Commission
MOFTEC	Ministry of Foreign Trade and Economic Cooperation

CHAPTER 1. INTRODUCTION

The research background provides an overview of the research problem and purpose of this thesis. It further presents the delimitations of the research. Finally, we give an outline for the thesis.

1.1 Background

“This is the world of globalization—a new context for and a new connectivity among economic actors and activities throughout the world (Kofi A. Annan, 2000).” That means economic sphere cannot be separated from the more complex network because the globalization creates bigger markets. With many Multinational Corporations joining the global market and extending their supply chains to worldwide, supply chains become more and more complex according to many factors. Each participant in an extended supply chain has its core competencies. All must cooperate and collaborate to provide maximum customer satisfaction and to achieve optimal performance for the supply chain as a whole. But the end manufacturing company has responsibility for the whole chain, and the chains are very long and often start in developing countries in Asia, Africa or Latin America, especially in China, which is becoming a world manufacturing center with its fast development and cheap labour costs. Although business operations around the world have become

highly standardized, national traditions, attitudes and beliefs remain diverse. Because manufacturing has different conditions and rules, it is very hard (or even impossible) for the end manufacturing company to control the whole chain. Many big international companies have huge problems to control the whole chain because they have huge number of suppliers under different cultures over the world. A culture is an aggregate of divergent and contradictory pictures, and each picture is true (Hidetoshi Kato, 1992:10). At present and future, the companies will work in a more open and international environment. When taking more effective management methods, companies must think about supplier's response, which always is decided by a profound cultural background. It is what people always have said "culture conflicts". The management to deal with different cultures will be the obstacle to improving management level which even threatens the company's validity and efficiency.

During the past two decades, the purchasing function is central to the strategic operations of effective supply chain management. A number of studies are published concerning the importance of strategic purchasing (Carter and Narasimhan, 1996; Pearson et al., 1996; Carr and Smeltzer, 1997). Also, previous research discusses the importance of cooperative of buyer-supplier relationships with key suppliers (Landeros and Monczka, 1989; Heide and John, 1990; Richardson, 1993). However, few previous studies attempt to empirically demonstrate how to evaluate supplier and build evaluation and monitoring

systems, buyer–supplier relationships in different culture backgrounds. We try to research it and give an initial solution to this problem.

1.2 Research Problem

Most companies seem to have gotten the message about core competencies and partnering to reduce the time and cost it takes to bring products to market. A rather new and in the future growing problem is related to what can be called “Business and Human Rights”. This involves many aspects in the chain, for example: torture, disappearances, hostage-taking, forced labour, bonded labour, forcible relocation, forced child labour and denial of freedom of expression. Other aspects are ethics, environmental considerations, cultural differences and social considerations. However, many companies have actually sat down and thought about these questions.

What is important to consider, however, is not what they are and where they are found physically, but what they mean to the people in each culture. The essence of culture is not what is visible on the surface. It is the shared ways groups of people understand and interpret the world (Li, Jenny, 2001). The company focuses on playing a constructive role in developing and managing customer purchasing from China. But the biggest obstacle may come from your own company’s resistance, even from your existing suppliers. We find that

Multinational Corporations, which want to do business in China, are puzzled by culture differences.

The lack of information about certain things is not entirely the fault of the people that you may encounter. The suppliers tend to give out conflicting information. Similarly, the experience has been the same when making inquiries into different companies. This research is not only important, but also necessary in order to advance the field of supplier evaluation in global supply chains. It attempts to empirically answer the questions: (1) What is the impact of strategic purchasing on supplier evaluation systems? (2) What is the impact of strategic purchasing and supplier evaluation systems on buyer–supplier relationships?

Under different culture backgrounds, how to evaluate suppliers and how to use the data from evaluations to enhance performance and build stronger buyer-supplier relationships are the main problems. Two of the more challenging questions facing supply managers are: (1) What should we measure? and (2) How should we measure?

Research Question

Culture difference may become the bane of multinational supply chain management. It may destroy the future of mindless managers who lack of local

and global culture knowledge. One of the critical responsibilities faced by purchasing managers of firms is the performance evaluation and monitoring of suppliers that will provide them with the necessary product quality and delivery quality, and a rather new growing problem in the future is related to what can be called business and human rights. Others like environmental considerations, and social considerations for the production are also needed.

This paper deals with socioculture of understanding of Chinese supplier's evaluation and monitoring. We defined the problem as follows:

Main problem:

How do Multinational Corporations evaluate and monitor their suppliers in global supply chains?

More and more Multinational Corporations join Chinese market and their purchasing rate in China increases quickly year by year. They are facing a series of problems on how to evaluate and monitor local suppliers in global chains. In order to solve this problem, we divided it into two sub-questions:

1. What are the current conditions of Chinese market and how to understand the suppliers' behavior in local culture background?

It will be of benefit for their purchasing to capture salient characteristics of Chinese culture to systematically understand Chinese purchasing style in the Sino-Western purchasing and supplier behavior difference.

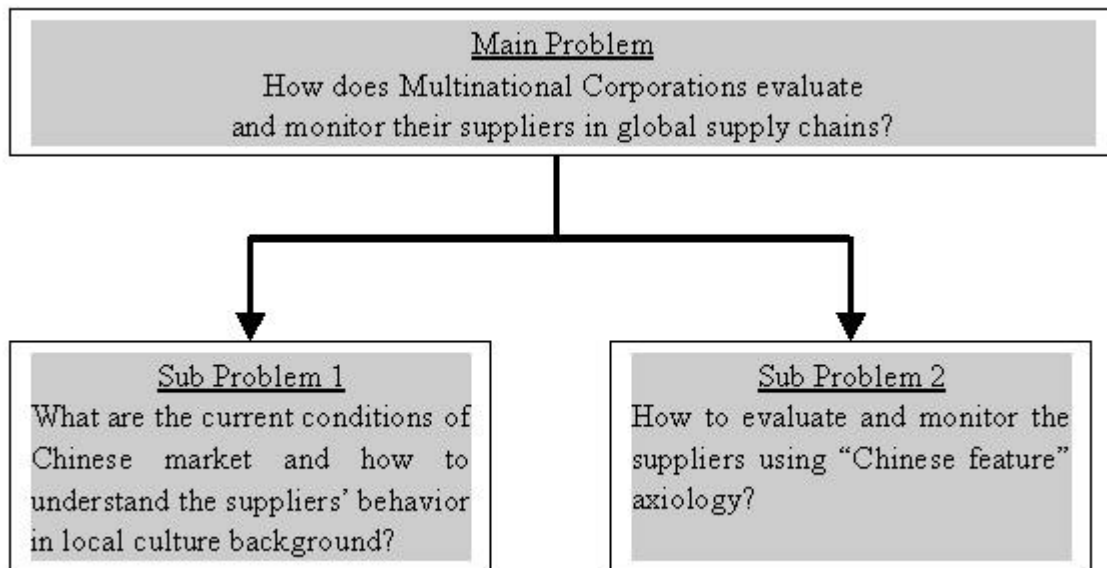
2. How to evaluate and monitor the suppliers using “Chinese feature” axiology?

Culture defines people’s behavior. Cultural explanation of management behavior has been increasingly favored in recent decades, especially since 1980s (Adler, 1991). Using a culture method that evaluates and monitors local suppliers is a feasible and effective solution.

The paper aims to identify and analyze the main aspects of Multinational Corporations’ supplier evaluation, which need to be modified due to the fact that Multinational Corporations are in a fast changing market—China. The current purchasing performance of Multinational Corporations, their supplier evaluation and monitoring system will be studied with regard to China institutional particularities.

Finally, our research problems are summarized in Figure 1-1.

Figure 1-1 Research Problem



1.3 Purpose

This paper introduces how culture differences affect the process of evaluating suppliers and monitoring. Within the core processes of purchasing, this paper's scope focuses on the supplier performance evaluation and monitoring process in Chinese culture, which assists in maintaining effective buyer-supplier linkages. The contribution of this paper is two-fold. First, it applies a new multi-criteria evaluation model for supplier performance evaluation by considering various performance criteria in Chinese culture background. Second, a proposed application extension of this model serves as a monitoring and controlling mechanism for the performance of suppliers, thus supporting continuous process improvement.

All the two-fold related to our analysis when evaluate and monitor, we mainly based on culture behaviors. According to research and analysis these phenomena of Chinese business culture and ethic, Multinational Corporations can avoid cultural misunderstanding in supplier evaluation.

At last, we attempt to do three things: dispel the idea that there is “One best way” of evaluating and monitoring suppliers; give Multinational Corporations a better understanding of their own culture and culture differences in general, by learning how to recognize and cope with these in a business context; and provide some culture insights into the “Global” versus “Local” dilemma facing international organizations. Understanding our own culture and our own assumptions and expectations about how people “should” think and act is the basis for success.

1.4 Delimitations

China was chosen as an example of how culture differences influence supplier evaluation for its bigger market. Our research shows Chinese culture and business culture, and describes the method of Chinese suppliers’ selection, while trying to understand how Multinational Corporations adapt to supplier evaluation in different cultures.

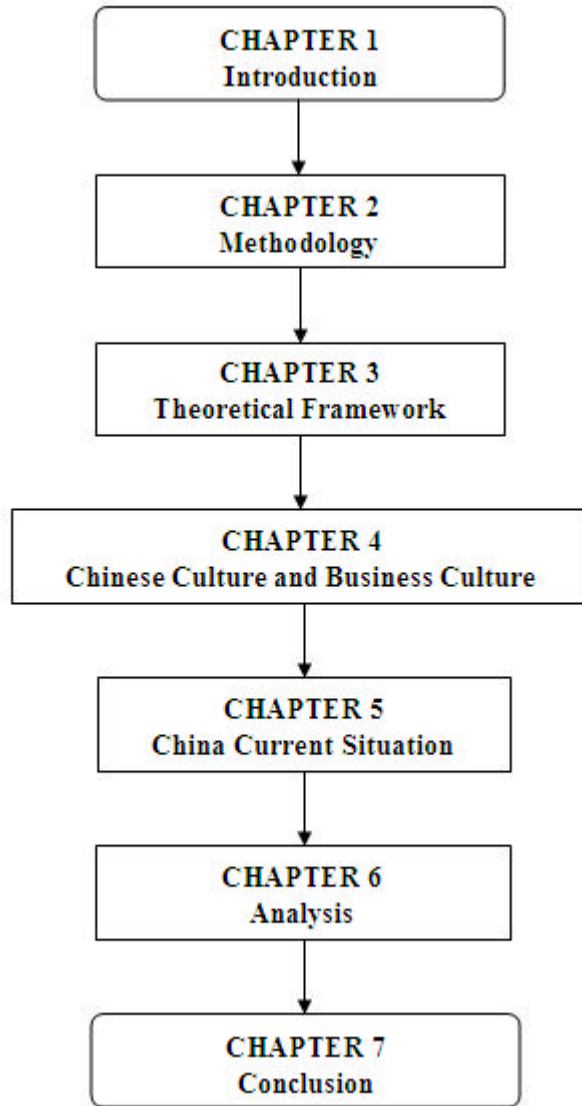
In this thesis, we designed questionnaires and sent them by email to selected Swedish companies which have business relationships with China, in order to get primary data, and more practical information. However as we mentioned in chapter 2, we only managed to get two answers. Therefore the empirical evidence of the research is limited to the number of the respondents. Further, we did not get any reply from companies to process an interview, even if our research is interesting for many foreign companies, but it is base more on theoretical, not on practical.

Geographically, we limited our research on the Chinese market, as well limited it under the Chinese special culture background involves in human behaviour, value, emotion and feeling, etc., therefore some methods and models we studied on evaluating and monitoring suppliers, is not appropriate to the other countries.

1.5 Outline of the Thesis

This is the outline of this paper represented by Figure 1-2.

Figure 1-2 The thesis outline



CHAPTER 2. METHODOLOGY

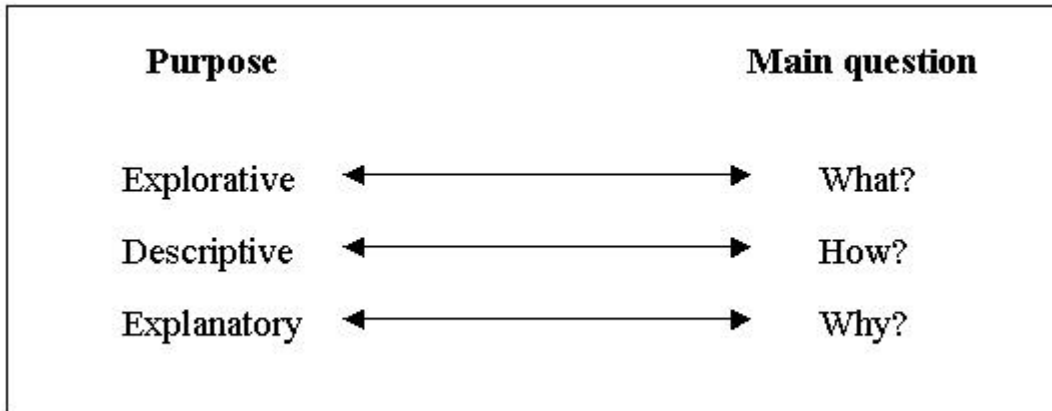
There are various research methods for different research problems. It is very important to get a persuasive research result, therefore the choosing of one or several suitable methods can be the vital part of research work. This chapter describes the methods of research and data collection we used, and at the end of this chapter, we explain how the thesis and the argument are validated and show their reliability.

2.1 Purpose of the Survey

According to Yin, there are five different ways for research: case studies, experiments, surveys, histories, and the analysis of archival information. (Yin, 1994) Among all of them, survey is currently used in a variety of fields ranging from economics and political science to environmental studies, marketing research, voting behavior and health. Survey can be divided into three main groups: explorative, descriptive, or explanatory (Christensen, 1998) The three groups are overlapping, and all surveys are, for example, partly explorative, even though that does not mean that the purpose of all surveys is explorative.

As stated in figure 2-1, the purpose of a survey can be connected to the main question of the survey:

Figure 2-1: The connection between the purpose and the main question of a survey



Source: Christensen, 1998

An explorative survey is proper for the early stages of the decision-making process (Kinnear, 1996). It often functions as a pre-study where the important questions are identified, so that a more thorough and systematic investigation can be accomplished, often a descriptive or explanatory one (Christensen, 1998). Sometimes the results from explorative research are useful enough to make further surveys redundant.

The vast majority, about 84 percent, of marketing research studies involves descriptive research (Kinnear, 1996). A descriptive purpose requires some knowledge about the research area and answer questions How?, Who?, Where?, and When?. It focuses on describing a certain area rather than discovering new phenomena that might affect it (Christensen, 1998).

When the researcher has good knowledge about and a good description of the research area, he might want to know why it is the way. The explanatory research looks for the causal correlation between independent and dependent variables. Sometimes the cost of finding the correlation between variables is unproportionately large compared to the value of knowing it (Christensen, 1998).

This thesis has involved both explorative and descriptive research. In the early stages of the study we studied theories concerning purchasing and evaluation supplier under the global environment, moreover we focus study on Chinese culture and business culture in order to achieve an understanding for foreign companies to do business in China in optimized way. We also read literature, magazines, articles, in order to learn more about what our study related to. Meanwhile information coming from Chinese websites gives us more knowledge about the Chinese current business and cooperation development situations towards foreign companies, plus our several years of work experience in Chinese companies, enable us to identify important questions for the research, and to the further descriptive research.

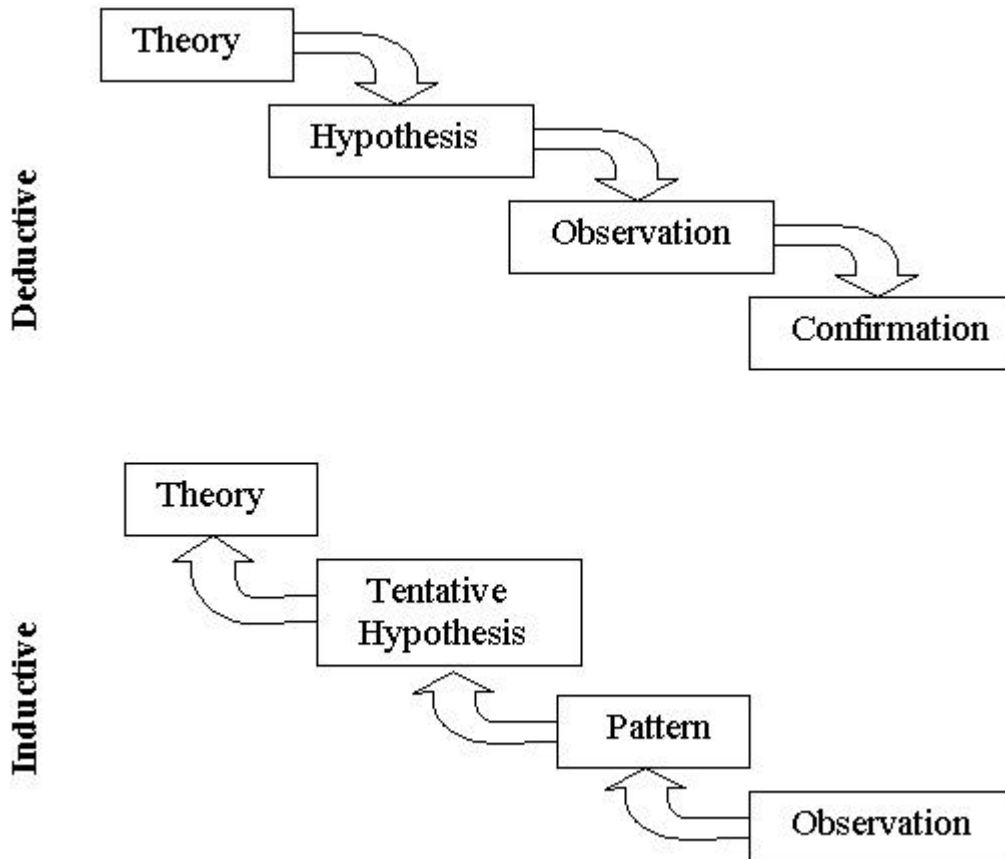
2.2 Scientific Research Approach

In research work there should be a discussion whether a deductive or an

inductive approach shall be used. The deductive approach works from the more general to the more specific. Sometimes this is informally called a "top-down" approach. It starts with a study of theories within the selected area, and then narrows that down into more specific hypotheses that can be tested. Further observations can be collected to address the hypotheses. This ultimately leads to original theories being confirmed with specific data.

The inductive approach starts with empirical work to move from specific observations to broader generalizations and theories. Informally, this is usually called a "bottom up" approach. With specific observations and measures, inductive approach begins to detect patterns and regularities, formulate some tentative hypotheses that researchers can explore, and finally ends up developing some general conclusions or theories.

Figure 2-2 illustrates the flows of deductive and inductive, we can clearly see the difference.



Source: <http://trochim.human.cornell.edu/kb/dedind.htm>

In the thesis, we have had a deductive approach to find out the appropriate method and principle to evaluate Chinese suppliers under Chinese culture background. Theories with purchasing and supplier evaluation in the global environment and China's specific culture have been studied. The conducted investigations have been based on the studied theories. Conclusions about evaluating Chinese suppliers with culture backgrounds have also been made.

2.3 Data Collection

Data collection is crucial to all research. Through this process, researchers accumulate empirical material on which to base their research. Usually, there are two main ways to divide data. Firstly, it is possible to start out from its form, by separating quantitative data from qualitative data. Secondly, it is possible to start out from when and how the data is collected, by separating secondary data from primary data.

2.3.1 Quantitative and Qualitative Data

Quantitative data consists of numbers while qualitative data consists of words and pictures. Principally quantitative data can be calculated by using statistical methods, while qualitative data is interpreted and understood (Christensen, 1998).

Quantitative research mainly registers numbers and focuses on quantity, amount, and frequency of quantifiable things that can be worked up statistically. The analysis focuses on discovering, establishing, and measuring correlation between variables. It has an atomic view, which means that it studies parts of an entirety. Words, text, symbols, and actions constitute qualitative research. The understanding of the entirety is more important than the parts. It generates a

description of reality in text and models and tries to discover connections between the parts (Christensen, 1998).

The data form of this thesis is qualitative, without any statistical application. As for our study, evaluation suppliers under Chinese culture background, more involved motivations, feelings, values, attitudes, and perceptions, all of these are not countable; it can only be conducted by observations, understanding of cultures, and analysis.

2.3.2 Primary and Secondary Data

There are many indirect and direct ways for collecting data. According to Yin (1994), six important sources of evidence can be used: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. Generally, these methods are classified into two types of data: primary data and secondary data. Primary data is collected when the research goes directly to the originator of the evidence and gets the data; secondary data is the information that is already published or available in formal format such as textbooks, journals, research papers, articles, and company reports, since the data has been collected by the authors, the collection of this data in the indirect way.

In this thesis, besides the questionnaire for collecting of the primary data from some selected Swedish companies, we mainly use the secondary data collection method, since our research focuses on China, many Chinese articles, reports, news, webs were read, therefore the up to date and accurate data / information can be collected.

2.3.3 Questionnaire

Questionnaire is a method of data collection that can be used with paper questionnaires that have been administered in face-to-face interviews; mail surveys or surveys completed by an interviewer over the telephone. It is highly structured but can have both open-ended and closed-ended questions in the three basic types of questions: multiple choice, numeric open end and text open end. Examples of each kind of question follow:

Multiple Choice

1. Where do you live?

North

South

East

West

Numeric Open End

2. How much did you spend on groceries this week? _____

Text Open End

3. How can our company improve its working conditions?

A good questionnaire design is very important, it enables a respondent to respond with the willingness attitude, and give accurate answer. Thomas C. Kinnear and James R. Taylor (1996) argue that seven steps should be organized in the design of questionnaires, they are: (1) review preliminary considerations; (2) decide on question content; (3) decide on response format; (4) decide on question wording; (5) decide on question sequence; (6) decide on physical characteristics; and (7) carry out pretesting and revision, and make the final

draft.

Since our research focuses on how to evaluate china's suppliers under Chinese culture background, the questionnaire's design not only requires information about detail evaluation standards, but also involves investigation of culture differences between Chinese and West people, especially the way of thinking and behavior attitude. Based on this, we adopted the questions form of text open end and sent questionnaires to some selected Swedish companies, which have business relationships with China, by email to seek the detail information. As text open end questions are time demanding, respondents had to spend time to answer, this is probably the reason why we got few replies, only two answers, and did not reach what we expected, however some useful information and some culture differences in doing business were given, such as more strict hierarchy in China existing sometimes lead foreign companies to get confused, they have to take time to understand which person takes which decisions; also during the negotiations, the English skill needs to be improved for Chinese etc.

2.4 Reliability & Validity

This section will discuss whether the chosen method and the collected data are valid and if the results are reliable. In order to clearly explain and maximize quality of the study, two factors need to be considered to avoid uncertainties

when collecting data - the validity and the reliability.

Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. It can be divided into four types, each of which addresses a specific methodological question.

These are (Yin, 1984):

- *Construct validity* is related to generalization and is an assessment of how well one translates its ideas and theories into actual measures.
- *External validity* is concerned with the transferability of the research findings, and if it can be applied beyond the immediate research study.
- *Internal validity* is the approximate truth about interferences regarding cause-effect or causal relationships.
- *Conclusion validity* is the degree to which conclusions are reasonably related.

Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials. As Yin (1994) mentioned that if a later investigation follows the exact same procedure as described by an earlier researcher, and that the same study is repeated in the same way resulting in the same findings and conclusions. The goal is to minimize the errors and biases in a study.

In order to increase the validity of our thesis we have used multiple sources of evidence to collect data. The sources include newspapers, company reports, Internet websites, as well as academic research documents, books etc. By apprehensible reasoning and organizing concept from theory to practice, discussion or further confirming through reading associated articles or books written by experts or previous researcher in this area, we were convinced that the concepts involved in this thesis are valid. Furthermore, the reliability of first hand data can be generally considered limited in our thesis. In the other hand, the reference of official released reports and articles can always confirm the reliability of thesis.

CHAPTER 3. THEORETICAL FRAMEWORK

In this chapter we describe the models and theories we have used throughout our research. They structured our thinking process and were used as a basis when analyzing our findings.

3.1 Global Supply Chain

Today, global economy is increasingly interlinked by material suppliers, logistical systems, manufacturing capacity, and markets. Companies face increasing pressure to reduce costs while maintaining production and quality levels to deliver results. In order to achieve these goals, companies must successfully overcome a number of challenges. They must gain visibility into global spending data and collaborate across global functions, moving supply chain management from a local and regional approach to a truly global operation. They must implement, develop, and manage supply chains and gain access to real-time information about global markets. Moreover, they must build integrated supply chain management processes and capabilities to drive global adoption of technology and best practices.

3.1.1 Defining the Supply Chain and Its Characters

There are several definitions of what a supply chain, in recent years Monczka and Trent (2002) gave us a complete scope of supply chain conception as: “The supply chain encompasses all activities associated with the flows and transformation of goods from the raw materials stage (extraction), through to end users, as well as the associated information flows. Material and information flow both up and down the supply chain. The supply chain includes systems management, operations and assembly, purchasing, production scheduling, order processing, inventory management, transportation, warehousing, and the customer is in turn a supplier to the next downstream organization until a finished product reaches the ultimate user.”

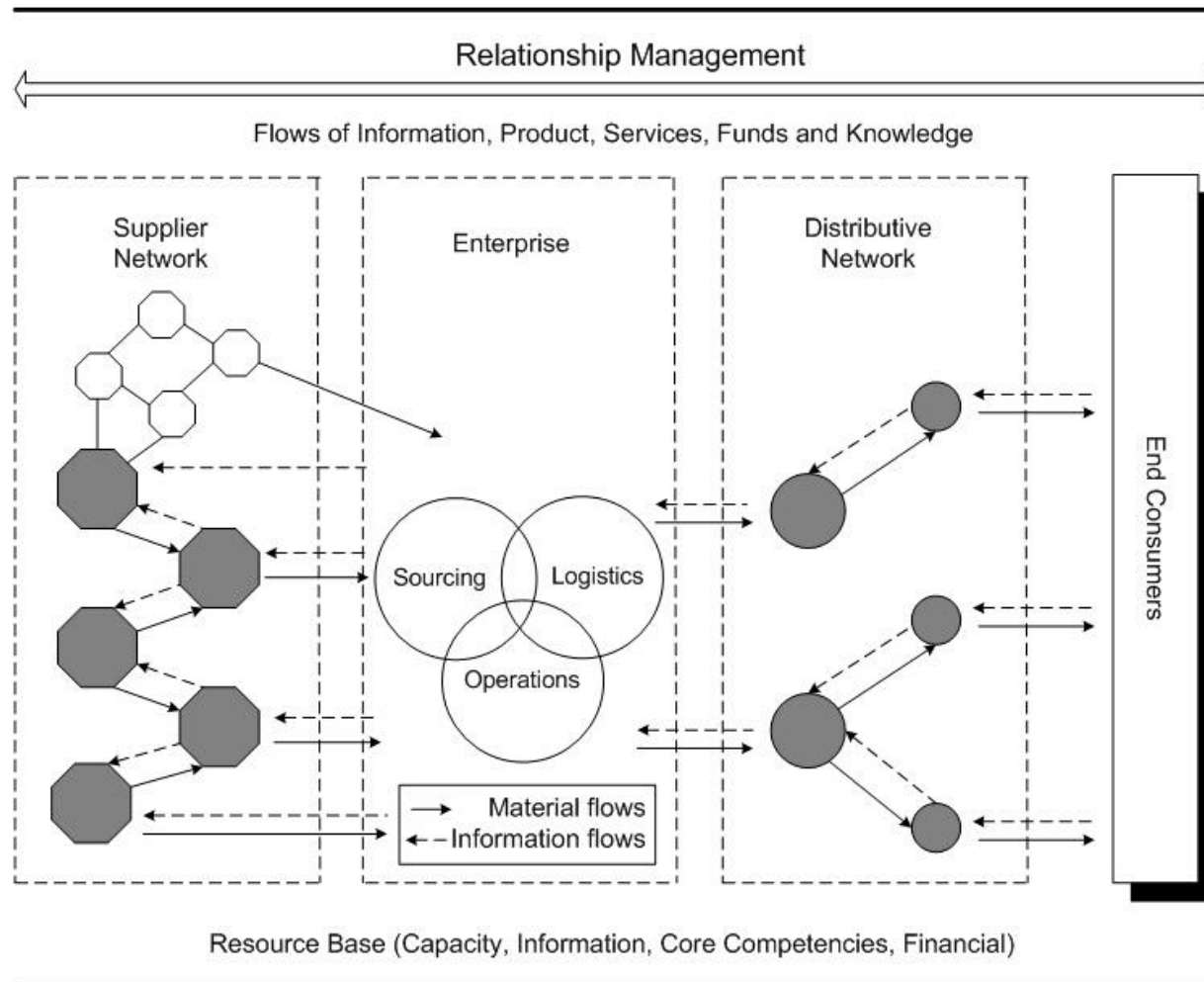
According the above definition, we can conclude the characteristics of supply chain in three aspects:

- The supply chain includes all functions and activities in product and material flow- from procurement through production and distribution to delivery to the final customer.
- The supply chain links materials management and physical distribution into a single integral system, crossing organizational boundaries through coordination. It requires the cooperation of suppliers, processing and distribution units, service providers, market intermediaries and customer organizations.

- The supply chain is driven by customer demand and service requirements. The force is meeting current and potential customer requirements, delivering products at the precise times and locations where they are needed. Meeting these requirements requires flexible response in order to meet changing market demands and requirements for product variety.

As the supply chain becomes more complex, in particular, the global supply chain, there is an increasing need to integrate each stage as part of a larger system. Monczka and Trent (2002) mapped the integrated supply chains as the following figure 3-1, shows us that business operations integrate from initial material purchase from suppliers to delivery of products and services to end customers.

Figure 3-1: The Integrated Supply Chain

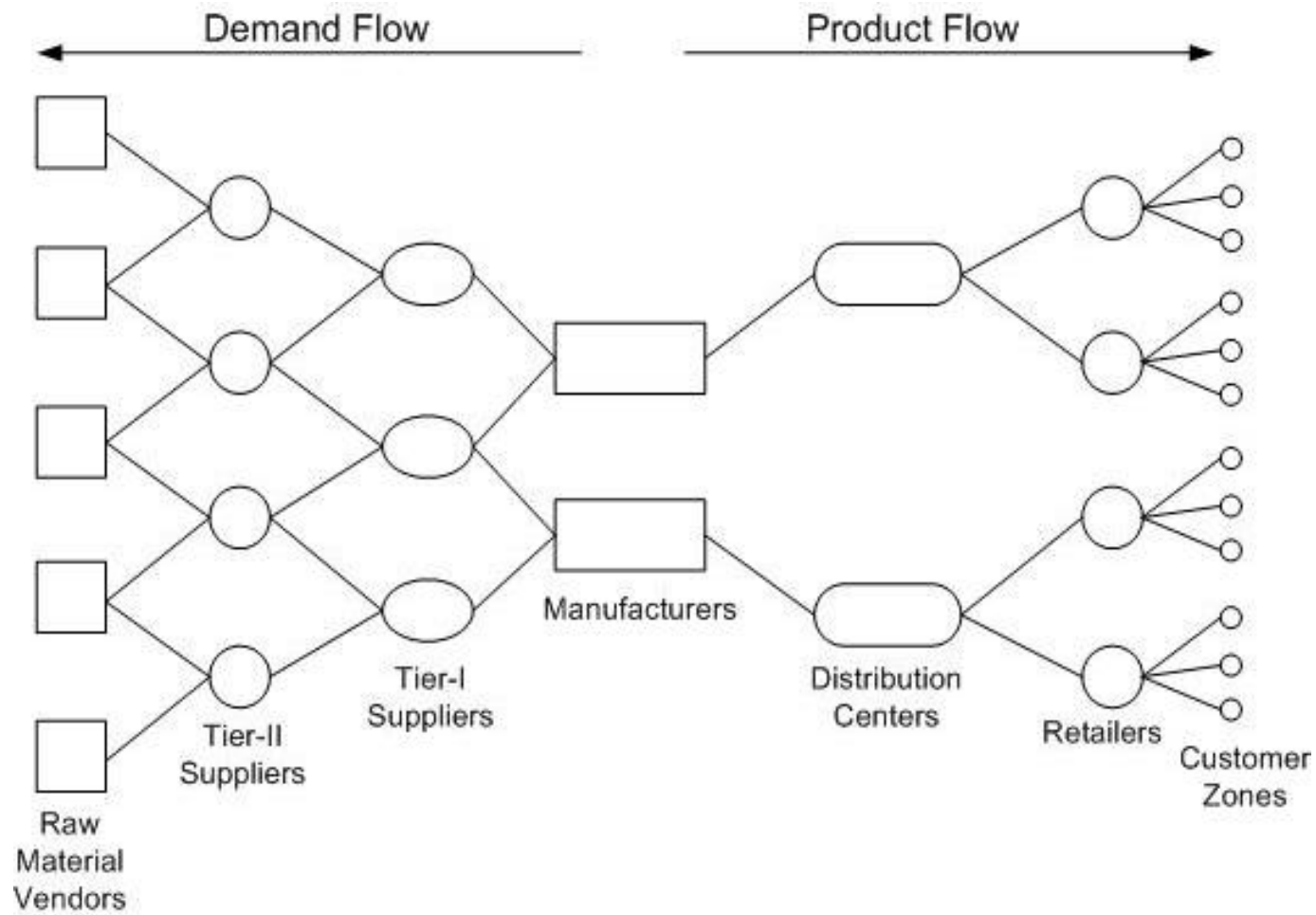


Source: Monczka and Trent (2002)

3.1.2 Supply Chain Network Structure

The supply chain network structure is the member firms and the links between these firms. All firms participate in a supply chain from the raw materials to the ultimate consumer. How much of this supply chain needs to be managed depend on several factors, such as the complexity of the product, the number of available suppliers, and the availability of raw materials (A.M. Brewer, 2001). Firms run business need consider the length of the supply chain and the number of the suppliers and customers at each level. Therefore, it is important to have an explicit knowledge and understanding of how the supply chain network structure is configured. The typically way is to use a network model. A network model graphically visualizes a supply chain and is used to depict the parts of a supply chain being considered in the business process. Figure 3-2 represents a supply chain network formed by cooperating entities.

Figure 3-2: Supply chain network



Source: Charu Chandra, 1999

In general, three structural dimensions of the network are essential when describing, analyzing, and managing the supply chain. These dimensions are the horizontal structure, the vertical structure, and the horizontal position of the focal company within the end points of the supply chain. The horizontal structure refers to the number of tiers across the supply chain. The supply chain may be long, with numerous tiers, or short, with few tiers. The vertical structure refers to the number of suppliers / customers represented within each tier. A company can have a narrow vertical structure, with few companies at each tier level, or a wide vertical structure, with many suppliers and/or customers at each tier level. The third structural dimension is the company's horizontal position within the supply chain. A company can be positioned at or near the initial source of supply, be at or near to the ultimate customer, or somewhere between these end points of supply chain. According to the research, different combinations of these structural variables were found in the companies (A.M. Brewer, 2001).

In order to manage its demand and product flows, common operations of demand forecasting, inventory planning and control, capacity planning, purchasing, warehousing and distribution are conducted in this supply chain network. An implementation of this special relationship among business entities is a supply chain management system. The closeness of

the relationship at different points in the supply chain will differ. Management will need to choose the level of partnership appropriate for particular supply chain links.

As a network, it involves bi-directional flows of materials, information and payments. Supply chains exist in virtually every industry, especially industries that involve product manufacturing, and management of supply chains is not an easy task because of the large amount of activities that must be coordinated across organizational and global boundaries. Not all links throughout the supply chain should be closely coordinated and integrated. The most appropriate relationship is the one that best fits the specific set of circumstances. Determining which parts of the supply chain deserve management attention must be weighed against firm capabilities and the importance to the firm (A.M. Brewer, 2001). A proper structural foundation of the supply chain allows flexible representation and implementation of prescriptive models to improve its performance through cooperation among its members.

3.1.3 Implementing Effective Supply Chain Management Strategies

The primary purpose in establishing supply chains is to minimize the flow of raw materials, and finished products at every point in the pipeline

in order to enhance productivity and cost savings. Strategic role of supply chain involves the following critical elements (Charu Chandra & Sameer Kumar, 2000):

1. Manage inventory investment in the chain

Nowadays, the concept of vendor-managed inventory has been accepted and used broadly, as well as has become a trend in inventory management. This system allows the inventory to be pushed back to the vendor and as a result lowers the investment and risk for the other chain members. As product life cycles are shortening, lower inventory investments in the chain have become important. Cycle times are being reduced as a result of quick response inventory system. The quick response system improves customer service because the customer gets the right amount of product, when and where it is needed. Quick response also serves to increase manufacturing inventory turns.

2. Establish supplier relationships

For any organization to act as a successful supply chain, one of the most important things is to establish strategic partnerships with its suppliers. Corporations have started to limit the number of suppliers they do business with by implementing vendor review programs.

These programs strive to find suppliers with operational excellence, so the customer can determine which supplier is serving it better. The ability to have a closer customer / supplier relationship is very important because these suppliers are easier to work with.

With the evolution toward a sole supplier relationship, firms need full disclosure of information such as financial, gain sharing, and jointly designed work. They may establish a comparable culture and also implement compatible forecasting and information technology systems. This is because their suppliers must be able to link electronically into the customer's system to obtain shipping, production schedules and any other needed information.

3. Increase customer responsiveness

To remain competitive, firms focus on improved supply chain efforts to enhance customer service through increased frequency of reliable product deliveries. Increasing demands on customer service levels is driving partnerships between customers and suppliers. The ability to serve their customers with higher levels of quality service, including speedier delivery of products, is vital to partnering efforts. Having a successful relationship with a supplier results in trust and the ability to be customer driven, customer intimate and customer focused.

4. Build a competitive advantage for the channel

Achieving and maintaining competitive advantage in an industry is not an easy undertaking for a firm. Many competitive pressures force a firm to remain efficient. Supply chain management is seen by some as a competitive advantage for firms that employ the resources to implement the process. Attaining competitive advantage in the channel comes with top management support for decreased costs and waste, in addition to increased profits. Many firms want to push costs back to their supplier and take labor costs out of the system. These cost reducing tactics tend to increase the competitive efficiency of the entire supply chain.

Firms have become more market channels focused. They are watching how the entire channel's activities affect the system operation. In recent times, the channel power has shifted to the retailer. Retailer channel power in the distribution channel is driven by the shift to some large retail firms. The large size of these retailers allows them the power to dictate exactly how they want their suppliers to do business with them. The use of point of sales data and increased efficiency of distribution also has been instrumental in improving channel power and competitive advantage.

5. Introduce information technology

Information is vital to effectively operating the supply chain. The communication capability of an enterprise is enhanced by information technology system. However, information system compatibility among trading partners can limit the capability to exchange information. An improved information technology system, that is user friendly, and where partners in the channel have access to common databases that are updated real-time, is needed.

3.1.4 The Particularity of Global Operations

The global supply chain deal with product flow span from country to country, with different background of polity, culture, and economy. It makes the entire supply chain more complex and obviously different from domestic operations. Bowersox (1996) analyzed the difference from the following four factors:

Performance-cycle length

The performance-cycle length is the major difference between domestic and global operations. Instead of four to ten day total performance cycles in domestic operations, global operations often require performance cycles measured in terms of weeks or months. The reasons for a longer

performance cycle are communication delays, financing requirements, special packaging requirements, ocean freight scheduling, long transportation times, and customs clearance. As a result, the longer performance cycle causes high inventory requirements and space requirements.

Operations

When the global operations are conducted, the business entity must have to consider a number of differences in a global environment. 1) Multiple languages are required for product and documentation. This increases the time and effort for international operations to translate these complex documentations to each country that the shipment passes through prior to shipment. 2) Increased number of producers necessary to support global operation. Since different countries have different requirements in product feature and characteristics. While these small differences between country requirements may significantly increase required stockkeeping unit (SKUs) and subsequent inventory levels. 3) The sheer amount of documentation required for international operations. While domestic operations can generally be completed using only an invoice and bill of landing, international operations require substantial documentation regarding order contents, transportation, financing, and government control. 4) Ineffective global inventory management. Company has to set

up more inventory locations than are actually necessary in order to support every country's market. 5) Complexity of international transportation, due to the different country having different regulation.

Systems integration

Global supply chain operating requires increasing operational coordination through systems integration. This includes the ability to route orders and manage inventory requirements using EDI from any place in the world. It is important for companies to invest in new hardware and software to integrated global logistics information systems.

Alliances

Alliances with carriers and specialized service suppliers are important for domestic operations, however they are even more important for global operations. Without alliances, it would be necessary for an enterprise operating internationally to maintain contacts with retailers, wholesalers, manufacturers, suppliers, and service providers throughout the world. In addition, international alliances can provide market access and expertise as well as reduce the inherent risk in global operations.

With the globalization of business, enterprises are driven toward global operations to achieve market growth and to obtain access to low cost

and/or high quality labor, material, and production capacity. In order to reach the purpose, enterprises must have to integrate their supply chain under global environment.

3.2 Purchasing

Today companies are required to integrate business with other business in order to stay competitive and cut costs. The result of integrating business is a chain of companies, which can also be called a value chain. This value chain is responsible for ensuring that the right material, technology and services are purchased from the right place at the right time and quality.

3.2.1 Definition Purchasing

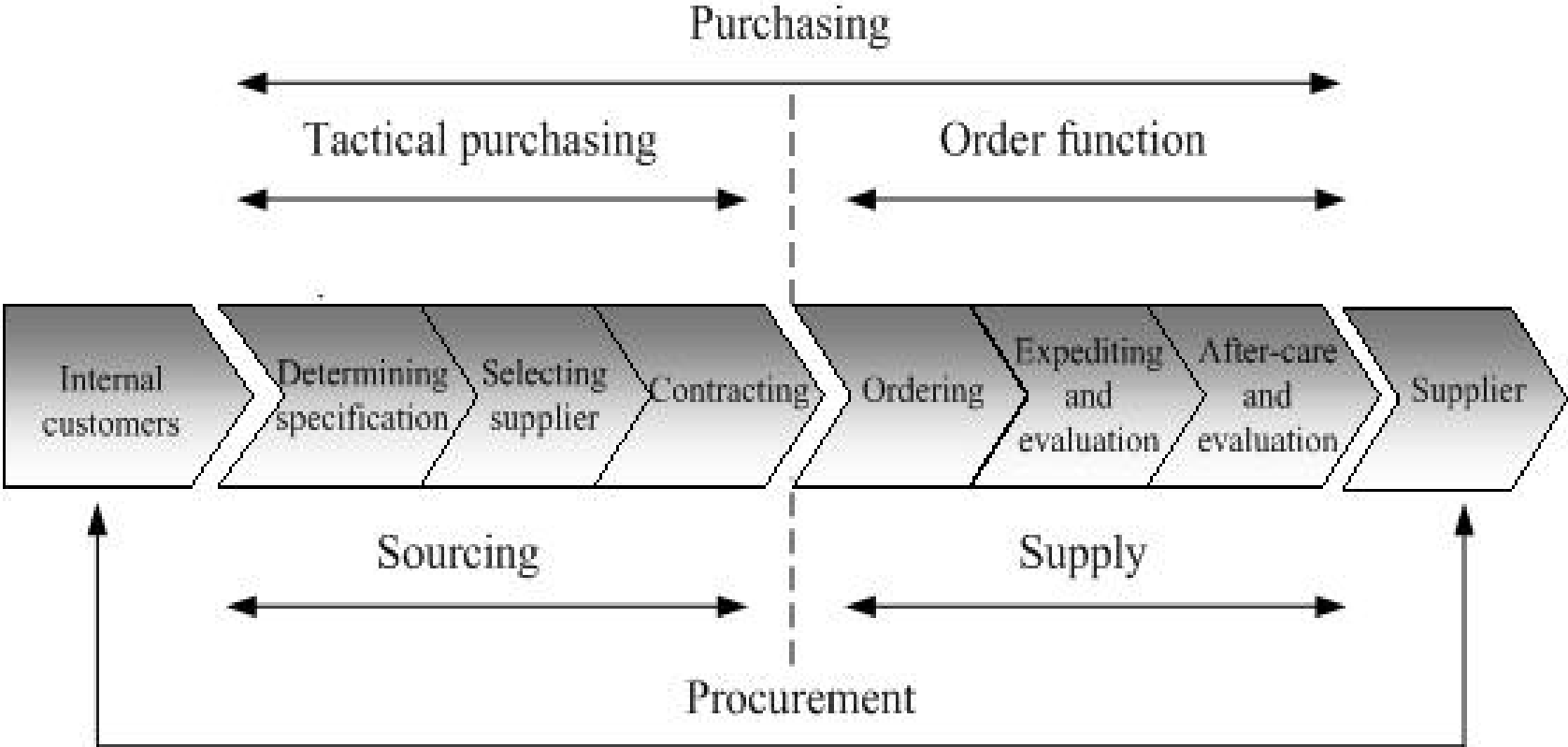
3.2.1.1 What is Purchasing?

In the past decade, purchasing conception had been defined in several different aspects. Håkansson (1982) defines purchasing as ‘securing of the resource inputs of materials, components, and equipment into the business’. Heinritz (1986) refers to purchasing as ‘buying materials of the right quality, in the right quantity, at the right time, at the right price, from

the right source.’ Scheuing (1989) describes purchasing as ‘the acquisition of needed goods and services at optimum cost from competent, reliable sources’. All these conceptions used in the past have broadened considerably to a more strategic understanding of the underlying processes. As Van Weele (1994) mentioned that purchasing has more and more become a strategic function aimed at ‘managing the external resources of the firm’ and further defines purchasing as: ‘obtaining from external sources all goods and services which are necessary for running, maintaining and managing the company’s primary and support activities at the most favourable conditions.’ (Van Weele, 1994).

In this study, we think the conception of purchasing include all aspects above mentioned, it is a strategic integration, and relate to lots of items: strategic sourcing, relationship building, supplier development and supply management, etc. Van Weele (1994) refers to six basic activities involved in the purchasing process: specification, selection, contracting, ordering, expediting and evaluation (after-care). These activities are graphically represented in figure 3-3:

Figure 3-3: Purchasing activities



Source: Van Weele, 1994

In the modern business, every organization, whether it is a manufacturer, wholesaler, or retailer necessarily buys materials, services from outside suppliers to support its operations. In the any operation process, all these activities form the basic building blocks, however they may not all be performed each time.

3.2.1.2 Why Purchasing is Important?

Purchasing plays an important role in an organization. It is the major area to potentially save cost. Research has shown (Monczka and Trent, 2002), that most manufacturers spend about 55% of total revenues on good and services. In fact, in the 1980s, many Japanese automobile companies also got the same conclusion from statistics.

Purchasing has a major impact on quality. It is obviously that the quality of finished goods and service is dependent upon the quality of materials and parts purchased in producing those items. If poor-quality materials and parts are used, then the final products will not meet customer's expectations. As a result, unqualified products can lead to bad effects, huge losses, and even break a company's operations. This further increases the importance of purchasing and external suppliers.

Purchasing can also improve product and process designs and help introduce new technology faster into products and service. Monczka and Trent give us a typical example: when Chrysler introduced the Neon automobile, the company realized that suppliers would furnish 70% of the value of the car. In order to bring the car out on schedule, the team invited 25 makers of key parts such as seats, tyres, and suspension components to send engineers to Chrysler's engineering facility. The result of this effort was that the car cost less to produce than previous models and included all of the proposed design features.

In consequence, one of the most effective ways any business organisation has to reduce cost, improve quality and to gain competitive advantage, effective purchasing become a critical factor.

3.2.2 Purchasing Objectives

Purchasing's primary role is to obtain goods and services in response to internal needs. It is very complex and requires constant tracking and evaluation of the process itself. The purchase objective in today's business is becoming more important since the business nowadays relies on external suppliers. It is important to understand what purchasing is all about, starting with the primary objectives of a world-class purchasing

organization. According to Monczka and Trent (2002), the following six objects are crucial:

Objective 1: Support operational requirements

Purchasing must perform a number of activities to satisfy operational requirements of internal customers, which is the traditional role of the purchasing function. Purchasing supports operational requirements through the purchase of raw materials, components, repair and maintenance items and services. Purchasing must support this movement by providing an uninterrupted flow of high-quality goods and services that internal customers require. In order to support this flow a company must:

- Buy items at the right price
- From the right source
- At the required specification
- In the right quantity
- For delivery at the right time
- To the right internal customer

Objective 2: Manage the purchasing process

The management of the process means that the goal is to make it as

efficient and effective as possible. When doing this, the appropriate staff level has to be determined as well as providing them with the correct professional training. Purchasing systems must be implemented that can lead to productivity improvements and better decision-making.

Objective 3: Select, develop and maintain sources of supply

Purchasing must select and manage a base of suppliers capable of providing performance advantages in product cost, quality, technology, delivery and product development. To effectively maintain and develop sources of supply requires purchasing to identify suppliers who have the potential for excellent performance, and then approach these suppliers with the objective of developing closer buyer-seller relationships.

Objective 4: Development of strong relationships

Purchasing must develop positive relationships and interact closely with other functional groups, including marketing, manufacturing, engineering, technology and finance.

Objective 5: Support organizational goals and objectives

Perhaps the single most important purchasing objective is to support organizational goals and objectives. This objective implies that purchasing can directly affect total performance and that purchasing must

concern itself with organizational directives. Purchasing will then no longer be a support function but a strategic asset that provides a powerful competitive advantage in the marketplace.

Objective 6: Develop integrated purchasing strategies

Two major reasons for integration within purchasing to fail are. First, the training and selection of purchasing personnel has historically been for the performance of a demanding operational position. As a result purchasing personnel have not participated at the highest levels of the corporate planning process. Second, executive management has often been slow to recognize the benefits that a progressive procurement function can provide. These two problems are becoming less important the more integrated a company becomes with other parties.

3.2.3 Purchasing Strategy

The relation between the buying company and its suppliers is central since it affects what, how, and from whom purchases take place. Therefore, it is important in this thesis to emphasize what strategy companies use towards their suppliers. Bowersox (2002) has argued three strategies: volume consolidation, supplier operational integration, and value management.

Volume consolidation

Purchasing comes from either single sourcing or multiple sourcing. Both of them have their advantages and disadvantages. Purchasing literature prior to 1980s suggested that multiple sources of supply were the best procuring strategy, due to the fact the use of a single supplier takes on too much risk once this single supplier encounters problems, such as a strike, a fire, internal quality problems, or other disruptions in ability to supply. On the contrary, numerous advantages were seen to multiple sourcing: First, potential suppliers were continually bidding for the buyer's business, ensuring that prices would be quoted as low as possible. Second, maintaining multiple sources reduced the buyer's dependence on any one supplier.

However, multiple sourcing brings another problem to companies, that is that many companies have to deal with a large number of suppliers for almost every material or item. With such problem occurring, volume consolidation becomes a more effective procuring strategy to reduce the number of suppliers. By consolidating volumes with a reduced number of suppliers, purchasing is not only beneficial to buyers, also beneficial to suppliers well. The last paragraph has mentioned the main advantages buyers gained. As for the supplier, the most obvious advantage is that by concentrating a larger volume of purchases, the supplier can gain greater

economies of scale, therefore spread its fixed costs over a larger volume of output. Additionally, once a larger volume of purchase can be assured, the supplier is more willing to invest in their equipment and to further improve their service. Under this situation, suppliers also can pass their gained advantages to the buying organization, further the working relationship between buyers and suppliers can be developed very well.

Operational integration

The primary goal of operational integration is to cut waste, reduce cost, and develop a relationship between buyer and seller to achieve mutual improvements. Buyers and sellers begin to integrate their processes and activities to achieve substantial operational performance improvement in the supply chain as Bowersox (2002) mentioned as the next level of development in procuring strategy.

The operational integration can be performed in many kinds of forms, Bowersox (2002) mainly illustrates the ways in the following three aspects:

- 1) The buyer may allow the seller to have access to its sales and ordering information system, giving the seller early warning of which products are being sold and what future purchases to expect.

Such information allows the seller to get more certain demand information, therefore to position effectively supply requirements and practice effectively operation for materials at a reduced cost.

- 2) Operational integration also can occur by buyer and seller working together to identify the processes involved in maintaining supply, searching for ways to redesign those processes. One of efficient ways is to establish EDI linkages, accordingly reduce order time and eliminate errors is a simple form of such integration. More sophisticated efforts may involve eliminating redundant activities that both parties perform.

- 3) Further two-way learning is also a better way to reduce total cost. For example, Honda of America works closely with its suppliers to improve those suppliers' capability in quality management. Using its own personnel, Honda visits supplier facilities and helps identify ways that those suppliers can increase the quality of their output. Such improvements ultimately benefit Honda by reducing the suppliers' costs of rework and by providing Honda with higher levels of quality materials. All the above ways are only a few examples, and some other ways can be used in realizing the operational integration.

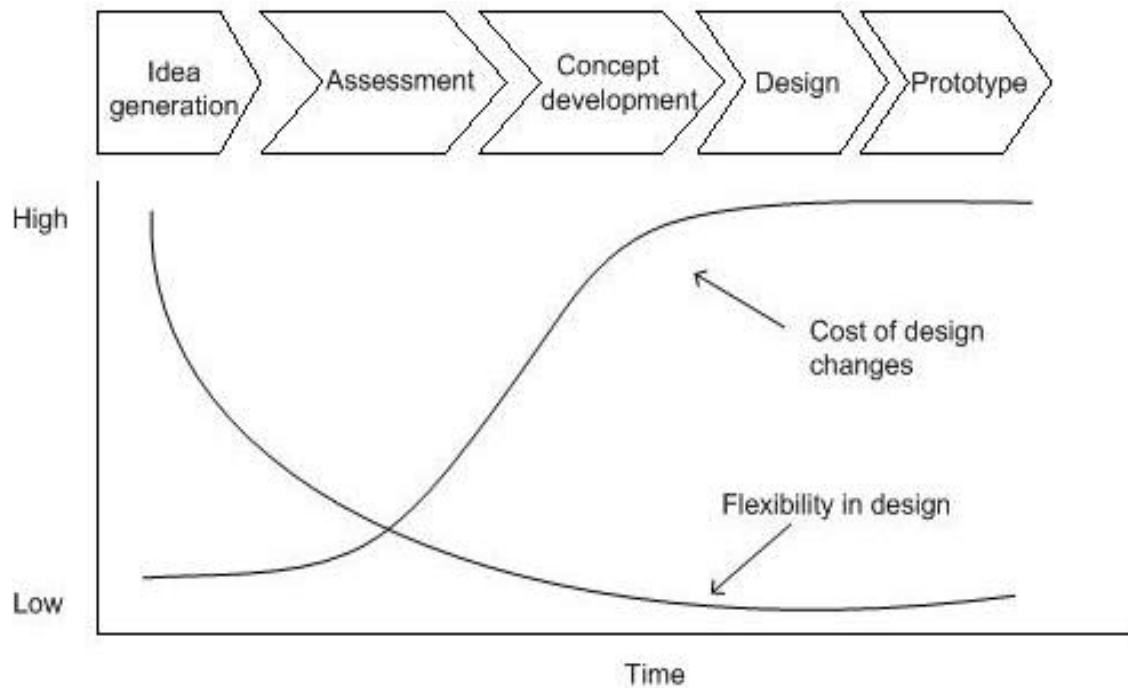
Operational integration bring many benefits to the organization, research has showed that operational integration with a supplier can provide incremental savings of 5 to 25 percent above the benefits achieved through volume consolidation.

Value management

According to Bowersox (2002), the next level of development in procuring strategy comes to value management. It is a more intense aspect of supplier integration, going beyond a focus on buyer-seller to more comprehensive relationship operations. Such relationship operation involves numerous participants, both internal and external.

Value engineering, flexibility to make changes and early supplier involvement in product design represent some of the ways purchasing can work with suppliers to lower the total cost. Value engineering is a concept that involves closely examining material and component requirements at the early stage of produce design to ensure that the lowest total cost inputs are incorporated into that design. Figure 3-4 shows how early supplier involvement can be critical in achieving cost reductions.

Figure 3-4: Flexibility and cost of design changes



Source: Bowersox, 2002

When a firm develops a new product, necessarily process proceeds from idea generation, assessment, concept development, design and final prototype. During the whole process, flexibility and design changes can easily be accommodated in the early stages, but by the time prototypes have been developed, a design change is extremely difficult. Once a prototype has been developed, the expense associated with a design change is extremely high. In addition, a supplier is involved in the product process in the earlier stage is more likely for an organization to utilize supplier’s knowledge and capabilities to cut waste and reduce cost. Therefore Value engineering, flexibility to make changes and the supplier involvement, all the aspects related to value management should be

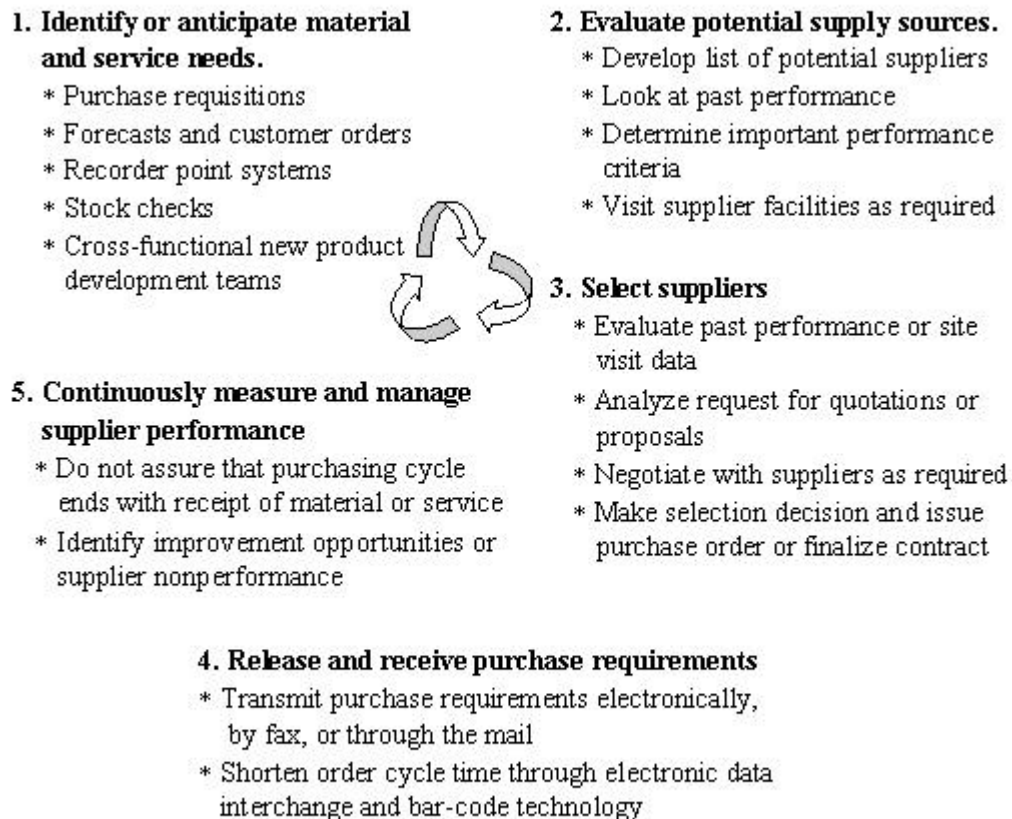
involved in the as earliest as possible stages of the processing procedure.

3.2.4 Purchasing Cycle

The Purchasing cycle covers all activities associated with ordering items for company use. Monczka and Trent (2002) state that the purchasing process as a cycle consists of five major steps:

- Identify or anticipate material or service needs.
- Evaluate potential supply sources.
- Select suppliers.
- Release and receive material requirements.
- Continuously measure and manage supplier performance.

Figure 3-5: The purchasing cycle



Source: Monczka and Trent, 2002

The above figure shows the entire purchasing cycle in five steps, these steps may vary in different organizations, not all occur each time, depending on whether purchasing is sourcing a new or repetitively purchased item. When new items are required, purchasing processes need to spend much more time to evaluate potential sources and select qualified suppliers to perform the whole five steps. However, repeat items usually have approved sources already available, and do not need to

select supplier again, and only apply steps 1, 4, and 5 of the purchasing cycle.

3.3 Supplier Evaluation

The use of foreign suppliers will nearly double in the next five years. While foreign sources currently represent 17.5% of a typical company's supply base, it is expected to grow to 27% by 2008, a 52% increase (Supplier Selection & Management Report, 2003). But it is difficult for most companies to select the right suppliers in different cultures with transition to global sourcing.

Supplier evaluation is defined as the process of quantifying action, or more specifically the process of quantifying and analyzing effectiveness and efficiency. Effectiveness is defined as the extent to which goals are accomplished and efficiency is a measure of how well the firm's resources are utilized to achieve specific goals (Neely 1995; Mentzer & Konrd, 1991). In order to do this, a multicriteria system has been devised to dynamically assess the suppliers' performance. Selection and evaluation of supplier is the foundation of supply chain's operating. It is also important to enterprise's operation and development.

3.3.1 Influencing Factors

Companies need to increase their existing and largely conservative sourcing strategies with the requisite intelligence and procedures to aid in identifying, qualifying, and managing sources in low-cost countries. The transition to global sourcing will not be easy and will likely require enterprises to take on additional supply risks and to develop strategies to offset these risks. By so doing, companies making the transition to global sourcing will be able to recognize double-digit reductions in their cost structure, improve performance and service levels to global customers, and gain early access to new markets.

The basic factors for Multinational Corporations quest for total quality, cycle time, cost reduction and other strategic objectives, effectively limit the number of suppliers that meet their requirements. They are identified from the buying firm's perspective on the basis of a detailed review and discussed below (Li Wen-li, 2003):

Long-term strategic goal: It is important for suppliers' future capabilities in technology and product development than current quality and cost. The clearness of long-term strategic goals would be the key to the success of supplier evaluation program.

Perception on supplier's strategic objective: Supplier development requires a mutual recognition by the buyer and supplier of the need for continuous performance improvement (R.M. Monczka, 1993). Supplier development would not work if the supplier does not have a compatible strategic objective with that of customer.

Partnership strategy: A buying firm pursues a long-term relationship with suppliers and they would like to show their commitment. The supplier may be unwilling to make changes in its operation to accommodate the desires of that buyer, if without buyer's commitment.

Effective communication: Open and frequent was recognized as a key approach in motivating suppliers. Early involvement and open channels of communication increase both parties' understanding and encourage problem solving.

Top management support: It is top management who recognizes the need to initiate a supplier assessment program based on the firm's competitive strategy. Purchasing management needs the encouragement and support from top management to expand their resources within a supplier's operation.

Local supplier's match ability: The Multinational Corporations' purchasing decision is influenced by local supplier's match ability, which includes providing high quality products or service, delivery time, etc.

3.3.2 Selection Criteria

Successful sourcing is not achieved only on the basis of securing competitive bids. Buyers are not looking for the lowest prices, but for the best value on a total cost basis. Multinational Corporations wish to work with suppliers who are not only capable, but also motivated to sharing their standards for enterprise and society. Companies under consideration as potential suppliers are evaluated in a process using both industrial and social criteria. The common performance criteria used to evaluate the supplier is as in the following, Table 3-1:

Table 3-1. Criteria and Performance Measures

	Criteria	Performance Measure
Industrial Criteria	Cost	Cost Reduction, Price Structure
	Quality	Number of trouble due to quality problem
	Delivery	Compliance with Quantity, Delivery Predictability/Reliability
	Service & Communication	Financial Status, Communication, Technology, Productivity
	Management Philosophy	Innovation/New Ideas
Social and Environmental Criteria	Legal & Moral Rules	Child Labour; Forced & Bounded Labour; Discrimination; Harassment, Abuse and Disciplinary Practises; Work Comfort; Working Hour, Wages & Benefits; Work Safe
	Society Requirements	Social Responsibility, Product Safe
	Environmental	Ground Contamination; Hazardous and Non-Hazardous Waste; Emissions, Discharges and Noise; Chemicals; Environmental Improvements

Source: Summary of many books

3.3.2.1 Industrial Criteria

Cost Goal: Total purchasing cost function is expressed to be minimized, because the goal is to minimize the purchasing cost. The purchasing manager was able to give a target value for this goal. However, a reasonable target value is important to use.

Quality: Because we want to maximize the quality of the product purchased from respective suppliers, the type of goal is defined as maximization, and a target value was assigned by the purchasing team.

Delivery Reliability: Delivery reliability is defined like the flexible quality goals. Again, we want to maximize delivery reliability of each kind of product.

Service & Communication: Keeping good and common communication is also important for both buyer and supplier. It will help for knowing and monitoring the supplier performance.

Management Philosophy: A management philosophy of supplier can help you to know the future strategy and their long-term and short-term target.

3.3.2.2 Social and Environmental Criteria

The time is changing. The business role is changing. Customers and co-workers expect more from companies. They expect them also to take an active role in influencing social and environmental issues wherever they are present.

Legal & Moral Rules: The basic criteria are that suppliers must follow national laws and international conventions. Other rules, for example, the Declaration of Human Rights, the ILO (International Labor Organization) Declaration on Fundamental Principles and Rights at Work, and the Rio Declaration on Sustainable Development, etc. are also important.

Society Requirements: Social work is good for business because customers will feel reassured that they are doing business with a company that shares their

views and values. It can also support cost efficiency. Using resources and raw material efficiently, saving energy, improving working conditions at suppliers and through that getting more motivated people, will have a positive effect on costs and therefore support their business objectives. Being successful with social work will take clear goals, strategies, time plans and responsibilities. And above all, it takes a vision to create a better everyday life for the many people.

Environmental Criteria: Due to the increasing realization of the importance of integrating environmental factors into assessing supplier's performance, environmental issues will become an important factor for a company to consider. There was no coordinated response to dealing with the environment and each of the companies had used a different approach. Environmental categories and criteria are viewed as important to consider during the green supplier selection process. It will benefit the company to enhance the competitive position in the supply chain by integrating environmental factors into the supplier selection process.

3.3.3 Model and Method

3.3.3.1 Model

Supplier Evaluation Model (SEM) is a work tool to evaluate the suppliers according to expectations and demand. Analytical models for supplier evaluation have ranged from simple weighted techniques to complex mathematical programming approaches. The more recent approaches have also incorporated multiple supplier criteria into the evaluation process.

Some of the simple techniques for supplier evaluation include categorical, weighted point, and cost ratio approaches (Willis et al., 1993). In the categorical method, the buyer rates each supplier as being preferred, unsatisfactory, or neutral on all the attributes considered in the evaluation process. The limitation with this approach is that all the attributes are weighted equally. The weighted point method assigns weights to each attribute and evaluates the sum-product of the weights and attributes scores for each alternative. Assigning attribute weights in an objective manner and

standardizing all the attribute units are some of the key issues with this approach. The cost ratio method evaluates the cost of each factor as a percentage of total purchases for the supplier. However, this approach has difficulties in developing cost accounting systems for this purpose.

Several multi-criteria, mathematical programming, and other advanced methodologies have also been proposed for supplier selection. Some of these methods are shown in Table 3-2.

Table 3-2 Supplier evaluation techniques

Evaluation Technique	Authors
Weighted linear models	Lamberson et al. (1976), Timmerman (1986), Wind and Robinson (1968)
Linear programming	Pan (1989), Turner (1988)
Mixed integer programming	Weber and Current (1993)
Grouping methods	Hinkle et al. (1969)
Analytical hierarchy process	Barbarosoglu and Yazgac (1997), Hill and Nydick (1992), Narasimhan (1983)
Analytical network process	Sarkis and Talluri (2002)
Matrix method	Gregory (1986)
Multi-objective programming	Weber and Ellram (1993)
Total cost of ownership	Ellram (1995)
Human judgement models	Patton (1996)
Principal component analysis	Petroni and Braglia (2000)
Data envelopment analysis	Narasimhan et al. (2001), Talluri (2002a), Weber and Desai (1996), Weber et al. (1998)
Interpretive structural modeling	Mandal and Deshmukh (1994)
Game models	Talluri (2002b)
Statistical analysis	Mummalaneni et al. (1996)
Discrete choice analysis experiments	Verma and Pullman (1998)
Neural networks	Siyong et al. (1997)

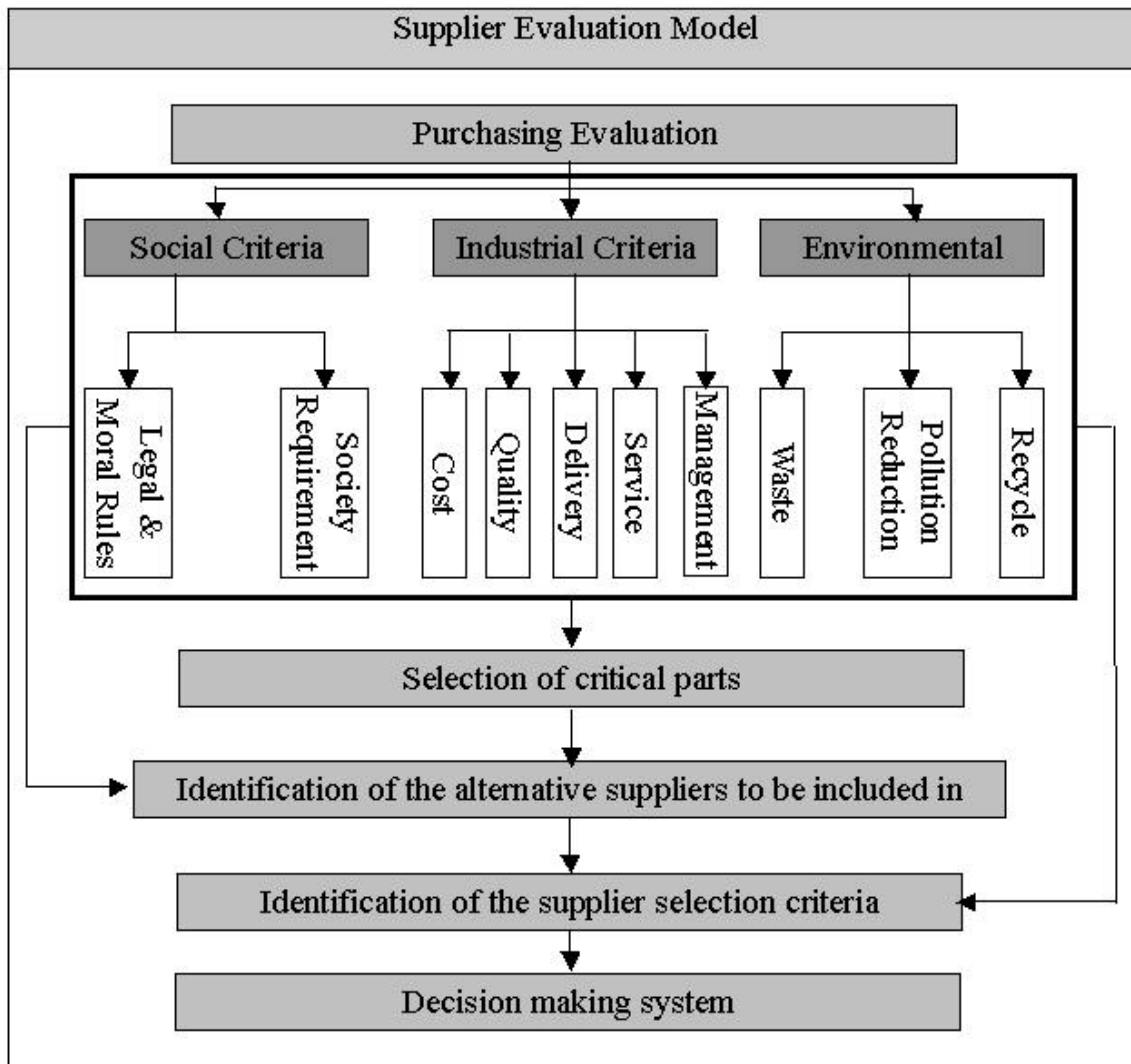
Source:Talluri, Srinivas; Narasimhan, Ram, 2003

Although several effective techniques and models have been utilized for evaluating supplier performance, there is little work in incorporating variability measures into the evaluation process. Clearly, integration of performance variability into the decision making process, and the identification of effective alternative choices provides the buyer with flexibility in the final selection process.

This paper admits a model which is based on the linear weighting principle and

includes criteria addressing the supplier’s capabilities regarding Quality, Logistics, Production, Internal management, Supply management, Environment, Engineering, Finance, etc. The SEM gives a view of suppliers’ good and weak areas. The weak areas are specially targeted for improvement. The SEM is divided into the following categories (Figure 3-6):

Figure 3-6: Supplier evaluation model



Source: Summary of many articles

3.3.3.2 Methods

Conventional Solutions to Supplier Selection

Supplier selection questions have always been encountered as multiple criteria problems, but multiple criteria techniques have not been used exclusively in

their solution. Instead, the problem has been converted to a single objective formulation, and the resulting single criterion model has been solved to deliver an optimal solution. The most frequently utilized approach has been the application of linear weighting models (Willis and Huston, 1990). The linear averaging or weighted point method assigns subjective weights to the selection criteria based on their relative importance. The suppliers are then rated on each criterion according to a numerical scale. The scores on each criterion are multiplied by that criterion's weight and summed to provide an overall score for each vendor. The supplier with the highest score is then selected. Steuer (1986) discusses complications in using weights. He contends that there may be “good” weights producing bad solutions and “bad” weights producing good solutions. For example, it can be shown that the optimal solution can be found by placing a zero weight on the purchasing manager's most important criterion. These methods provide a single optimal solution whereas the purchasing team may have a set of preferred solutions given the trade-off among the criteria.

Among the few multi-criteria applications in purchasing, goal programming is the most frequently used approach (Buffa and Jackson, 1983; Chaudhry, Forst and Zyckiak, 1991; Sharma, Benton and Srivastava, 1989). Goal programming takes vendor selection a step further than the traditional methods by incorporating multiple goals. The technique requires that purchasing teams must decide on a pre-emptive priority order of their goals, i.e. they must first specify the goals for selected criteria and set priorities for the attainment of these goals (Buffa and Jackson, 1983). Although the resulting solution may sometimes be acceptable to the purchasing manager, many times, it may not be adequate. If the solution is unacceptable, the priority structure may be re-organized and the problem re-solved once more. In this fashion, it may be possible to generate a solution iteratively that finally satisfies the decision-maker. Unfortunately, the number of potential priority reorderings may be very large. A problem with five selection criteria has up to one hundred-twenty priority reorderings. The purchasing manager or purchasing team would have to be very confident in their priority structure to generate good solutions, because trial and error is a laborious process at best.

There are a variety of multiple criteria methods that can be used in the supplier selection process that address these concerns. Among the available approaches we chose Visual Interactive Goal Programming (VIG), because it overcomes some of the limitations of goal programming.

Visual Interactive Goal Programming (VIG) is a decision support system (Korhonen 1987) based on a multi-criteria technique known as Pareto Race (Wallenius and Korhonen, 1988). This method treats constraints as a subset of purchasing teams' goals. Constraints of the problem define the feasible but not necessarily optimal solutions. Among these, there are some solutions such that no other feasible solution will yield an improvement in one goal without degrading the value of at least another goal. These feasible solutions are referred to as “non-inferior,” “efficient,” “non-dominated, or “pareto optimal” solutions. The method asks the decision-maker to give target values for each goal. It then finds the deviation of each goal from the target value, thereby defining a reference direction. Finally, it projects the reference direction on the set of non-dominated, efficient solutions. Therefore, in multiple criteria problems the notion of the optimal solution is replaced by the concept of the “best compromise solution.” Best compromise solution is the efficient and non-dominated solution that is selected by decision-makers as their preferred solution among alternative courses of action provided by the technique. In VIG, while the goals of the decision maker are termed flexible goals, constraints are called inflexible goals. This helps to formulate both goals and constraints similarly and to examine them simultaneously. The goal functions can be specified to be minimized or maximized. VIG starts by finding the best possible value for flexible goals. If some goals are defined as inflexible, VIG may not be able to find a feasible solution during the initial process. However, the method still gives the current achievement levels for the inflexible goals, although some of these goals may not be satisfied. The inflexible goals (constraints) can be relaxed by changing the status of the goal from “inflexible” to “flexible.” This helps to obtain feasible and non-dominated solutions. If the solution is still infeasible, we recommend that the decision maker continue relaxing inflexible goals consecutively.

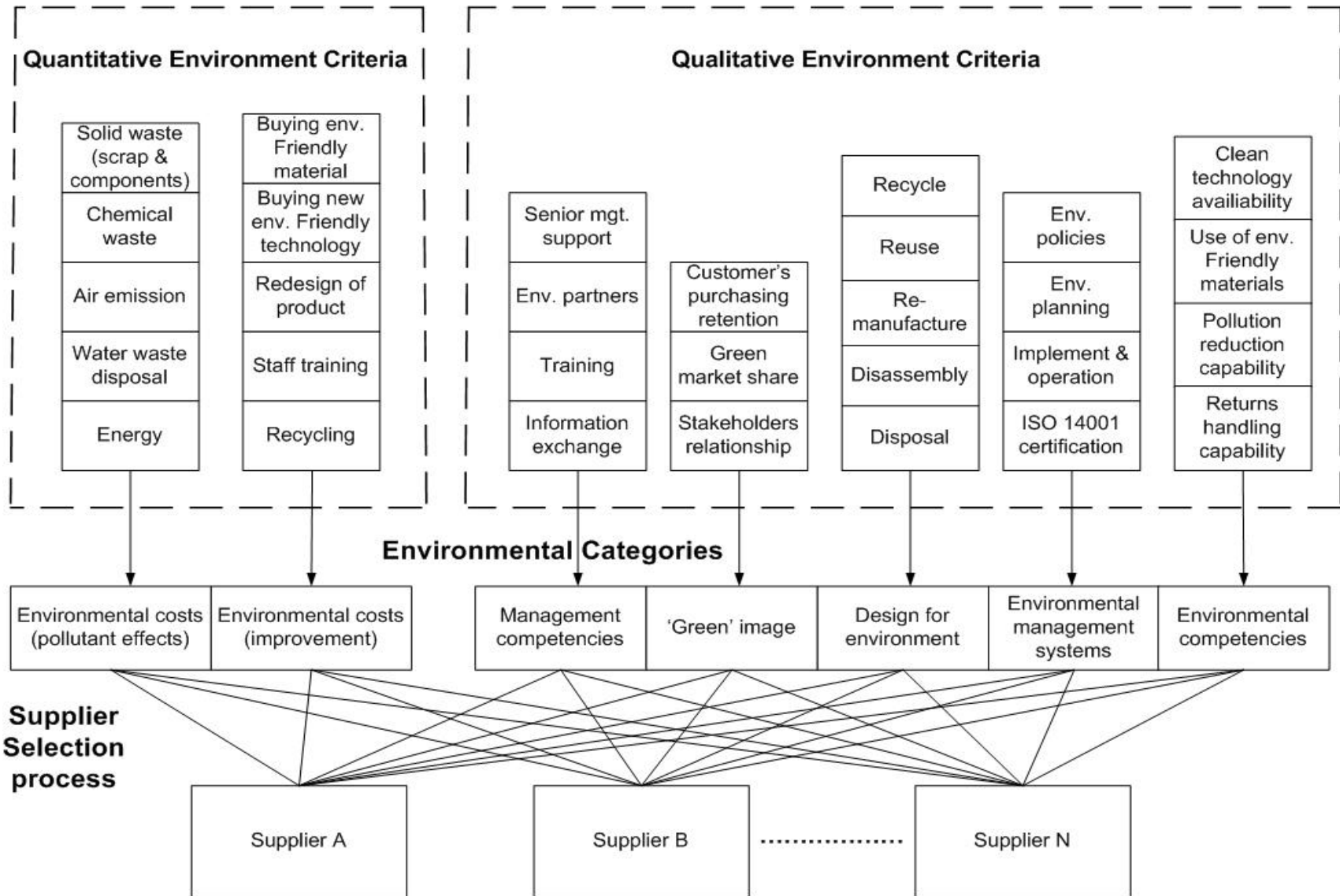
As a decision support system, VIG can assist purchasing teams in solving the supplier selection problem interactively and identifying their best compromise solution. The values of the goals to be optimized are displayed in numeric form as well as bar graphs dynamically. On the respective bar graph of each goal, it indicates whether this goal has been defined to be minimized or maximized.

Using VIG, the purchasing team members were able to see the trade-off between quality and price. They easily changed the status of the quality goal from inflexible (constraint) to flexible (goal) and were able to see the resulting prices for different quality levels of the blends.

Proposed framework for incorporating environmental criteria with supplier selection process

By integrating the categories and criteria identified, an environmental framework was developed for incorporating environmental criteria into the supplier selection process. Figure 3-7 shows a systematic model of the environmental framework (P. K. Humphreys, 2003).

Figure 3-7: Environmental framework for incorporating environmental criteria into the supplier selection process.

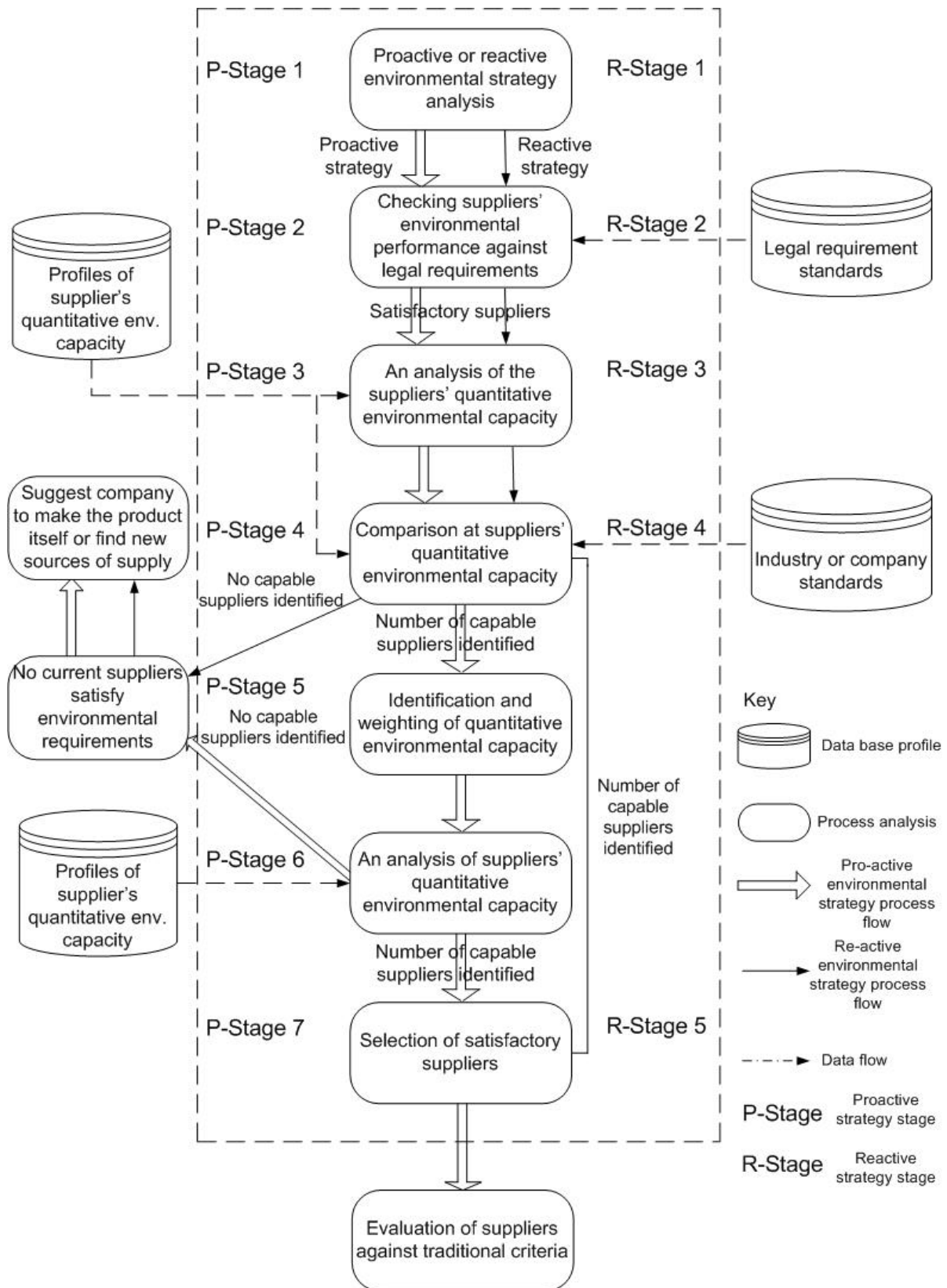


Source: P. K. Humphreys, 2003

These seven environmental categories are separated into two groups. The category ‘environmental costs (pollutant effects)’ and ‘environmental costs (improvement)’ are grouped together under the heading ‘quantitative environmental criteria’ and the other five categories are in a separate group termed ‘qualitative environmental criteria’. Criteria under the category ‘environmental costs (pollutant effects)’ are costs due to treatment of pollutants such as costs for solid waste disposal. While criteria under the category ‘environmental cost (improvement)’ are costs related to improving suppliers environmental performance. For example, the cost for buying new equipment that will produce less pollutant, etc. All criteria are quantitative factors expressed in monetary terms. Therefore, these criteria are grouped under the term ‘quantitative environmental criteria’. On the other hand, the criteria identified under the other environmental category grouping are mainly qualitative criteria such as the environmental management system within a company and its green image, which require subjective decisions to be made during evaluation of these criteria.

After the framework was developed, a decision support system was designed to evaluate suppliers. The steps involved in the decision support system are shown in Figure 3-8.

Figure 3-8: Stages involved in the decision support system



Source: P. K. Humphreys, 2003

In the long term, environmental issues will become an important factor. Integrating environmental management techniques along the supply chain is an appropriate method of enhancing the environmental performance of an industry. A decision support system, which integrated environmental criteria into the supplier selection process, was built for purchasing. The proposed decision support system is computerized in order to provide a fast and convenient tool for the users to assess their suppliers' environmental performance. It may help to enhance the competitive position of companies in the supply chain by integrating environmental factors into the supplier selection process.

CHAPTER 4. CHINESE CULTURE AND BUSINESS CULTURE

For systemic understanding, we put Chinese culture and business culture in an independent chapter, which includes both theory and practices. And then we analyze culture differences which will be helpful to understand Chinese behavior when you begin to evaluate Chinese suppliers.

4.1 What is Culture

Culture can be viewed as consisting of everything that is human made (Herskovits, 1955); everything that people have, think, and do as member of their society (Ferraro, 1990); communication (Hall & Hall, 1989); a system of shared meanings (Geertz, 1973); the way of life of a group of people (Barnouw, 1973); collective programming of the mind (Hofstede, 1991); inherited ethical habit (Fukuyama, 1955); a “tool kit” of habit, skills, and styles from which people construct “strategies of action” (Swidler, 1986); one being composed of both “objective culture”, such as chairs, tools, and jet planes, and “subjective culture”, such as categories, norms, roles, and values (Triandis, 1994); a set of understandings shared among persons who have been similarly socialized (Terpstra & David, 1991); or a system consisting of subsystem, such as kinship, educational, economic, political, religious, association, health, and recreational systems (Harris & Moran, 1996).

Although there is no standard definition of culture, we prefer to accept as a working version:

Culture: The system of shared beliefs, values, customs, behavior, and artifacts that the members of society use to cope with their world and with one another, and that are transmitted from generation to generation through learning (Daniel G. Bates, 2002).

4.2 Chinese Culture

China is the world's "longest continuous civilization with the longest tradition of record-keeping and collection" (Ropp, 1990). As one of the world's four oldest civilizations, the traditional Chinese culture is different from the civilizations of Egypt, Babylon, India and Greece and it is the only ancient civilization that has survived to this day with continuity. During the long Medieval years, China was the leading civilization in the world. After the first century, the Chinese civilization began to spread to neighboring countries such as Korea, Vietnam, Japan and Southeast Asia, creating what has been known as a "sphere of Chinese civilization".

The main obstacles to doing business in China are language barriers, imperfect infrastructure, and excessive regulation. But the real issue is more basic: China operates on an entirely separate set of cultural standards and norms. In the last two decades, Chinese culture fast change with blaster of global economy. Many Chinese puzzled by that, say nothing of foreigner. We believe that you can never understand Chinese cultures. Knowing the Chinese history and culture is the first step in building simpatico relationship. We try to explain and introduce the traditional and modern Chinese culture for easy understanding.

4.2.1 Traditional Culture

Confucianism, Taoism and Buddhism are three essences of Chinese traditional culture. The interrelationship has been marked by both contention and complementation in history. The most important is Confucianism, which influenced Chinese behavior since Confucius (551-479 B.C.) built it 2500 years ago. "Confucian culture zone" phenomenon let world focus on East Asia for its fast economic development. Many researchers want to find the relation between culture and economy.

Confucius stresses "ren" (benevolence, love), and "li" (rites), referring to respect for the system of social hierarchy. Another founder, Mencius advocated a policy of "benign government" and a philosophy that human beings are good by nature. Confucianism became the orthodox ideology in feudal China and it drew on Taoism and Buddhism. By the 12th century, Confucianism had evolved into a rigid philosophy that calls for "preserving heavenly laws and

repressing human desires”.

Taoism was created by Lao Zi (around the 6th century B.C.), whose masterpiece is “The Classic of the Virtue of the Tao”. He believes the dialectical philosophy of inaction. Zhuang Zhou, the main advocate of Taoism during the Warring States period, founded a relativism calling for the absolute freedom of the subjective mind. The tourism culture is to combine China's long-standing history culture and human culture. It has greatly influenced Chinese thinkers, writers and artists.

Buddhism was created by Sakyamuni in India around the 6th century B.C. Believing that human life is miserable and spiritual emancipation is the highest goal to seek, it was introduced into China through Central Asia. Buddhism had given a deep and tremendous influence to the Chinese Culture together with its process of localization. The inter-flow of the Buddhist philosophy and the classic Chinese philosophy had pushed forward a new question and new method for the development of philosophy. That was also a process when the ingenuous culture of Confucianism and Taoism were blended with Buddhism. Chinese Buddhism has the greatest influence on traditional ideology and art.

Zhongyong (Middlebrow) is the basic spirit of Chinese. The *Zhong* (Fit exactly) means suitable and conformable, and *Yong* (Mediocre) means durable and unvarying. Combination of twos stands for impartial, moderate, and not in the extreme. This idea manifesting in culture is cultural appetency which seeks common points while reserving difference. In Chinese history, it plays a key role in several cosmically cultural amalgamations. *Zhongyong* will hang up that which it cannot unite temporarily and wait future's solution.

"The individual is subordinate to the organisation. The minority is subordinate to the majority. The lower level is subordinate to the higher level. (Mao Zedong, 1966)" This quotation can help easily explain why Chinese society and companies are very hierarchically organised, and why Chinese people seem to be more group oriented than individualistic and often do not like to take responsibility. Similarly, people are seldom willing to give an opinion before their peers as it might cause loss of face with a valued ally.

4.2.2 Modern Culture

“The culture tradition is a strange mix. It of course is founded on basic Chinese culture, but it has been profoundly influenced by decades of Marxism-Leninism, and more recently by ambivalent reactions against that orthodoxy and uncertainty about the reforms.” (Pye, L.W., 1992) Traditional culture is eroded and weakened with the encroaching influence of mass media and the global economy now.

To gain analytical power, the traditional Chinese culture values and norms need to be combined with contemporary Chinese ideological and institutional factors.

The outbreak of the Opium War in 1840 indicated the beginning of modern Chinese history. The following century was marked by unswerving endeavors towards modernization, including sometimes painful interactions with the Western civilization. Since 1978, China has been following a policy known as “reform and opening-up”. In its drive to build socialist modernization with Chinese characteristics, the country, while introducing Western science, is seeking to preserve and critically carry forward its tradition.

Traditional Chinese culture has become a hot topic repeatedly discussed since the 1980s, with the deepening of reforms and an accelerating modernization process. It has been realized that tradition not necessarily retards modernization; on the contrary, it can promote modernization. Furthermore, the essence of the tradition can be food for thought for the Chinese people, particularly the young generation.

4.3 Chinese Business Culture

Especially at the beginning, you will find yourself operating under a cloud of uncertainty and ambiguity. It is necessary to understand the Chinese way of thinking, in many ways fundamentally different to that of the West, and rooted much more in Confucianism than in Communism. To regard a nation’s mentality as a fixed monolith is to run counter to the truth that variety is the law of nature. Few Western managers really understand the mental

programming or mind-set that many Chinese bring to their work, though most Western managers are aware of this issue to some degree. This lack of cultural insight is unfortunate, because an understanding of Chinese perceptions and attitudes can be a powerful tool in purchasing.

4.3.1 Confucian Thought and Chinese Management

Confucianism is not a religion, but rather an ethical system, which relies on both scholarship and speculative thought to guide social behavior. Although (and partly because) it has been periodically re-interpreted to serve as a political legitimating agent (A. Chan, 1996), Confucianism continues to hold considerable sway in the contemporary Chinese social milieu (T.K. Oh, 1991, S.G. Redding, 1995). Referring to the Overseas Chinese, Redding (S.G. Redding, 1990) argues that it remains “the most apposite single-word label for the values which govern most of their social behavior.” The mainland Chinese have also retained much of their Confucian tradition. According to a leading historian, the Confucian doctrine “still has a far-reaching influence on the common culture and psychology of the Chinese nation” (Beijing Review Confucius, 1989). Even after importing Marxist ideology and experiencing a Cultural Revolution (1966--1976), the Chinese government remains very similar to those since the days of the Han Dynasty (206 BC-220 AD).

Moderation in both thought and action is advocated to extend harmony and balance from the natural realm to the social realm. The Chinese also have a “situation-accepting” tendency rather than the “problem-solving” orientation, which prevails in Western societies (N.J. Adler, 1991, K. Leung, 1992). They see little value in trying to influence external events or significantly change their surroundings. Their proclivity is to accept their environment and focus on adapting to it (R.I. Westwood, 1992, O.H.M. Yau, 1988). This has broad implications for the cross-cultural transfer of both management and production technologies (M.G. Martinsons, 1996, M.G. Martinsons and A.G.B. Martinsons, 1996, M.G. Martinsons and C.S. Tseng, 1995). It also significantly influences business planning (P. Lasserre, 1988, M.G. Martinsons, 1996, H.C. Triandis, 1983). Chinese managers are less inclined to use systematic and formal planning procedures than their Western counterparts. Instead, they will rely

more on extrapolations from experience and intuition (M.G. Martinsons, 1996). The Chinese also view cause and effect in a multi-causal and non-linear manner.

In the Chinese cosmos, all things are interdependent. A solution to a given problem will greatly depend upon its specific and holistic context (M.H. Bond and K.K. Hwang, 1986). Instead of conducting a rational analysis of the data related to a single issue, the Chinese seek to synthesize a wealth of knowledge that has been absorbed over many years. Decisions tend to be based subjectively on a combination of intuition and experience. The Chinese are more apt to resolve or dissolve a problem, applying common sense and judgment in order to adapt to the environment, rather than seeking a scientific solution. The approach employed by the Chinese reduces the need to construct alternative scenarios and assess possible outcomes. The concepts of rational science and rational economy in the Western sense conflict with the Chinese belief in the fundamental unity of nature. This helps to explain the underdevelopment of management science in Chinese organizations. The limited use of formal planning methods and quantitative analysis in private-sector Chinese enterprises (S.G. Redding, 1990) moderates both the need for and potential value of an MIS.

4.3.2 Ethical Value in Organizational Culture

Confucius illustrates the concepts of leadership from two viewpoints: social ethical values and individual ethical values (Jeong-Kyu Lee, 2001). Assuming that individual values were nearly related to leadership, social values would be inseparable from organizational culture because culture is actually a combination of values and practices in organizations or society (Swidler, 1986). For Confucius, both ethical values, as core factors for achieving both an ideal leadership and a harmonious society, are inseparable relations between leadership and organizational culture.

Confucius regards the ruler as a moral manager having cultural leadership.

The Master said... 'a benevolent man helps others to take their stand in so far as he himself wishes to take his stand, and gets others there in so

far as he himself wishes to get there' ...

The Master said, 'There are three things constantly on the lips of the gentleman none of which I have succeeded in following: "A man of benevolence never worries; a man of wisdom is never in two minds; a man of courage is never afraid' ...

Confucius also views the ruler as a gentleman, a man of benevolence, a man of wisdom, or a man of courage. Also, he regards the ruler as a virtuous man or a righteous man. For Confucius, ethical values, such as benevolence, wisdom, courage, virtue, and righteousness are essential tools that the ruler possesses to be a moral manager in collectivist society. On the basis of these ethical values, Confucius suggests the behavioral criteria of the ruler:

'There are nine things the gentleman turns his thoughts to: to seeing clearly when he uses his eyes, to hearing acutely when he uses his ears, to looking cordial when it comes to his countenance, to appearing respectful when it comes to his demeanor, to being conscientious when he speaks, to being reverent when he performs his duties, to seeking advice when he is in doubt, to the consequences when he is encouraged, and to what is right at the sight of gain'.

In point of organizations, assuming that ethical values refer to the standards of individual and social moral behavior, the behavioral criteria mentioned might be regarded as not only behavioral norms of the ruler but also ethical paradigms of the moral manager. In particular, Confucius claims both benevolence and wisdom as essential elements for the ruler who wants to be a moral leader or a gentleman. Confucius views benevolence as "to love subordinates," whereas wisdom as "to know subordinates." We may say that the former is a main factor in maintaining a harmonious relationship between the ruler and his or her subordinates; the latter is an essential element to display effective leadership. In addition, in order to keep society healthy, Confucius advises superiors and subordinators to possess some important ethical values: (1) reciprocal ethical values between the ruler and subordinates are ritual, righteousness, faithfulness, and sincerity; (2) subordinates' ethical values are loyalty, filial piety, and

respect; and (3) superiors' ethical values are forgiveness, benevolence, wisdom, and rectification.

In light of ethical values in organizations (Daft, 1992), ethical values are not only essential factors that play important roles within a category of personal ethics that includes values, moral development, and ethical framework, but also symbolic factors that play significant parts in organizational culture that includes rituals, ceremonies, and symbols. In order to achieve successful organizations, the leader should become a moral manager who does one's best under leadership that embodies ideal ethical character, as well as a cultural leader who creates culture or ethical values (Daft, 1992).

In sum, ethical values show a reciprocal relationship based on hierarchical rules. The ultimate goal of Confucian ethical values is to build personal and sociopolitical order in collectivist society. Personal order as a core factor is closely related to leadership that executes administering government and that displays substantial power for effective management. Sociopolitical order as a core element is nearly connected to organizational culture that involves cultural leadership and ethical norms for the change of culture.

4.3.3 Beliefs That Create Problems

Certain thought patterns that exist within the Chinese work force and can be seen in daily operations are particularly prominent¹:

- fear of responsibility;
- “cha bu duo” (“it's close enough for government work”);
- “mei ban fa” (“there's no way”)

In analyzing these beliefs, it is critical to remember two things: 1) Most of these beliefs operate at the sub-conscious level. Thus, most people are unaware that these belief systems control and influence daily behavior. 2) While problematic Chinese norms and standards are discussed here, analogous belief

¹ <http://www.smithbrandon.com/newsletter.htm>

systems exist within all societies and can have a negative impact on efficiency and social order. The specific belief systems that can be observed among Chinese workers and professionals include these:

Fear of responsibility

There is an old saying in Chinese: "The more you do, the more will go wrong." Traditionally, blame falls upon the doer, even if the problem was not his or her fault and even if the doer was trying to solve a problem. And, even in the recent past, punishment in China tended to be excessive. In many cases, not only was the miscreant punished, but also his entire family was punished as an example to the rest of society. In fact, the so-called miscreant need not have been guilty of any criminal conduct at all. For centuries in China, the law was whatever local officials or warlords said it was. Rough justice was dispensed almost by whim. In such a climate, it is no surprise that people learned to fear and to avoid authority. People went to great lengths to avoid personal responsibility. Today, that same fear continues to exist on both a conscious and subconscious level. Without taking significant steps to assure employees that they will not be punished for making honest mistakes, it is very difficult to get employees to assume responsibility or to motivate proactive behavior. Getting workers to become self-starters is, in large part, dependent upon the workers accepting and even desiring the burden of responsibility. For that desire to exist, this fear of responsibility must be addressed.

"It's close enough for government work" ("cha bu duo")

"Cha bu duo" translates literally as "short by not much." In colloquial English, it is similar to the commonly used, "It's close enough for government work." This attitude is very common among Chinese of all ages. This belief so distressed the famous Chinese author, Hu Shi, that he wrote a short story entitled "Mr. Cha Bu Duo" in an attempt to raise the consciousness of his countrymen and to discourage them from this line of thinking. Arguably, this belief system originated from the Confucian ideal of the "golden mean." Originally intended as an admonition for literate scholars of that ancient time, its purpose was to set forth the notion that "gentlemen" avoided extremes in behavior and that compromise was usually preferable to conflict. While that ideal may have worked as a political philosophy, it certainly doesn't do much to

motivate peak performance, high productivity or zero defects in a modern competitive context. The propensity for many modern Chinese to think that "close enough" equals "good enough" is not surprising, given the profound influence that Confucian thought still has on Chinese culture. Fifty years of communist rule has not been nearly long enough to remove the impact of Confucian thought from China's cultural underpinnings.

"There's no way" ("mei ban fa")

It means that people really have very little control over their lives or their fate. For many years this was true for most Chinese. The inevitable result of this long history of bare subsistence was that people grew to adopt a very fatalistic attitude and the belief that there are no solutions to life's major problems. Fate rules all. Obviously, if one believes in impossibility, whatever the ethnic background, there is little motivation to engage in creative, problem-solving thought processes. This is the primary negative impact of the "mei ban fa" syndrome. This thinking also has a negative impact on the ability of modern managers to effectively delegate authority and/or motivate proactive behavior. Obviously, belief in "impossibility" discourages being proactive. Regardless of whether one analyzes the nation-building efforts of the early 20th Century or more recent reform efforts in China, this belief system helps to explain why many reform initiatives in China have met with such resistance or have proceeded so slowly.

4.3.4 Guanxi

Business relationships in China are based on "guanxi", the translation of which is "relationships" (David, 2003). It stands for any type of relationship. It is an important concept to understand if one is to function effectively in Chinese society. It is also understood as the network of relationships among various parties that cooperate together and support one another. It is the right "Guanxi" that makes all the difference in ensuring that business will be successful. By getting the right "Guanxi", the organization minimizes the risks, frustrations, and disappointments when doing business in China. It is often acquiring the right "Guanxi" with the relevant authorities that will determine the competitive standing of an organization in the long run in China. And moreover, the

inevitable risks, barriers, and set-ups you'll encounter in China will be minimized when you have the right "Guanxi" network working for you. That is why the correct "Guanxi" is so vital to any successful business strategy in China. As said in the West: 'It's not what you know, but who you know' that matters. However guanxi also implies obligations or indebtedness, a system of favours and debts between people in a network which itself is based on relationships governed by Confucian thought.

Although developing and nurturing the "Guanxi" in China is very demanding on time and resources, the time and money necessary to establish a strong network is well worth the investment. What your business could get in return from the favors for your partners are often much more valuable, especially in the long run, and when you're in need. Even domestic businesses in China establish wide networks with their suppliers, retailers, banks, and local government officials. It is very common for individuals of an organization to visit the residence of their acquaintances from other organizations, bringing gifts. While this practice may seem intrusive, as you spend more time learning the Chinese culture, it will become easier to understand and take part in this practice that is so central to successful Chinese commercial activity.

4.3.5 Respect Face

Face is an essential component of the Chinese national psyche, i.e. 'losing face', 'saving face' and 'giving face' are central to relationships between people and need to be understood well if one is to develop social or business relationships in China.

Giving face means having a high status in the eyes of one's peers, and is a mark of personal dignity.² The Chinese are acutely sensitive to gaining and maintaining face in all aspects of social and business life. Face is a prized commodity, which can be given, lost, taken away or earned. A person 'loses face' if he is caused to be embarrassed in front of friends or colleagues and therefore is seen to lose respect and dignity. Causing someone to lose face

² <http://chinese-school.netfirms.com/goldenhints.html>

could ruin business prospects or even invite recrimination. The easiest way to cause someone to lose face is to insult an individual or criticize them in front of others. Westerners can unintentionally offend Chinese by making fun of them in a good-natured way. Another error can be to treat someone as a subordinate when their status in an organization is high. Very 'diplomatic' behavior is required consequently so as not to make someone lose face. Just as face can be lost, it can also be given by praising someone for good work before their colleagues. Giving face earns respect and loyalty, but praise should be used sparingly. Over-use suggests insincerity on the part of the giver.

4.3.6 Local Decisions are Made by the Head of the Collective³

In Chinese business culture, the collectivist way of thinking still prevails, even in sectors experimenting with free enterprise. “Saving face” is an important concept to understand. In Chinese business culture, a person's reputation and social standing rests on this concept. Causing embarrassment or loss of composure can be disastrous for business negotiations. In accordance with Chinese business protocol, people are expected to enter the meeting room in hierarchical order. Since there is such a strong emphasis on hierarchy in Chinese business culture, ensure that you bring a senior member of your organization to lead the negotiations on your behalf. The Chinese will do the same. Only the senior members of your group are expected to lead the discussion. Interruptions of any kind from subordinates may be considered shocking by the Chinese. In Chinese business culture, humility is a virtue. Exaggerated claims are regarded with suspicion and, in most instances, will be investigated. The Chinese will not directly say “no” to you. Instead, ambivalent answers such as “perhaps”, “I'm not sure”, “I'll think about it”, or “ We'll see” usually mean “no.” The Chinese tend to extend negotiations well beyond the official deadline to gain advantage. On the final day of your visit, they even may try to renegotiate everything. Be patient, show little emotion, and calmly accept that delays will occur. Moreover, do not mention deadlines. At the end of a meeting, you are expected to leave before your Chinese counterparts. You may have to make several trips to China to achieve your objectives. Chinese

³ <http://www.executiveplanet.com/business-culture-in/132272625364.html>

business people prefer to establish a strong relationship before closing a deal. Even after the contract is signed, the Chinese will often continue to press for a better deal.

4.3.7 Entertaining for Business Success⁴

Business lunches are growing in popularity here. Business breakfasts are not a part of Chinese business culture, except in Guangdong, Hangzhou and Fujian province where the “Morning Tea” is very popular. Evening banquets are the most popular occasions for business entertaining.

Generally, the seat in the middle of the table, facing the door, is reserved for the host. The most senior guest of honor sits directly to the left. Everyone else is seated in descending order of status. The most senior member sits in the center seat. Follow this seating pattern if you are hosting a banquet or a meal in your residence, whether for business or purely social reasons.

The host is the first person at the table allowed to begin eating by suggesting the first drink. Then, the rest of the company can proceed with the meal. If you are the host, take the first piece of the most valued food and put it on your guest of honor's plate after leading the first drink. This will signify the beginning of the eating and is considered a friendly gesture. It is not uncommon for a host to order enough food for seven people at a table of five. He or she loses face if there are not plenty of leftovers at the end of a meal. Rice, considered by many Chinese to be a filler, is generally not served until the end of a meal.

During a meal, as many as 20-30 courses can be served, so try not to eat too much at once. The best policy is to lightly sample each dish. Leaving a “clean plate” is perceived to mean that you were not given enough food. On the other hand, leaving a food offering untouched will also give offense; even if you find a dish unappealing, try a small portion for the sake of politeness. One important part of Chinese business entertaining is a tea drinking ritual known as “yin cha.” It is used to establish rapport before a meeting or during meals. Seeds and

⁴ <http://chinese-school.netfirms.com/entertainment.html>

bones are placed on the table or in a specially reserved dish; never place these objects in your bowl.

It will be appreciated if you use chopsticks. When you are finished eating, place your chopsticks on the table or a chopstick rest. Do not put the end of the chopstick in your mouth. Try not to drop your chopsticks, as this is considered a sign of bad luck. When eating rice, follow Chinese custom by holding the bowl close to your mouth. Toothpicks are usually offered between courses and at the conclusion of a meal. When using a toothpick, cover your mouth with your free hand for concealment.

Before smoking, it's polite to offer cigarettes to those in your company. The meal has reached a definite conclusion when fruit is served and hot towels are presented. Shortly after these items are offered, guests should make preparations to leave. In accordance with Chinese business etiquette, the host will not initiate the guests' departure.

Follow Chinese business protocol and reciprocate with a banquet of the same value; never surpass your host by arranging a more lavish gathering. Home entertaining is very popular in China. If you are invited to a Chinese home, you will probably be asked to remove your shoes. Arrive on time, but not too early.

Another potential minefield for westerners is toasting. This is the centerpiece of a formal Chinese meal and you can help build your relationship by taking part. First, when a table full of people at a Chinese banquet drinks, they usually all drink the same thing. Do not expect a server to take orders for several different kinds of beer and liquor. Your host will usually order the beverages (and the food, for that matter). And second, at a formal meal such as this, do not expect to sit down and begin sipping your drink by yourself. Instead, you must toast or be toasted in order to sip. Don't be afraid to toast your host. In fact, that is among the most important items on your agenda at this meal. If you have an opportunity to refill glasses, do so. Be prepared for continuous toasting with individuals at the table. If you're thirsty, then toast someone. Raise your glass no higher than your host's — preferably lower. If the liquor is expensive, note this. If you remember all these tips, you will "give face" to your hosts and start

your relationship off on the right foot. Try to pick up the visual and verbal cues during the eating and drinking — you will earn respect if you do so. And have fun!

Some topics of conversation are often welcome when you make contact with Chinese, for examples, Chinese scenery & landmarks, weather, climate, and geography of China, your travels in other countries, your positive experiences travelling in China and the recent economic developments in China, Chinese art.

4.3.8 Public Behaviour and Cultural Behaviour

The Chinese will sometimes nod as an initial greeting. Handshakes are also popular. Banquets are hosted with varying degrees of extravagance, usually in a restaurant. The Chinese do not use their hands when speaking, and will only become annoyed with a speaker who does. The Chinese, especially those who are older and in positions of authority, dislike being touched by strangers.

Smiling is not as noticeable in China, since there is a heavy emphasis on repressing emotion. Members of the same sex may hold hands in public in order to show friendliness. Public displays of affection between the sexes are frowned upon. Do not put your hands in your mouth, as it is considered vulgar. Consequently, when in public, avoid biting your nails, removing food from your teeth, and similar practices.

As with all societies and cultures, the Chinese have been taught to incorporate certain beliefs and value systems into all their mental processes. These beliefs result in ironclad assumptions that are used to evaluate new information, concepts and situations. Understanding these basic beliefs is important because they powerfully influence perceptions of what is valuable and what is not valuable, and thus, decision-making. Other cultures see possibility differently and may place a higher value on patience. One of the interesting things about culture-based belief systems is that the more abstract they are, the more firmly people hold on to them. Beliefs become not ideas, but “truths.” All societies can be blinded by their own version of self-evident “truths.” After all, at one

time, the World was said to be flat!

Lavish gift giving was an important part of Chinese culture in the past. Today, official policy in Chinese business culture forbids giving gifts; this gesture is considered bribery, an illegal act in this country. In many organizations, however, attitudes surrounding gifts are beginning to relax. In any case, you will have to approach giving gifts with discretion, as outlined in the following points. If you wish to give a gift to an individual, you must do it privately, in the context of friendship, not business. The Chinese will decline a gift three or more times before finally accepting, so as not to appear greedy. You will have to continue to insist. Once the gift is accepted, express gratitude. You will be expected to go through the same routine if you are offered a gift. In the presence of other people, never present a valuable gift to one person. This gesture will cause only embarrassment, and possibly even problems for the recipient, given the strict rules against bribery in Chinese business culture. Do not take any photograph of any gift giving unless it is a symbolic gift presented to the organization as a whole. Giving a gift to the entire company, rather than an individual, can be acceptable in Chinese business culture as long as you adhere to the following rules:

- All business negotiations should be concluded before gifts are exchanged.
- Specify that the gift is from the company you represent. If you can, explain the meaning of the gift to the receiver.
- Present the gift to the leader of the Chinese negotiating team.
- Do not get anything that is obviously expensive, so that the company will not feel obliged to reciprocate.
- Valuable gifts should be given to an individual only in private and strictly as a gesture of friendship.
- Make sure that the gifts given to people of the same level of importance are equitable or of similar grade. Somehow, they may find out later, and the difference may lead to strains in your relationship.

Personnel and members of their families are prohibited from accepting gift or gratuities of any form from current or potential suppliers. Acceptance of such offerings may be interpreted as an attempt to improperly influence decisions.

Negative replies are considered impolite. Instead of saying 'no', answer 'maybe', 'I'll think about it', or 'We'll see' and get into specifics later. You'll find that the Chinese will do the same. When your Chinese counterparts smilingly and politely or even enthusiastically say 'No big problem' or 'The problem is not serious', they usually mean 'There are still problems.' And you should inquire more about the potential problems that still exist.

4.4 When East Meets West

Western thought is dominated by linear logic, oppositely, Chinese thinking is influenced by early philosophers, who saw a paradoxical balance of opposites in all things. So everything you hear about China is true, and so is the opposite. Westerners tend to look for clear alternatives, but Easterners may examine ways to combine both options. This difference may make a Westerner think that a Chinese is being illogical, evasive or devious, when he believes he is being quite straightforward.

The western businessman is often deadline-driven and unwilling to slow down to the Chinese pace when discussing business. In China the pace can be fast and slow simultaneously. Those involved in negotiations know how long they can drag on when the Chinese side is consulting internally or has other reasons for delay. But Chinese can move with lightning speed on other occasions. Part of this feeling is subjective. Nevertheless, Chinese use time more consciously than do their Western counterparts.

The European and American also think “Business is business, personal relationship is just personal relationship.” Entirely different, Chinese think they can combine both options. They are always extremely puzzled with Chinese behavior which answers questions using an indirect manner instead of a direct one, which is we always said “Culture shock”.

The Chinese culture is distinguished from the Western culture in many ways, including how business is conducted. For example, the Chinese prefer to deal with people they know and trust. On the surface, this does not seem to be much different from doing business in the Western world. But in reality, the heavy

reliance on relationship means that western companies have to make themselves known to the Chinese before any business can take place. Furthermore, this relationship is not simply between companies but also between individuals at a personal level. The relationship is not just before sales take place but it is an ongoing process. The company has to maintain the relationship if it wants to do more business with the Chinese.

Personnel behavior also different, for example, public praise is much enjoyed by its recipient in the U. S. and Europe, but is a source of embarrassment and discomfort for an individual in China. This is because Western cultures value individual thought and action, while Eastern cultures prize modesty and group consensus. In China, “the nail that sticks up gets hammered down.” While the primary focus of people in one culture might be to quickly get down to business, another culture concentrates first on developing personal relationships. Although their objectives may be the same, people from different cultures are likely to have very different ways of achieving them. You’ll probably never know a particular culture as well as your own — not only is the language different, but the historical context within which its people operate is often misunderstood by outsiders. When cultures collide, as they inevitably will, the damage can be greatly reduced by an appreciation of what caused the collision (Table 4-1).

Table 4-1: Chinese culture contrast Western culture

COMPARING VALUES ACROSS CULTURES	
Western Culture	Chinese Culture
Values change	Values tradition
Favors specific communication	Favors ambiguous communication
Values analytical, linear problem solving	Values intuitive, lateral problem solving
Places emphasis on individual performance	Places emphasis on group performance
Considers verbal communication most important	Considers context & nonverbal communication most important
Focuses on task and product	Focuses on relationship and process
Places emphasis on promoting differing views	Places emphasis on harmony and consensus
Emphasizes competition	Emphasizes collaboration
Prefers informal tone	Prefers formal tone
Is flexible about schedules	Emphasizes rigid adherence to schedule

Source: Li, Jenny, *Passport China: Your Pocket Guide to Chinese Business, Customs and Etiquette*. Novato, CA, USA: World Trade Press, 2001. P7

In Chinese business, relationships are between people, not corporations, since relationships are fundamentally based on trust, not contracts. A trusting relationship may take a long time to develop and so Western businesses should take a long view on doing business in China. In conclusion, it can be said that in the West, business comes first and friendship may follow, but in China, friendship must come first if business is to follow.

Chinese and Westerners often approach a deal from opposite ends. To a Westerner, starting with a standard contract, altering it to fit the different situation, and signing the revised version, seems straightforward. Commercial law is ingrained in their thinking. But traditionally, commercial law scarcely existed in China and certainly indicated bad faith. The early appearance of a draft legal contract was seen as inappropriate or, more likely, irrelevant,

because it carried no sense of commitment. The business clauses might form a useful agenda, but obligations came from relationships, not pieces of paper. Today, returning home with a signed piece of paper is a symbol of progress, but nothing more. The Chinese may be signing a contract to humour their guests. To them, a completed contract may merely be the proof that both sides have grown close enough to develop a trusting relationship. Further concessions may then be requested — a difficult prospect for the Westerner who has shaved his margin down to the bone.

Since many things are influenced by global economy, many differences between western and eastern will still exist for a long time. So understanding it is more important than waiting, because, business has not time to wait.

CHAPTER 5. CHINA CURRENT SITUATION

In this chapter, we describe China's supply chain management, i.e. challenges, reform and future directions. Purchasing situations followed, which include current procurement situation and opportunities.

During the economic reform and transition to market economy, China has achieved unprecedented economic expansion. Currently, China is the world's tenth largest trading nation, accounting for 4 percent of world trade and the World Bank estimates that China could become the second largest trading state by 2020 (William, 2001). Moreover, China is now the world's largest manufacturing base, and will become the world's largest market and largest economy by 2015. In particular, China's accession to the World Trade Organization (WTO) in 2001, China is becoming a more important market in global business environment.

According to The New York Times (2003), the Chinese now buy more cellular phones than any other country. They also purchase about 100,000 Buicks annually and patronize nearly 1,000 McDonald's, KFC, Pizza Hut, and Starbucks outlets. It's therefore no surprise that China's economy is growing by nearly 8 percent per year, despite a global slowdown.

5.1 Supply Chain Management in China

The Chinese government is currently committing large sums of money to modernize China's logistics and transport infrastructure. Local and foreign providers of supply chain services— including State-Owned Enterprises (SOEs)—are rushing to upgrade their capabilities. Shippers and manufacturers are working to develop new and better supply chain capabilities that will help them provide better service at less cost. China's accession to the WTO in 2001, and its increasing liberalization of governmental regulations, mean that modern Chinese supply chains are more imminent than ever.

5.1.1 The Challenges of China's Supply Chains

Compared to other developed countries, China's supply chain has been limited by poor infrastructure; a fragmented and chaotic distribution system; local protectionism; a lack of third-party capabilities; problems with cash flow and accounts receivable; and restrictive laws. These conditions mean there are currently few efficient supply chains in China, and that improvement in these areas will take time. Supply chain management in China today is mainly characterized by three important challenges: infrastructure, regulations, and cultural and business constraints (Robert Easton, 2002, 2003).

Infrastructure challenges

Road

In China, the preferred option for moving packaged finished goods is road transport although it costs more than rail and water, it can offer foreign companies the most flexibility and control over delivery times and the delivered condition of goods. Currently China is investing billions of dollars on upgrading its road transport network. According to the China Business Review (2001) China spent \$26.6 billion on 50,000 kilometers of new highways in 2000, including 4,561 kilometers of new expressways. However, these initiatives still are not keeping pace with the strong demand and the extensive fragmentation of China's road transport industry, where 5.4 million trucks are registered to more than 2 million trucking providers- an average of 2.7 trucks per company. In all of these registered trucks, only 20 percent are containerized, this condition will have to affect the safety of goods, due to open-back vehicles being used.

Moreover, local protectionism is a particularly big issue in road transport industry. Many cities do not allow trucks to enter without licensing, which often can take hours to obtain. In some cases, trucks are restricted to one-way haulage within provinces; many cities regulate operating hours for visiting trucks; and some jurisdictions simply protect the local industry by refusing to license outside trucks.

Rail

Rail is China's cheapest distribution method for shipping commodities, such as grain, coal, chemicals and other bulk materials. — The result of long-standing priorities given to moving military and strategic commodities. Transporting commercial freight by rail generally has been a low priority. However, capacity shortages are routine, resulting in unmet demand for cargo space. According to Accenture between 25 percent and 30 percent of the demand for cargo space on railroads cannot be met, and that approximately 2,000 towns in China are inaccessible by rail. The shortage of space and limited infrastructure lead to slow delivery times, and delivery windows generally are measured in weeks rather than days.

In China, the Ministry of Railways (MOR) controls most of the country's rail service, although China Ocean Shipping Company (COSCO) and Sinotrans (China National Foreign Trade Transportation Corporation) also offer limited service. Traditionally, these entities have focused on passenger services, but an awareness of the need for better rail-freight capabilities is emerging. The MOR has spearheaded several projects to upgrade China's rail infrastructure and increase capacity and travel speed. In the past five years China has invested 246 billion RMB in the construction of 5,700 km of new lines, 4,100 km of dual lines and the electrifying of 4,300 km of existing lines. (Lecture notes)

Air

Airfreight is expected to grow considerably over the long term but is currently plagued by high prices, fragmented routes, limited information exchange among airlines and forwarders, and inadequate cargo capacity, due to a heavy focus on passengers by major Chinese airlines. Over the next 10 to 15 years, China plans to spend billions of dollars on airport construction and expansion, including an air cargo super-hub at Guangzhou that will rival Hong Kong's airport.

Ocean and Inland Water Transport

Ocean and inland water transport is China's most developed distribution sector, with more than 1,200 ocean and river ports offering berths for 33,000 ships — including more than 780 deep-water berths capable of handling 10,000-ton

vessels (China Hand, 2001). China's shipping companies also rank among the world's largest: The China Ocean Shipping Company (COSCO) is the seventh largest shipping company in the world.

However, inland water transport for domestic distribution is underutilized because ports cannot process and manage cargo efficiently, shipping schedules often are inflexible, bureaucratic delays and pilfering are common, and many ports often cannot accommodate larger cargo vessels. Responding to these concerns, China has invested \$1.7 billion in inland water transportation, with the goal of developing an international-standard container network with intermodal capabilities.

Warehousing

At present, the government retains more than 90 percent of warehousing capacity in China. The major warehouse buildings are single-story, warehousing operations is hampered by limited use of automation, inefficient warehouse designs, low ceilings, poor lighting, and unreliable temperature controls. Goods usually are handled manually, without the use of racking. Warehouse automation and use of information technology are rare in China. Consequently, warehousing operations are characterized by poor inventory controls and discrepancies, limited ability to track orders, and high incidences of obsolescence, shrinkage, pilfering and damage. Therefore, access to modern warehousing is a necessity in China.

The Economist Intelligence Unit (EIU) recently reported that, by 2005, the Chinese government aims to build 30 modern distribution and logistics centers around the country. Two such centers currently are being developed in Shanghai, where the local government is investing US\$15 billion to build a world-class logistics business. A third centre is also being built in Beijing.

Information Technology Infrastructure

Some attempts to take logistics online in China have been made. However, the country's general use of IT and the Internet is minimal. According to IDC (International Data Corporation), small- to medium-sized Chinese companies that have invested in E-Logistics spend an average of US\$5,000 per year,

although a small number of multi-nationals spend an average of US\$1.5 million per year. Nevertheless, E-Logistics accounts for less than 1 percent of China's logistics market, compared with 12 percent in Hong Kong (China Hand, 2001). According to a survey by the China Storage Association, 61 percent of Chinese logistics providers do not even have a logistics information system. Among those that do, only about a third provide financial summaries of inventory to their customers (Henry Ho and Chin Lim, 2001).

While most companies in China have been slow to embrace leading-edge technologies, many SOEs and local companies have only started to implement enterprise resource planning (ERP) systems. Yet, without a central repository of reliable transactional data and standardized business processes, it is very difficult to achieve even basic levels of operational excellence. It also is impossible to introduce more advanced supply chain initiatives, for which standardized and readily available data and reengineered processes are a prerequisite. However, among the handful of Chinese companies that have successfully and strategically implemented ERP solutions, most agree that the benefits outweigh the costs. There is no doubt that the use of information technology enables company to achieve the more efficient logistics operation.

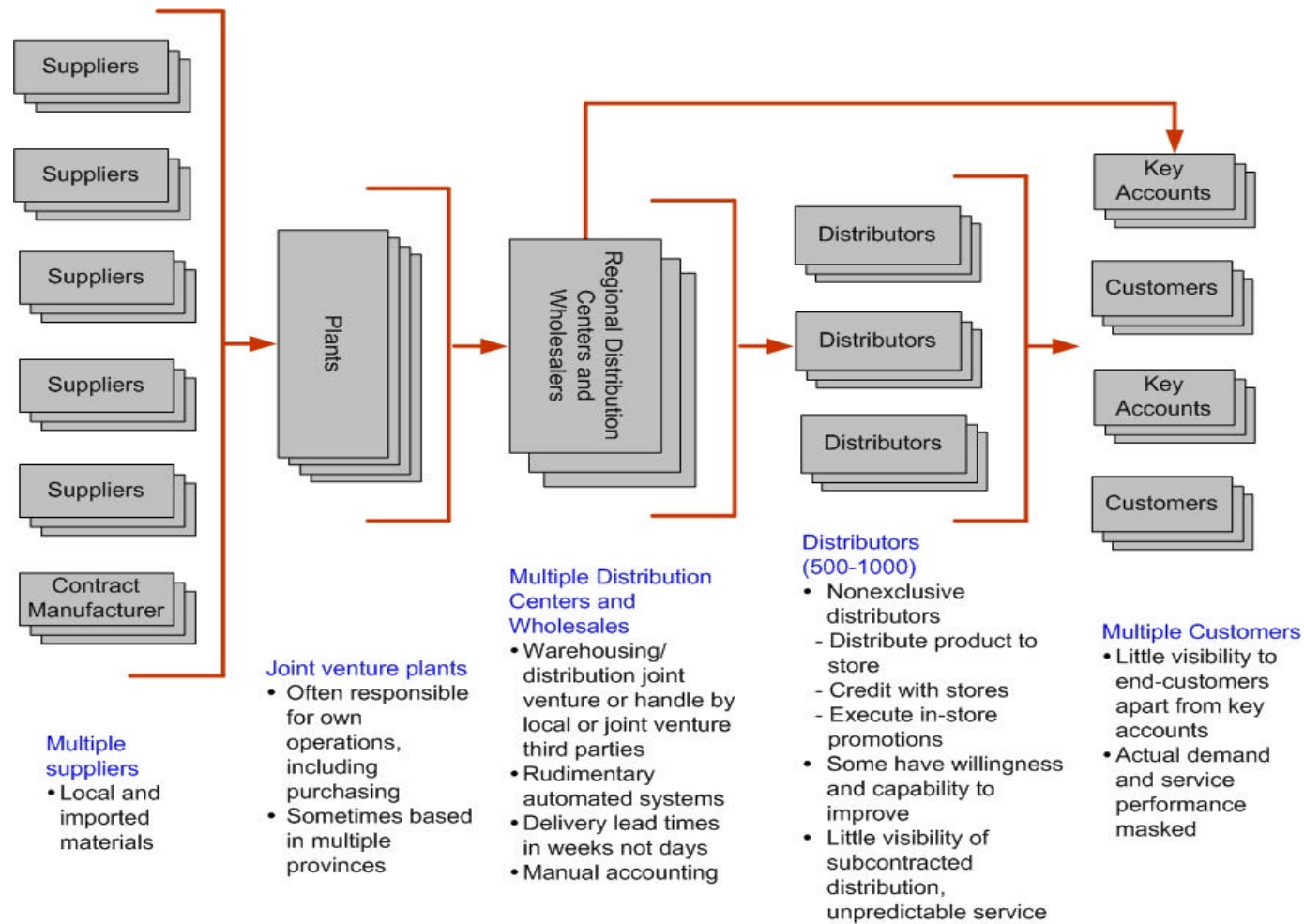
Regulatory challenges

Logistics is still not a well-defined industry in China: Different components of logistics services are the jurisdiction of different government departments. Logistics oversight is split among the State Domestic Trade Bureau, Ministry of Communications, Ministry of Railways (MOR), State and Economic Trade Commission (SETC), State Development Planning Commission (SDPC), Ministry of Foreign Trade and Economic Cooperation (MOFTEC), and the Civil Aviation Administration. Not surprisingly, this sharing of responsibility makes it difficult for many companies (foreign and domestic) to identify which agency handles their sector.

Therefore, companies have to work involved in multiple sectors of the industry. Overlapping jurisdictions, coupled with the scope of business restrictions and nontransparent regulations, further hinder market access. For foreign companies, a single license covering an entire range of activities does not exist.

Complicated and excessive regulatory controls also are common. Today, regulations still prevent foreign companies from distributing products directly to retailers, other than the products they make in China. Foreign companies also cannot own or control their own distribution channels. In some industries, these restrictions are particularly tight. Figure 5-1 shows that foreign companies have to rely on local companies to distribute products through multitiered wholesaler channels.

Figure 5-1: A typical supply chain network for a consumer products company operating in China.



Source: Robert Easton, 2003

Under the multitiered structure, logistics service levels cannot be efficiently controlled and point of sale activities cannot be timely monitored, due to the fact that a number of subcontractors are used by distributors. However the consumer goods industry in China provides a good example of distribution issues and practices. 90 percent of the country's retail outlets are "mum and pop" stores with about 10 square meters of floor space and capacity for one- to two-days stock of fast-moving goods. Some companies have tried distributing direct to retailers. For example, within the multitiered wholesaler structure, many second- and third-tier wholesalers operate on slim margins of 1 percent to 2 percent, yet they provide the service to the customer. Some manufacturers of strong brands have found that they can eliminate one or two layers from this distribution system by working directly with bottom-tier wholesalers to service the retailers and by dealing directly with selected key accounts. The resulting increase in physical distribution costs has been more than offset by the extra margin resulting from fewer layers.

In general, existing regulations in China prevent foreign companies from doing business under a global standard. Following on China's WTO entry, the government will gradually free from various restrictions, in this way foreign companies will be operate in the entire supply chain easier than ever.

Cultural challenge

In China, three culturally based factors can have a crippling effect on supply chain efficiency; these will be difficult for multinational corporations to overcome.

- "Win-lose thinking" dominates business, especially when dealing with suppliers. The road transport industry in China is a classic example: The lowest cost solution generally is given priority without regard to service.
- Trust is the basic foundation for open sharing of information and collaboration between supply chain parties. Unfortunately, trust among corporate entities is largely lacking in China.
- People generally mind their own business: They stay within their own boundaries and avoid challenging the way others do business, especially superiors. This mind-set exists within companies, across different departments, and outside the company (i.e., between trading partners). By inhibiting coordination between departments and trading parties, an absence of trust prevents supply chain value from being fully tapped.

In addition to the above cultural characteristics, informal transactions such as incentive payments are common in China. These practices spoil some supply chain improvement initiatives, particularly for the business based on information transparency. For example, undoubtedly, initiatives to improve the

buying of materials and services (and the information sharing that follows), offer big dollar opportunities to the Chinese company, and the company can obviously benefit from the smooth operation and the transparent information exchange, however, the officers from Chinese companies may sometime pose a significant attitude of “not willing to cooperate” or indirectly show that there are some difficulties existing in the operation, therefore to hint to the procurement officials to pay incentive payments for smooth operations.

5.1.2 Driving the Reform of China’s Supply Chain

Despite the fact that China’s supply chain is facing challenge in infrastructure, regulatory, culture, and even some other barriers, there are three strong causes driving the change for an optimistic and competitive supply chain (Robert Easton, 2003).

1) The power of the market growth

Currently China's population is 1.2 billion, which is expected to grow by roughly 15 million people per year. The country's gross national product (GNP), currently US\$816 billion, also is forecast to increase— by roughly 8 percent to 9 percent per year. In addition, 400 of the world's top 500 enterprises are investing in China; from 1995 to 1999, US\$230 billion was invested (Patrick Powers, 2001).

Concurrent with this growth, Chinese industries are consolidating for more efficient and reliable services. By aggregating volume and centralizing procurement, retailers have been able to exert sufficient force to secure favorable payment terms, timely delivery, priority service and technology advancements such as bar coding. Retailer demands also support the supply chain, forcing shippers, manufacturers and distributors to upgrade their capabilities. In the retail and household appliance market, companies and consumers will demand more and faster changes. History shows that huge market demand is inspiring retailers to push into new markets and is intensifying the call to modernize China's supply chain infrastructure (Patrick Powers, 2001).

2) Liberalization of government policies

The Chinese government has been quick to acknowledge that a lack of development in the logistics and transportation sectors is a major impediment to industrial growth. In fact, modernization of logistics and transportation is one of the top three priorities in China's Tenth Five-Year Plan (2001-2005). This current blueprint for the modernization of China contains clearly stated intentions to upgrade road, rail, air and seaport capabilities, as well as intermodal links. The country's state and provincial governments are making significant investments to upgrade infrastructure and build logistics centers and hubs to promote consolidation and collaboration.

To accelerate the modernization process, some regulations appear to have been relaxed. For example, the Ministry of Railways announced changes in regulations to encourage foreign firms to invest in railway infrastructure. In the most recent move to relax regulations, the Ministry of Foreign Trade and Economic Cooperation announced: "In order to promote the opening and healthy development of international trade and the modern logistics industry, some piloting of foreign investment in the logistics industry will be allowed in some domestic areas. Foreign Invested Logistic Companies are able, based on actual demand, to organically integrate the activities such as transportation, warehousing, loading and unloading, assembly, packaging, distribution, information processing, and import/export to form an integral supply chain so as to offer a multifunctional and integrated service." Although the pilot is restricted to certain locations and has a number of conditions attached to it, it is significant in that it represents the opening of China's logistics system and shows that the winds of change are clearly in progress (MOFTEC, 2002).

3) China's accession to the WTO

China's entry into the WTO, the country will progressively remove restrictions that prevent foreign companies from participating in transportation and distribution, the detail is showed in figure 5-2. The accession of WTO also will stimulate economic growth by opening China's economy to competition and encouraging collaboration between local and foreign companies. After WTO

entry, within a year, foreign companies will be permitted to distribute imported products and hold majority shares in logistics joint ventures. Within three to four years, all restrictions on primary and ancillary logistics services will be phased out, making it possible for foreign companies to set up 100 percent foreign-owned subsidiaries covering a variety of supply chain management functions.

Figure 5-2: Post-WTO Accession Regulations

	By 2002	By 2003	By 2004	By 2005	By 2006	By 2007
Trading Restrictions	<ul style="list-style-type: none"> Minority Ownership/joint ventures (JVs) to engage in wholesale of both import and domestic products Foreign Investment Enterprises (FIEs) can distribute products made in China 	<ul style="list-style-type: none"> Lifting of foreign majority geographical and quantitative restrictions Some geographic restrictions for retailing 	<ul style="list-style-type: none"> Lifting all restrictions Establish Wholly Owned Foreign Enterprises (WOFES) All geographic restrictions lifted for retailing 		<ul style="list-style-type: none"> Books, chemical fertilizers, crude oil and processed petroleum phased in over 3 to 5 years Few limitations No restrictions for retailing 	
Shipping and Freight Forwarding		<ul style="list-style-type: none"> Majority ownership 			<ul style="list-style-type: none"> Wholly owned subsidiaries Foreign companies not limited to international freight business 	
Maritime Cargo Handling, Customs Clearance	<ul style="list-style-type: none"> Foreign-PRC ventures permitted 					
Rail Transportation	<ul style="list-style-type: none"> Minority ownership/JVs 		<ul style="list-style-type: none"> Majority ownership 			<ul style="list-style-type: none"> Wholly owned subsidiaries
Road Transportation	<ul style="list-style-type: none"> Minority ownership/JVs 	<ul style="list-style-type: none"> Majority ownership 		<ul style="list-style-type: none"> Wholly owned subsidiaries 		
Warehousing and Storage	<ul style="list-style-type: none"> Minority ownership/JVs 	<ul style="list-style-type: none"> Majority ownership 		<ul style="list-style-type: none"> Wholly owned subsidiaries 		
Courier Services		<ul style="list-style-type: none"> Majority ownership 			<ul style="list-style-type: none"> Wholly owned subsidiaries 	

Source: Robert Easton, 2002

5.1.3 Future Directions of China's Supply Chain

The expanding market and increasing demand, favorable government policies, and membership of the WTO will drive significant changes in China's supply chain landscape over the next five to 10 years (Robert Easton, 2003).

Increasing investment to logistics sector. Chinese government is making great efforts and huge investment to improve its infrastructure facilities, building large-scale logistics parks and platforms to meet the further expanded operation demand. In Beijing, a highly effective logistics platform is in process, and will be finished in 2010. Following WTO accession, the logistics sector is gradually being opened for foreign companies. This will attract more foreign companies investing in logistic business.

Turning the traditional logistics companies into the specialized logistics operators. Some enterprises are making great efforts to transform from traditional to modern, integrated logistics service providers. China also will have three or four years to restructure its companies and industries before foreign providers become a significant force.

Rapid changes in China's business and consumer environment will weaken the emphasis on guanxi (relationship) Strong networks and relationships are

important throughout the world, but China's emphasis on guanxi has often come at the expense of commercial realities. This will change.

Competition and consolidation will intensify. This will be particularly true in consumer goods, where significant consolidation already has occurred in the home appliance, television, and beer sectors. In China's planned economy, even the smallest manufacturer has its own truck fleet and warehouses, which implies that significant duplication of logistics assets exists.

Distribution channels will not proliferate. Given the time and expense, it is unlikely that shippers will rush to develop their own distribution channels and wholesale networks. Most will continue to rely on local partners to reach second-tier cities and remote regions. They also will look for ways to de-layer existing wholesaler structures and build long-term relationships with major distributors that already operate distribution networks.

Third-party logistics providers will mature and consolidate. The opportunity for third-party logistics providers to incorporate wholly-owned foreign enterprises within three years of WTO accession is significant. It should attract foreign firms to an industry projected to grow by more than 30 percent per year for the next five years — and one that is very willing to invest in the infrastructure projects needed to create a modern, national, logistics network.

Many players already are joining the fray, including traditional Chinese logistics companies, new logistics companies, the internal logistics departments of Chinese companies, and Foreign Service providers. This will force a consolidation of the entire industry, as it did in the United States and Europe.

Outsourcing will grow in scope and acceptance. Outsourcing is underdeveloped and highly fragmented in China. According to Henry Ho (2001), third-party logistics service providers have captured only 2 percent of China's overall logistics business, compared with 8 percent in the United States and 10 percent in Europe. This will change significantly over the next five to 10 years.

IT is becoming more important. Information technique is not only a kind of tool in supply chain construction, but also an important part and foundation of supply chain of international operation of enterprises. IDC forecasts that the annual growth in China's information technology market will increase from 24.4 percent in 2001 to 28.1 percent in 2002 (Wilson Wan, 2001).

It is true that there is still a large gap between Chinese logistics development and international logistics standards. However, today's China is greatly concerned with and enthusiastic about the logistics industry, in particular, after the WTO entry. It could be said that logistics and supply chain management

have become a new industry of great vitality, and this has caused high attention from various aspects of society including government institutes, manufacturers, wholesalers, logistics service providers, educational organizations, and research institutes. With economic globalization and information technology development, the integration of international logistics will become more and more obvious. Chinese logistics will necessarily be a part of this global integration process. A special focus to implement efficient supply chain is greatly helping China to spur its growth.

5.2 Purchasing in China

5.2.1 China's Current Procurement Situation

The robust development of Chinese economy promotes the development of China's procurement. Purchasing in China consists of government procurement and company purchasing, also of purchasing in China by domestic and international companies, and purchasing abroad by domestic and international companies.

In 2002, purchasing by Chinese government and domestic and foreign invested companies in China from foreign countries was US\$ 300.16 billion, 24.27% of Chinese GDP in the year, and purchasing by foreign governments and foreign

companies from China was US\$ 320.64 billion, 25.92% of Chinese GDP in 2002. Foreign invested companies in China sourced from China in 2002 US\$ 169.94 billion of products, an increase of 27.4% over that in 2001, and the foreign invested companies in China made a purchase abroad of US\$ 160.29 billion, an increase of 27.04% over the last year. The procurements from both China and foreign countries made by the foreign invested companies in China accounted for 13.73% and 12.95% of GDP in 2002 respectively. The fact that the import and export volumes increased sharply in the first year after the accession to WTO revealed that the sourcing scales by the multinational companies from China and by Chinese companies from abroad can be much more than that in 2002. At the same time, China's government procurement has just started, so there will be a dramatic increase in government procurement with the expansion of government budget scale of China. Now the increase of the proportion of government procurement to the government budget expenditure is reinforced by related laws. With the adoption of internationalization strategy, Chinese native companies will enlarge their sourcing abroad too, for example, some big and famous brands of China, such as PetroChina, Sinopec, Shanghai Bao Steel, China Telecom, Haier, Lenovo, etc., have set up their own worldwide sourcing network. (He Mingke, 2003)

5.2.2 Opportunities for the Development of China's Purchasing

The purchasing scale, advantage and effectiveness of a country are enslaved to that of the economic development of the country. The progress of China's economy provides a wide market for foreign products, while offering plentiful competitive goods, which can be sourced by overseas firms. "Sourcing in China and Selling in China" is the result of globalization of Chinese economy, which creates great opportunities for China's purchasing. The development of China's purchasing is supported by the following facts: (He Mingke, 2003)

5.2.2.1 Global Manufacturing Sites in China

By 2002, more than 400 firms had already invested in China, nearly 400 companies have set up research and development centers among FORTUNE 500 top companies. The leading manufacturers in the world in the fields of integrated circuit, computer, information product, automobile, etc., such as MOTOROLA, IKEA, VOLVO, NOKIA, SONY, SIEMENS, INTEL, IBM, GE, BELL, SAMSUNG, GM, HONDA, TOYOTA, VOLKSWAGAN, etc., have set up their world manufacturing centers in the following Chinese cities: Shanghai, Beijing, Guangzhou, Tianjin, Shenzhen, Wuxi, Suzhou, Nanjing, Dalian, Qingdao and so on. By the end of 2002, INTEL had made an investment of more than US\$ 500 million in the IC Assembly plant in Shanghai, and plans to set up a manufacturing base in Xi'an, Shaanxi province. From May of 2003, it has begun to sell Pentium 4 processors made in Shanghai, China to the world.

(Wang Yuzhong, 2003)

The reasons for foreign firms to build their global manufacturing sites in China are as follows:

- 1) China is the biggest potential market opened most recently in the world.

The manufacturing sites built in China can help to meet local market demands;

- 2) China's economy has been developing at an average annual speed of 9.5% for almost 20 years. China's economy development will continue for another 20 years. In addition, the low price, low inflation and stable policies attract foreign investors to make long-term investment without worries.

- 3) The labor cost in China is much low, but the quality of the human resources is very high. There are more than 2 million new graduates in China every year. Comparably, the salary of a common worker in China is 50 US cents per hour on average, but it is 2.3 US dollars in Mexico and 80 US cents in India, therefore, Chinese workforce has obvious comparative advantages in the world, and the manufacturing cost of products in China is low. Generally speaking, the sourcing cost in China can be 20%-50% lower than that of similar products in other countries. (Zhang Tingbin, 2003) In a word, it is suitable to make products in China and sell them worldwide.

- 4) China is opening all-round to the outside world with the most attractive foreign investment policies and the most favorable services and infrastructure. After the entry into WTO in 2001, China's economy is deeply integrated with world economy; Chinese government protects the overseas interests by enforcement of laws.
- 5) The Pearl River Delta, the Yangtze Rive Delta and the Bohai Sea Belt of China have already been invested heavily by foreign investments. They are the main world manufacturing sites in China with strong aggregation effect, from where all foreign investments have gained good returns. Thus, The majority of foreign investors in China plan to enlarge the proportion of investment and sourcing in China. At the same time, export-oriented industrial structure and supply chains have been established in China, so any kind of products can be made in China. Foreign manufacturers in China can source locally so as to reduce sourcing cost of raw materials made by multinational companies (MNC) in China.
- 6) China has gradually established the market economic system, which helps to integrate Chinese market with global market. More MNCs plan to set up their manufacturing sites in China because they hold optimistic views on the long-term development of China.

5.2.2.2 Global or Asian-Pacific Sourcing Centers in China

Now China is a location of global or Asian-Pacific sourcing centers for more than 200 MNCs, nearly 30 famous MNCs set up their global or Asian-Pacific procurement headquarters in Shanghai alone. (Zhang Tingbin, 2003) They have expanded their purchasing scales in China, for example, Wal-Mart will purchase US\$ 15 billion of goods in China in 2003. It was US\$ 2.5 billion sourced by Dell in China in 2002. Other well-known multinationals, such as Hewlett-Packard, General Motors, General Electric, Carrefour, etc., spend yearly above 1 billion US dollars in sourcing in China. Products and services sourced in China by MNCs vary, from satellite launching, airplane empennages of Boeing, biggest oil tankers in the world, rice crossbreeding technology, silk clothing, Christmas trees to toys for children. In order to provide convenience for MNCs in procurement in China, multinational sourcing centers have been built in some developed cities of China, such as Shanghai, Beijing, Guangzhou, Tianjin, Shenzhen, Dalian, Qingdao, Nanjing and so on. Governments, cities and companies of China are all ready for serving large-scale procurement by more foreign firms. In fact, many cities hold international sourcing fairs every year. The Chinese Export Commodities Fair in Guangzhou has already been in operation 93 times. Chinese suppliers or foreign suppliers in China are the dependent sourcing channels of MNCs.

5.2.2.3 Sourcing Abroad by Chinese Government and Companies

Nowadays, Chinese people, especially the youngsters, are proud and even fans of consuming foreign brands. Chinese consumption is becoming increasingly internationalized. Every fashionable product or service in the world must be going to prevail or has already prevailed in China. Haute Couture of Paris may be sold better and more expensively in China than in Paris. There are steady consumption colonies in China for well-known Swiss watches. These fashion-oriented consumptions create a large group of consumers of high-grade goods and services in China. According to the ambitious infrastructure construction plan of China in the coming 20 years or more, Chinese government and companies will source, by international bidding, asphalt originated from the Trinidad Lake of Trinidad and Tobago, maglev or high speed train system and its technology and Automatic Fare Collection (AFC) system of subway from Germany, Airbus from Europe, Boeings from America, nuclear power and airport management technologies from France, computer hardware and software from America, heavy construction machinery from Japan, etc. Because Chinese market has been an internationalized market, to satisfy these demands, sourcing abroad is a must; otherwise, the related multinationals had better establish factories in China to produce the products locally!

5.2.2.4 Enforcing Government Procurement Law

Sourcing of goods and services listed in government budget should be open to the world. The amount of Chinese government procurement was US\$ 12.7 billion in 2002, 0.97% of GDP in that year, which will be up to US\$ 29.3 billion in 2005. Compared with that in developed countries, the proportion of Chinese government procurement is still low, but will expand gradually in the future, there are plenty of opportunities for international suppliers.

The Procurement Law of the People's Republic of China, the first purchasing related law for regulating the behavior of government procurement, was implemented on January 1, 2003. The law includes the regulations and mandatory requirements for the behavior of Chinese government, the enforcement of which is the incorporate representation of China's commitment of implementing Government Procurement Protocol with WTO. Accordingly, the relevant laws have also been promulgated, such as the Bidding and Tendering Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, etc.. These laws play important roles in eliminating corruption in procurement, reducing government procurement cost, increasing efficiency and maintaining market order in impartial competition, and providing legal guarantees for international suppliers to participate into competition in government procurement.

5.2.2.5 Favorable and Attractive Foreign Investment Policies and Gradually Perfected Investment Environment

Chinese government knows definitely that the development of China's economy relies heavily on investments from private sector and foreign channels. Therefore, a lot of economy and technology development zones have been set up in many cities, these zones are all free-trade areas, where very favorable policies are applied, including tax reimbursement for export, reduction or remittance of some expenses and taxation when purchasing made in international sourcing centers in China, favorable and flexible foreign currency management policies, preferential policies in land renting for the building of sourcing centers and in talents employed by the sourcing centers in China, etc.

In spring and summer of 2003, China was attacked by SARS, a new type of virus to human beings. As a result, businessmen making inquiries for quotations negotiate with their remote partners and place orders on net. Accordingly, e-commerce has developed at high-speed in China in this period, which facilitates the development of China's purchasing, because e-commerce is a facility of purchasing. In order to support the further magnification of foreign trade and rapid progress of domestic economy, Chinese government has strengthened the construction of roads, railways, seaports and airports. To adapt

to the fast growth in air transport of passengers and cargo, China is transforming three trunk airports in Beijing, Shanghai, Guangzhou into hub airports, meanwhile, reconstructing and building other airports to spoke airports accordingly so as to shape into a hub-spoke airport network. China has also laid out comparatively perfect logistics infrastructure, such as logistics centers and distribution centers, which can support large-scale and rapid procurement and distribution operations. Chinese logistics industry is growing at a 20%-30% increase every year. (Morgan Stanley, 2002) Now most of their foreign logistics partners of transnational purchasing firms have come to China with them, at the same time, the local third-party logistics service providers of China are also advancing rapidly. At present, the Chinese customs is implementing the Integrated Customs Clearance Plan to integrate order processing, taxing, auditing, cargo inspection, quarantining, information processing and other related operations in customs clearance. According to the new plan, the cycle time in Shanghai customs for customs clearance is shortened to 4 hours at the quickest from 12 hours previously. Other customs in China are taking Shanghai as an example; the Chinese government is determined to perfect the logistics environment required by global manufacturing sites and global sourcing centers.

5.2.2.6 Bigger Role of Non-governmental Organization

To strength the self-discipline and management of Chinese purchasing industry,

the central government approved to establish the China Federation of Logistics & Purchasing (CFLP), the mission of CFLP is to promote the growth of Chinese procurement industry, the increase of purchasing efficiency, the reduction of procurement cost, the recommendation of international products and services, the improvement of the quality of products manufactured in China, the elimination of procurement corruption, the performance of part of government function, etc. So far, members of CFLP are all famous companies in purchasing, logistics, transportation, warehousing, distribution, IT, consultation, education, exhibition, and other services related to logistics and procurement. CFLP plays an important role in helping the domestic and foreign enterprises and government to deal with procurement business in China and in the world.

All in all, China is a big and rare emerging market in the world; China's market is a market for global manufacturers, suppliers, distributors, consumers and other operators who provide products, services. It's a market for profit-seeking investors! When large groups of multinational companies set up their global manufacturing sites and global sourcing centers in China, purchasing in China becomes economical. With the promulgation and enforcement of related purchasing laws, the perfection of logistics infrastructure and the function of non-governmental organization like CFLP, Chinese procurement must contribute greatly to the development of China's economy.

CHAPTER 6. ANALYSIS

This chapter presents the analysis of our empirical results. We first direct the information gathering in China, followed by the Chinese supplier selection principle and steps.

6.1 Information Gathering Methods

Now, you are in China, which has her special characteristics. Undoubtedly, purchasing in China has quite more risks and challenges because strange culture, different language, and dissimilar ethics viewpoint are obstacles when Multinational Corporations new enter China.

When a Multinational Corporation selects the Chinese suppliers, the first important thing is information. Information about available suppliers can come from a variety of sources that include personal, internal, published, and international sources. It is difficult to collect information in China, few companies can supply market professional investigation, just enterprise does it by themselves. Government monopolizes more information and on cooperative conditions always appeared. In western countries, professional companies can supply paying investigation report and government supply more public information free. But you are in China that has its own particular culture and

condition different to yours, so how to collect legal intelligence and the grey information (The information you really needed but can not get it from public way) is you first problem. Once a list of supplier candidates is drawn up from these various sources, a preliminary screening is carried out to determine which potential suppliers appear to be qualified to provide the required material and services. Supplier selection processes differ depending upon a variety of factors that organizations are concerned with. The related factors about the proper way to collect the unpublished information and how to establish and operate the people network of enterprise are raised.

We looked at methods of gathering information for an approval vendor selection. Respondents were asked to indicate the methods of information gathering they used for each information category, or past practice. Further, they were asked to consider a hypothetical vendor selection and to identify, for each category, the information-gathering methods that would produce the most significant information, or ideal practice. There is quite a bit of consistency in the highest frequency responses across categories (see Table 6-1). Questions for written response, Request for proposal & bid, and Telephone references were frequently selected. Data from vendor, e.g., publisher list, number of titles handled by class, etc. was frequently selected in the Approval management and Acquisitions categories. The methods frequently selected are quite consistent with the methods most frequently used in the past. The Vendor's financial

report is the one information gathering method that emerges in ideal practice that was not among the top choices for past practice.

Table 6-1: Information Gathering Methods That Produce the Most Significant Information

Corporate reputation and business practices
Telephone references
Vendor financial report
Request for proposal & bid
Approval plan management expertise
Data from vendor, e.g., publisher list, number of titles handled by class, etc.
Questions for written response
Acquisitions services
Government publication
Personnel relationship

Source: Linda A. Brown, 1998

Lastly, we looked at those methods where the largest increases or largest decreases in frequency occurred when comparing past practice to ideal practice.

Visit to vendor headquarters and the Vendor's financial report received the

highest percentage increase. Visit to vendor headquarters was not among the most frequently selected methods. Vendor's financial report also increased in frequency for every category. Those methods that dropped in frequency were Vendor advertising & brochures and Conference exhibits. Though these may be initial information sources, they are seen as not necessarily producing the most significant information.

Everything is based on relationship in China. If you want to know real conditions, how to establish relationship is key for your business success in China.

First of all, it does not have to be based on money. Treating someone with decency while others treat him/her unfairly could result in a good relationship. Second, it starts with and builds on the trustworthiness of the individual or the company. If a company promised certain things and delivered as promised, the company is showing trustworthiness and the Chinese would be more inclined to deal with them again. Third, being dependable and reliable definitely strengthens the relationship. It is like being friends, and friends can count on each other in good and tough times. A good example is related to the 1989 political instability in China. Companies that stayed found their relationship with the Chinese strengthened as they were viewed by the Chinese as friends who did not abandon the Chinese when they needed friends. Fourth, frequent

contact with each other fosters understanding and emotional bonds and the Chinese often feel obligated to do business with their friends first.

"Guanxi" or relationship with high rank officials are still important for doing business in China, though declining to some extent. Political and administrative interference in business have declined. More and more companies have found themselves on their own surviving without government subsidies. If they are not getting any help from the government they are more reluctant to be influenced by government officials. So government "Guanxi" may have less influence with these companies. Since "Guanxi" and relationship could function as an information network, companies with wide "Guanxi" and relationship networks often have much higher performance than companies with little or no relationship with the Chinese.

The logical development of close relationships is the Chinese concept. The kernel of it is doing business through value-laden relationships. In a highly centralized, bureaucratic state, the use of personal contacts was the only way to get things done. Guanxi is the counterpart of a commercial legal system. Where the latter is relatively weak, as in China, the need to rely on guanxi will be strong. As long as the relationship is more valuable than the transaction, it is logical to honor it. The idea of a friendship leading to business is attractive. But Easterners who are familiar with guanxi are more cautious than Western

converts. The obligations of guanxi are very real. In the wrong place, at an inappropriate time, with unsuitable people, the obligations can become a trap it is hard to escape.

6.2 The Principle

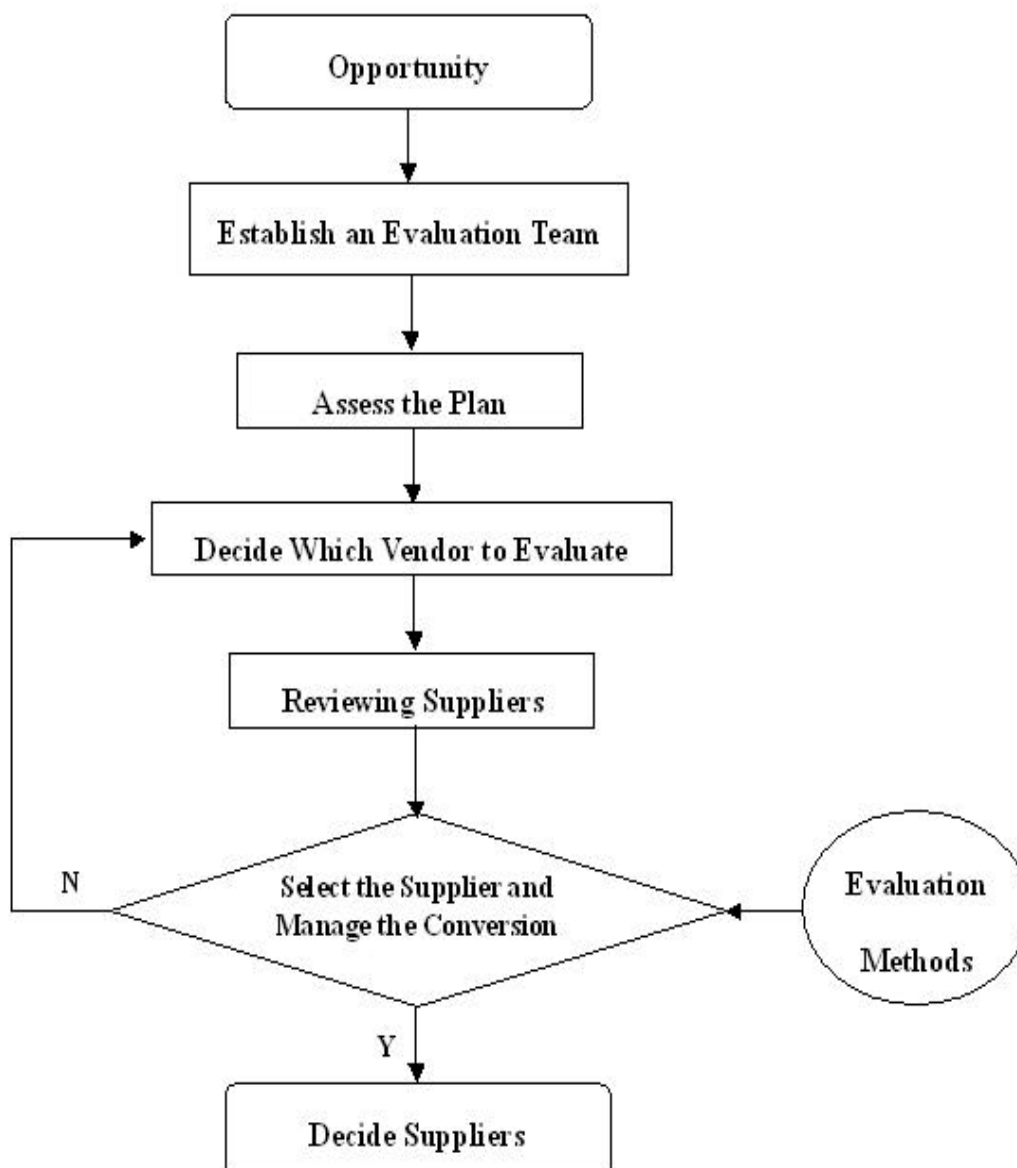
China has global influence in most industries. “Made in China” also become a comprehensive choice for many Multinational Corporation if they want to get more competitive power.

In Multinational Corporation, the basic principle of supplier evaluation is “Q.C.D.S”, which means quality, cost, delivery and service. Firstly, confirming suppliers, which have built a steady and effective quality management & assurance system, and have the essential equipment and technology for their production, is basic requirement. Secondly, it can reduce the cost by analyzing the cost and negotiating price. Thirdly, the enough production capability, sufficient human resource and potential of production enlargement are important factors which will influence delivery. At last, supplier’s service record also needs to be seriously considered.

6.3 The Steps

Initial selection of suppliers and the periodic evaluation of supplier performance are two of most significant decisions in industrial purchasing process. These decisions involve the application of buying motives as evaluative criteria in comparing the competitive offerings of potential or current suppliers. When a Multinational Corporation selects Chinese vendors, they can use some steps to describe the process of supplier selection (Figure 6-1):

Figure 6-1: The process of supplier selection



Source: Summary from many books and our experience

Step 1: Opportunity Analysing

Multinational Corporations can buy almost everything in China. What do they need to purchase? When answering this question, they must make purchasing projects as soon as possible. It is necessary to find potential products and suppliers, and filter all chances' feasibility. Building a management system will

benefit a company to renovate attitude to China's fast changing market environment.

Multinational Corporations can get contact information from various public information and channels. These channels include supplier's initiative introduction, media advertisement, Internet searching, etc. According to analysis of supplier's information, they can evaluate technology capacity, supply stability, resource reliability, and systematic competitive capacity, and draw a primary screen about their potential suppliers by analysing target market, finding out who is leader of market, realizing trend of market development, and knowing each supplier's position in the market. Then they can make an initial review list after eliminating some unsuitable suppliers.

Step 2: Establish an Evaluation Team

Conducting a vendor evaluation is to identify an expert to oversee the project—someone seasoned in vendor capabilities and fees. Whether you select someone from within the organization who has been through the process before or an outside consultant, a good candidate will manage the project from start to finish, guiding you through the process objectively.

A team includes those with the ultimate authority to hire a new supplier or

forward the recommendations to senior management for approval. The team members may come from purchasing, quality, production, and engineering departments and have team cooperative energy, professional skill, who not only supply professional knowledge and experience, but also benefit internal communication and cooperation with the same auditing experience. Although the internal or external consultant will manage the project and guide the decision process, the ultimate responsibility for selecting the vendor lies with the plan sponsor. The team should represent the interests of participants and internal administrators.

One of the team's more important responsibilities in the vendor process will be to decide which vendor services are the most critical in meeting participant and company needs. Those needs must be converted into specifications that will form the basis on which all vendors are objectively evaluated.

Step 3: Assess the Plan

Before you start the evaluation process, you will need to assess your current plan and vendor. The detailed time schedule developed in the assessment phase is predicated on the conversion date. Make sure this schedule is realistic. Unrealistic expectations and changing priorities can affect that schedule and harm the relationship. A time schedule should be like a contractual commitment:

The plan sponsor and the vendor must agree and follow it for the success of the project.

The plan participants can provide valuable feedback as current. In addition to the information you receive from participants, review these five major areas.

- Plan Design

Does the plan meet current legislative and regulatory requirements? Is it adding value in purchasing and producing?

- Operations

Are there additional services you want to outsource? Are you lacking any necessary technology? What do you like most about the services offered by your vendor? What plan reports or tools do you need?

- Communication

Do participants understand the plan? Do they receive their statements in a timely manner? Do statements contain useful information? Are there gaps in the current communications program?

- Fees

How much are you paying for the services you are receiving? If you have had the same supplier for a long time and have not renegotiated the plan fees, now might be the time to do so.

Step 4: Decide Which Vendor to Evaluate

A vendor search should be objective, and productive. Internal pressures and constraints always exist-company policies may impede the team's ability to make changes. Pre-qualification is the process of reducing the set of 'all' suppliers to a smaller set of acceptable suppliers. This process may be carried out in more than one step. However, the first step always consists of defining and determining the set of acceptable suppliers while possible subsequent steps serve to reduce the number of suppliers to consider. Basically therefore, pre-qualification is a sorting process rather than a ranking process. However, the subtle yet important difference between sorting and ranking is often not explicitly made in the purchasing. We acknowledge that they could be used in the final choice phase but that their sorting nature makes them more suitable for pre-qualification.

Armed with the assessment results, you're ready to select which vendors to evaluate in addition to the incumbent supplier. Although a typical search should include a thorough review of several suppliers, exactly how many you review will depend upon the number of plan participants and the value of plan assets.

You will want to develop a request for proposal (RFP) to collect information from the vendors. This will include questions in the following categories:

- Organization/market focus
- Recordkeeping/administration
- Regulatory compliance/reporting
- Trustee/custodial
- Communication/education
- Conversion/implementation
- Investments
- Company stock (if applicable)
- Fees
- References

No two vendors quote their fees alike. As part of a thorough evaluation, identify and quantify all fees and expenses. This is usually the most difficult part of the evaluation process but the most important for a meaningful evaluation. As a basis for comparison, you have to know what you are currently paying and what you should expect to pay. In the end, you want to know the total plan expense. Finding the lowest cost provider is rarely the highest priority for a vendor search. Usually, the highest priority is selecting the vendor that provides the greatest value.

You want the highest quality administration service that offers flexibility;

diverse, quality; and costs that are consistent and fair for the services provided. The team will want to weight each category in order of importance. These weights, when applied to the answers provided by the vendors, will provide an objective means for analyzing and ranking the suppliers for final selection.

Step 5: Reviewing Suppliers

It is important to evaluate supplier's management system, for instance, quality record, sales contact reviewing, equipment management, measure management, etc. Multinational Corporations also expect suppliers to understand and fully comply with all applicable international, national, state and local laws and regulations, including, but not limited to, all environmental, health and safety (EHS) and related laws and regulations. In addition, suppliers must agree to abide by all rules, including but not limited to, all applicable EHS policies, procedures and guidelines. If possible, it can reach every aspect and does not miss anything. At the end, the team summarizes the advantages and shortcomings of suppliers and hears the supplier's explanation.

The next is sending inquiry price file to eligible suppliers, including blueprint and standard, specimen, quantity, approximate purchasing period, delivery date. When receiving quoted price in stated time, purchasers need to clarify doubts and analyse items. Buyers can get initial understanding of rationality according

to compared differently quoted prices. Before price negotiation, you need to confirm target price but must ensure supplier's logical profit. At the same time, price negotiation is a durative process. Suppliers have their own study curve, which means their cost will decrease after a period of supplying. Actually, each supplier is expert in their own fields. More suggestions from suppliers will give you unexpected gains. It can reduce cost when making strategy alliances with excellent suppliers. Another important problem is recessive cost. Purchasing period, storage, and transportation are always sightless costs, so admit suppliers in your own logistics system is very important. Then you must think about suppliers' copulate capacity.

When you are in China, supplier's personal conditions are a very important factor that must be faced. Their relationship with government, personal credit standing, social responsibility, public praise in industry, and so on, are all you need to evaluate but it is difficult to operate in fact. You can only know him or her in contact process by you own experience. Professional local culture knowledge is also needed.

Step 6: Select the Supplier and Manage the Conversion

The preliminary evaluation process will enable you to cut the field of vendors in half. The next step is to invite the finalists to make formal presentations. This

gives the team an opportunity to meet the suppliers, review firsthand their communication materials and ask questions pertinent to your plan and participants. Often this presentation is the deciding factor because the finalists will differ only subtly.

Before you make your final selection, it is important to review service agreements for consistency with the proposal and for areas where there should be fee concessions. Also, consider guarantees to provide incentives for the vendor to meet service expectations. They can provide an "inside track" on the supplier and can help you avoid pitfalls during the conversion once a suitable supplier is selected.

Winston Churchill once said, "However beautiful the strategy, you should occasionally look at the results." If you are not satisfied with your vendor, then take control. It's critical to measure the participants' understanding and appreciation of the plan and the overall plan participation level. Many vendors will commit to levels of participation and offer concessions if they are not met.

A supplier evaluation does not always result in a change in vendors. At a minimum, you will know you are getting the best from your current vendor, and you will have satisfied your fiduciary requirements. Like any other engine, it helps to keep it tuned up for optimal performance.

6.4 Negotiation with Suppliers

Two broad theoretical perspectives, i.e., game theory and social exchange theory, can be isolated from the voluminous negotiation literature. (Bagozzi, 1978; Bonoma & Johnston, 1978; Dupont, 1996; Ghauri, 1983; McCall & Warrington, 1984; Raiffa, 1982; Siebe, 1991). Game theory deals with understanding of rational behavior in real conflict situations with the focus on maximizing the party's substantive outcomes in negotiation. Relationships between negotiating parties are called "win-lost" game. Social exchange theory sees negotiation as a social exchange process by which negotiating parties interact in a problem-solving manner to reach a "win-win" agreement.

Negotiating contracts for outsourced business activities is markedly different from routine purchase or services agreements. That's especially true if intellectual property, warranties, creative design, epidemic failure, liability and indemnification provisions are involved. Considerations regarding key performance indicators, metrics and service level agreements, as well as 'exit strategies,' become contract critical. In addition, the longer term aspect of shifting work historically performed by the contracting company requires more detailed planning for transition, work requirement scoping, performance measurement, disaster recovery and exit strategies than does casual or traditional services contracting.

Perhaps the most useful negotiation skills you can bring to a first meeting with potential Chinese business partners are humility and patience. Humility is essential for the simple reason that the cultural landscape of the Chinese world is nothing like the direct, sign-on-the-dotted line culture of western business. Westerners often seek business in China out of a desire to get in on what could be the world's largest market or take advantage of cheap labor. While these are fine reasons for going to China, as starters they often interfere with the successful development of a business relationship. Humility acknowledges that one does not know all the answers about a potential partner. Patience ensures the answers — the right answers — will come. Western business operates according to standard practices, published rates. Chinese business — especially in its still evolving form — comes with none of these reassurances. By carefully laying the groundwork, the business person will come to understand each situation and know each potential partner well, establishing a sound basis for a business relationship. In practice, this means your first meeting may be more social occasion than negotiation session. But don't be fooled: This is as important as any formal meeting around a conference table.

At your first meeting, you will want to be sure to have — for lack of a better word — a “sponsor.” This sponsor should be familiar with the people and places you hope to do business. In business dealings among themselves, Chinese rarely practice “cold calling,” or arriving without a proper introduction.

Neither should you expect to arrive and introduce yourself. Your sponsor can do this, or make the necessary arrangements. He or she will be invaluable in helping you to navigate the often murky waters of business in China.

To find a reliable Chinese ally work with you is a good method. An effective Chinese colleague will often be able to analyse body language at meetings, work out who in the other negotiating team holds real power — not always the boss — and help smooth out any inadvertent wrinkles. Conversely, the presence of a Westerner should be exploited to the full. Chinese interlocutors will often see a visit by a foreigner as an indication of sincerity and commitment by the Western company.

If you are negotiating a business deal in China, both parties to an agreement want to know and build relationships with one another — and an intermediary is essential. Indeed, it would be extremely rare to arrange a meeting without at least a letter of introduction from someone your potential partners will trust. They want to know: Who are you? What is your business? And more importantly: Do you have an existing good relationship with someone they know, too? Will others speak well on your behalf? You will almost never be able to meet a potential Chinese partner and immediately begin discussing the details of a proposed contract. Instead, those discussions may follow a meal, or even re-adjoin another day — probably over another meal!

Westerners normally build transactions and, if they are successful, a relationship will ensue. However, the Chinese believe that prospective business partners should build a relationship and, if successful, commercial transactions will follow. This difference underlies many misunderstandings arising from business negotiations. Virtually all successful transactions in China result from careful cultivation of the Chinese partner by the foreign one, until a relationship of trust evolves.

When negotiating outsourcing agreements, purchasing and supply managers should pay specific attention to:

- Developing a comprehensive statement of work (SOW) that accurately reflects the services and processes (outcomes) required.
- Developing service level agreements (SLAs) and key performance indicators (KPIs) to effectively measure performance against requirements or standards.
- Establishing an effective costing methodology (variable costs) to cover the requirements of the SOW as well as potential “extras” that are outside the SOW scope. Also, the costing should be scalable to permit upside and downside volume fluctuations.
- Defining the separation of responsibilities between the company contracting for outsourcing and the outsource contractor and, specific

hands-off points for key information.

- Integration of systems, formats, protocols, methods, data structures, and the like.

You'll find it beneficial to bring your own interpreter, if possible, to help you understand the subtleties of everything being said during meetings. Speak in short, simple, sentences free of jargon and slang. Pause frequently, so that people will be able to understand everything you've said. Except for those educated in the West, Chinese businesspeople largely rely on subjective feelings and personal experiences in forming opinions and solving problems. Belief in the government's policy line will be a dominant influence in all negotiations. Empirical evidence and other objective facts will be accepted only if they do not contradict Chinese government's doctrine and one's feelings. In China, responsibility for all decisions rests with the government and assorted government bureaucrats. Individuals working within this network, however, are still accountable for their own actions.

CHAPTER 7. CONCLUSION

The aim of this chapter is to present our conclusions and recommendations.

These conclusions are primarily based on the analysis of our empirical results.

At the end of this chapter, the suggestions for future study are presented.

7.1 Conclusion

China's market is important both as a market and as supplier to Multinational Corporations. It is the important part of world manufacture and 50% of industrial products of U.S.A are made in China now. No one can ignore a truth that buying from China can reduce cost and increase profit, which will give the Multinational Company more competitive energy in the world.

In chapter 6, we represented some ways and steps to evaluate and monitor suppliers under Chinese market based on the both theory and practice. However act all the mentioned whenever approach or procedure, foreign companies must first understand Chinese culture. Based on this, you can help yourself before you begin seeking business with the Chinese by learning as much as you can about China and the Chinese way of thinking. You can read, study and get to know Chinese and their culture through personal experience. Of course the most effective approach by far is to spend time in China. Plan to

allow yourself some time for travel before you start business. At the very least, it will provide you with common topics of conversation during initial meetings with your potential partners. Only after you do these things should you try your hand at business.

Keep in mind that “Guanxi” can take on many forms. It does not have to be based on money. It is completely legal in their culture and not regarded as bribery in any way. So, there is no need to feel uncomfortable about it. Trustworthiness of both the company and individual is an important component. Following through on promises is a good indication of this. Treating someone with courtesy while others treat him or her unfairly is another aspect. Frequent contact fosters friendship as well. Chinese feel obligated to do business with their friends first. There are risks with this system, as well. When something goes wrong, the relationships are challenged, and friendships quickly disappear. “Guanxi” can also be very one-sided. When “Guanxi” is involved, there is a risk of obtaining an invoice for twice the amount that you bargained for.

At last, we give some recommendations whether you understand or not but is important for purchasing in China:

- Government, the big boss in China, which interweaves the law and relationship, can influence business in many aspects. In cultivating

multiple connections, we have to remind ourselves that they are reciprocal: favours received are credits against future favours expected. Be cautious about the favours you accept. Keeping good relationship with government departments related to your business, especially the head, you can get correct information and help even you could not imagine.

- A person or institution, that knows the local culture and your own culture with professional knowledge, is the necessary success factor for your successful purchasing.
- Accepting gifts and entertainment from your eligible suppliers are important for future strategy. Whatever strict rules your company has, you can hand in high value gifts to your company but do not reject that because the sender will think they lost face and you do not want to make good relationship with him/her. Using warm human feelings instead of ice-cold rules maybe more useful when you doing business in China.

7.2 Future Research Suggestion

In this section, we would like to point out a few areas that could be topics for future research.

- The immediate task for research in this area is to carry out a constructive replication of this study using a larger representative sample. In our

research, we however did not discuss the practical problems due to time and other limitations. As the present study examined the purchasing practices in China, for the purpose of cross-cultural comparison it would be important to conduct future studies in multiple countries. Predicting the future changes by developing the scenarios is therefore an area for future research.

- As China is progressively integrated into the global economy, the purchasing practices of its managers are likely to show an upward movement. To capture any changes in the performance standards applied to supplier selection, it would be necessary to repeat the study at appropriate intervals.
- Finally, commitment and trust are very important for building effective purchasing networks. Different countries have however different business cultures. The further study about how to create commitment and trust in different culture perspectives could be a topic to develop.

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APPENDIX

QUESTIONNAIRE

1: Basic Information

- 1) What kind of products do Chinese suppliers provide? Is it raw material or finished product?
- 2) How long do you take to select an eligible supplier?

2 : Satisfy

- 1) Are you satisfied with the Chinese suppliers? If any unsatisfied aspects, please point them out, and give one or more examples if possible.

3 : Evaluations

- 2) How do you know the Chinese suppliers?
- 3) What are the supplier evaluation standards?
- 4) Except the price, quality and service, what factors do you consider more important?
- 5) Do you use the same standards to evaluate Chinese suppliers with global suppliers? If not, what differences are there?
- 6) How do you review your suppliers? And is there any review mechanism?
- 7) Is the program the same as the evaluation in the first time? If not, what is the difference?

4: Culture differences

- 1) Did you resolve any problems coming from the culture differences? Do you have any misunderstandings during the negotiation, evaluation, selection and cooperation? How did you deal with them?
- 2) What information (such as culture, business or any other) do you need if you want to purchase in China, point out any please.

5: Remark

- 1) If something is important but missing from above, please write below.
- 2) If possible, would you please post us some documents about evaluation standards in your company? We promise these documents are only used for personal academic research purposes.