Precision Marketing Management
—Probe into Way of Existence of Chinese Small and Medium-sized Enterprises (SMEs) by Analyzing Parker Hannifin (China)

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ABSTRACT

Purpose/Research questions

Aiming at the problem that the management efficiency of many Chinese small and medium-sized enterprises is generally low, the paper is to find the method in the aspect of marketing management to improve the management for the enterprise to meet challenges of global market competition. According to the thoughts of Kotler(2006, p814), the future marketing shall be in a direction towards holistic marketing from marketing department.

The paper discusses whether it is feasible for the Chinese small and medium-sized enterprises to use the precision marketing management method to optimize and integrate the resources and improve enterprises’ capacity.

Research design/methodology/Approach

The paper discusses the feasibility of the research subject through combination of theoretical research and case discussion. Analyze and discuss on experience of Parker Hannifin(China) to summarize ideas and implementation methods of precision marketing management to provide reference to the management of Chinese small and medium-sized enterprises.

Findings
Through the analysis and discussion on Parker Hannifin (China) and combination of marketing theory and value chains theory, I find that lean thinking may help the small and medium-sized enterprises in China to utilize the limited resources in a reasonable way and improve enterprise capacity.

**Research limitations/implications**

Starting with marketing management, the paper discusses how to improve the efficiency of value delivery and thus win advantage through changing the extensive management method of enterprises. However, the small and medium-sized enterprises in China still have the problems such as brand resources and technological resources, etc., therefore, precision marketing can not generally improve the enterprises’ comprehensive competitive capability. Several competition methods, such as technique introduction, strategy alliance and so on are still needed to improve the enterprise’ comprehensive competitive capability, only in this way can the enterprises may win in the competition.

**Originality/value of the research**

Different from other papers, the paper, in the light of the characters of Chinese existing small and medium-sized enterprises, mainly discusses the application of precision marketing management of small and medium-sized enterprises adopting extensive management. Therefore, it has the particularity in marketing cultural environment, such as Chinese policy and customers' preference; its application shall be more specific, and has stronger pertinence.

**Keywords**

Precision Marketing, Lean Thinking, Strategy Management, Value Chain, Customer Value, Just in Time (JIT)
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CHAPTER 1 INTRODUCTION

1.1 Background

With the development trend of economic globalization, the barriers in the market have gradually weakened while the industrial penetrability becomes stronger, so the competition among the enterprises becomes extremely fierce in the broader fields (Wang, 2006, p.23). According to the data from Ministry of Commerce of People’s Republic of China, from 1992 when Chinese commerce began to open up to the outside world to the end of 2004, the foreign capital accumulatively invested 314 enterprises and 3997 shops in China; in 2005, new 554 foreign-owned enterprises and 1130 shops emerged in China. (Cited in Li, 2005, p.31). The statistical data show that after China joined WTO, as the foreign trade barriers disappeared, various famous brand and multinational Corporations have entered into Chinese market and the competitive environment have been greatly changed.

Professor Lin(2007) summarized the common international successful management methods and experience at present, such as Benchmarking, selecting the target enterprise and making quantitative evaluation on the products, service and management methods etc. of our enterprise by benchmarking, then working out and improving the strategies”, “6 sigma, the enterprise improves the basic benefit substantially by designing and supervising the daily operation activities, reduces the waste of resources to the minimum level and improve customer satisfaction”, “5S, with delicacy and standard management, implementing Seiri, Seiton, Seiso, Seiketsu and Shit-suke to various factors of production so as to improve management level and work efficiency.” etc. And the research on global management tools made by Brain & Company also finds that enterprises in the world use 13 management tools averagely, other Asian enterprises use 16 management tools, while Chinese enterprises just use 7.5 management tools averagely (Cited in Lin, 2007, p.21). Under the new competitive environment, the Chinese small and medium-sized enterprises should consider how to improve capacity to meet the challenge arising from the global market competition.

Marketing management plays more and more important role in the economic market with fierce competition. Customers are more and more rational and they have more options, so the key for a company to win is to adjust the transfer, option and communication process which has higher value (Kotler, 2006, p.36). Kotler(2006) expounded the development direction of
the future marketing in the marketing management. He says that the modern marketing methods will be developed continuously and also will face new challenges and opportunities continuously. The result is that we will see: marketing department will disappear and holistic marketing will grow up; instinct marketing will disappear and marketing science will grow up; public marketing will disappear and precision marketing will grow up (Kotler, 2006, p814). Theoretically speaking, from McCarthy(1960)’s 4P theory, the later 4C(Lauterborn,1990) and IMC(Schultz,1993) theory, and then Kotler(2006)’s holistic marketing theory and etc., the development of marketing management is towards to the overall and precise direction.

Precision marketing is a new marketing concept introduced by Philip Kotler at the end of 2005. He believes that precision marketing means company shall have more precise, measurable and high investment return marketing communication and need to pay more attention to the result and the action(Cited in Jin ,2005,p.7). Precision marketing management reflects the lean thinking of marketing management theory. According to precision marketing management, the competitive advantages will be gained through precise management model to improve the delivering efficiency of the enterprises’ value selection, value delivery and value communication. In addition, precision marketing may establish individualized customer communication service system on the basis of precise positioning and relying on modern information technology, thus realizing the measurable & low-cost expansion for the enterprise(Luan, 2006, p.33).

1.2 Research questions and objectives

Aiming at the problem that the management efficiency of many Chinese small and medium-sized enterprises is generally low, the paper is to find the method in the aspect of marketing management to improve the management for the enterprise to meet challenges of globale market competition. Since entering into Chinese mainland in 1997, Parker Hannifin, as a multinational corporation, developed fast and it established a second branch in 2000. As a multinational corporation, what does the development of Parker Hannifin reveal to us and what the local enterprises can learn from its development? As mentioned above, Kotler(2006) points out that the future marketing shall be in a direction towards holistic marketing from marketing department.
The paper discusses whether it is feasible for the Chinese small and medium-sized enterprises to use the precision marketing management method to optimize and integrate the resources and improve enterprises’ capacity. The paper takes the marketing management theory and value chains theory as basis, analyzed and studies the experiences and methods of Parker Hannifin(China) to improve enterprise core competitive capacities by utilizing precision management, and discusses whether it is feasible for the Chinese small and medium-sized enterprises to use the precision marketing management method to optimize and integrate the resources and improve enterprises’ capacity.

*The paper has discussed the following matters:*

1. What does the case of enterprises in China invested by Parker Hannifin (China) mean?
2. The analysis of value creation system
3. What can the small and medium-sized enterprises in China learn from the precision marketing management?
4. How do the small and medium-sized enterprises in China carry out precision marketing management?

**1.3 Frame and content**

The structure of the paper is: *Chapter 1* is an introduction. It introduces the research background and research purposes of the paper. *Chapter 2* is the review on classical theories. It introduces the marketing theories, value chain theories and strategic-level precision marketing. *Chapter 3* is the methodology. It states the research methods used in the paper, explains how the data are collected, and also states the relativity between the theories and the experimental data. *Chapter 4* is the empirical data, and it selects the precision marketing management cases of enterprises invested by Parker Hannifin in China (PH(China)), analyzes and researches in detail Parker Hannifin(China)’s marketing thought and management method. *Chapter 5* analyzes the concrete methods of precision marketing management through the discussion on the precision marketing management case of Parker Hannifin(China), on the basis of value chain and in combination of the discussion on value creation system. *Chapter 6* discusses the feasibility of precision marketing management by combining the problems of “extensive management” of small and medium-sized enterprises in China. *Chapter 7, 8* put
forwards the suggestions to the Chinese small and medium-sized enterprises, make the final conclusion and also point out the weak points of the paper and the further study direction.

1.4 Practicability and Limitations

Different from other papers, the paper, in the light of the characters of Chinese existing small and medium-sized enterprises, mainly discusses the application of precision marketing management of small and medium-sized enterprises adopting extensive management. Therefore, it has the particularity in marketing cultural environment, such as Chinese policy and customers' preference; its application shall be more specific, and has stronger pertinence.

Besides, the paper starts with precision marketing management, discusses how to improve the efficiency of value delivery and thus win advantage through changing the extensive management method of enterprises. However, compared with the large-scale multinational companies which have mature brand and management mode, Chinese small and medium-sized enterprises still have the problems such as brand resources and technological resources, etc., therefore, precision marketing can not generally improve the enterprises’ comprehensive competitive capability. Several competition methods, such as technique introduction, strategy alliance and so on are still needed to improve the enterprise’ comprehensive competitive capability, only in this way can the enterprises may win in the competition.
What is marketing? Marketing is an organized activity, including value creation, communication, value delivery to client, and maintenance of relations between the management company and clients, finally bringing earnings to the company and the related parties (American Marketing association, 2007). Hunt (Cited in Hills, 1987) argues, marketing is only a part of the process during which the entrepreneur tries to create wealth. One must remember that marketing not only creates wealth itself, creation of wealth is the final target. Kotler, Armstrong, Saunders & Wong (2001) has a more favourable attitude that marketing is activity of sales, advertisement staying on the side of most people. But actually, this is only one part of the marketing process, marketing has started before the production or the service design. In Kotler’s (2006, p.4) idea, marketing must be understood “in the sense of satisfying customer needs”. Marketing can be seen as homework that managers and employees need to do in order to understand customer wants and needs in the potential market, and to assess if there is a potential profit in the market.

Since McCarthy(1960) brought out 4Ps (Product, Price, Place, Promotion) Marketing Mix, the marketing mix strategy has had a great influence over the marketing theory and practice. Over a long period, the consumers highly trusted the manufacturers, the public advertisement was effective, the economy was prosperous, the demands are identical, and especially the manufacturing industry was the main force. The “brand management mode” (O'Driscoll & Murray, 1998, p396) and “kit” method were very effective(Gronroos, 1994), the marketing mix 4Ps was generally accepted. After that, the scholars such as Kotler(2006) has introduced more elements such as political power, public relation, market research, market orientation and goal optimization etc. to the 4Ps and brought out 6Ps and 10Ps to improve 4Ps theory.

Along with the thriving of service industry, Robert Lauterborn(1990) has brought out the corresponding 4Cs (Customer, Cost, Convenience, Communication) theory on basis of 4Ps and created the demand-oriented marketing ideas. Shift the attention to the products to the attention to customers, understand and study the customers, provide products and service according to demands and attach importance to the communications between the enterprise and customers.

2.1 Values of customer demand-oriented
The task of all the business is to gain profit from customer value. In a fierce competitive economics market, more and more customers become reasonable, they have more choices. The key factor for the company to win is to adjust well the process of exploration, creation and delivering which are of higher value (Kotler, 2006, p.36).

Kotler (2006) thought the key concept of the marketing is the customer value. The marketing is recognized as the process of identifying, creating, delivering, communicating and supervising customer value. The value reflected the customers’ knowledge of tangible and intangible benefit and cost. The values are mostly recognized as quality, service and the price and is deemed as customer value triad. The value increases along with the improvement of quality and service and decreases with the increase of price. The marketer needs to segment and select target market and positioning (STP) and provide effective customer value through creating, delivering and communicating value (Kotler, 2006, p.25). The elaboration on marketing by Kotler reflected the customer demand-oriented and core marketing ideas of creating customer value.

According to the foregoing opinions of Kotler (2006), the fundamental objective of the customer-oriented enterprise is to create effective customer cognitive value. So, we need to probe deeply into the fundament of the development of enterprises-value creation. Analyze the key element of value creation system to realize the probability of optimizing the process of value chain.

Porter (1985) from Harvard University proposed the idea of value chain. Porter puts forward the value chain-based strategic analysis tool with a mind towards enterprise’s internal environment. In terms of the whole process of value creation, value chain offered us an analysis tool to determine the way of customer value creation. Porter (1985) dissected the value creation and production cost of enterprise into nine activities that are interrelated to analyze the design, production, sales, goods delivery and a series of activities supporting the products.

From Figure 1 (Porter, 1985), it can be seen that the enterprises carry out a series of primary activities such as purchase of materials (inbound logistics), processing the materials to make finished products (operations) and then transporting the finished products out of the enterprise for the sales on the market. On the basis of the primary activities, the enterprises still need to carry out support activities such as technology development, human resources management.
and logistics. These activities are closely interrelated and form the basic value creation process of the enterprise. The enterprise seeks the optimizing measures through efficient management of cost and operation of each value creation activity, if the enterprise can do better than its competitors in some activities, it can gain advantages in competition.

Based on the Porter’s value chain theory, Shank and Gowindarajan(1992) further developed the value chain thoughts. They think that any enterprise’s value chain includes the whole process beginning with the raw materials from suppliers to the finished products to the customers. This theory described the value chain from the perspective of the industry in which the enterprises are involved and take the enterprises as a core link in the process of value production, which forms a “Value Net” with upper stream and down stream. Shank and Gowindarajan(1992) not only expand the scale of value chain but also put the accounting information into the value chain analysis—they calculate out the ROA (Return on Assets) and profit of value chain in every stage, and then confirm what the competitive advantage is.

Along with the development of information technology, Jefferey F. Rayport and John J. Sviokla(1995) brought out the opinion of “Virtual value chain”. They believe that any enterprise competes with others in two different worlds: a tangible resource world—market place and a virtual world formed by information—market space. The two worlds have different value chains to implement value creation activities.

No matter you look at the process of value delivery from the perspective of Porter(1985), who brought the value chain theory based on the internal environment of individual enterprise, or perspective of J. Shank and V. Gowindarajan(1992), who took enterprises as core link of Value Net or perspective of Jefferey F. Rayport & John J. Sviokla(1995), who introduced value chain theory into on-line virtual market to form new Virtual value chain system, the value chain theory has given basic analysis method for the precision marketing in terms of process of value delivery(Xu, 2005, p.8). Xu Yuan(2005) has brought out the precision marketing method based on value chain theory. He divided the value chain into products
value chain, channels value chain and service value chain (Xu, 2005, p.25). Based on this, he used lean thinking to make optimization to add most value to the value chain of enterprise marketing. Through discussion, the precision marketing method based on value chain theory was brought out. Combine organically the value created in the activities in each link of value chain to optimize the value delivered to the customers. The task of the enterprises is to check the cost and benefit of each activity created by value and seek improvement. The success relies on not only the work performance of each department and each link, but also the coordination between the departments (Xu, 2005, p.41). Besides its own value chain, the enterprises shall also seek competition edge through value chain of its suppliers, dealers and end-users. Only by unifying the internal value chain of enterprises and external value net, the efficiency of value delivery and communicating can be improved (Xu, 2005, p.64). The value chain theory laid down a good theoretic ground for this paper to elaborate on thoughts of integrating value creating, delivery and communicating.

2.2 Strategic-level precision marketing Concept

2.2.1 Strategy

Webster’s Dictionary defines Strategy as follows: A fundamental, universal and ongoing significant plan or activity direction for an organization as a whole (Cited in Wang, 2003, p.29). Strategic marketing is a kind of marketing thought and method from a strategic altitude, on the basis of the enterprise’s overall target and plan, and with a goal to find out the enterprise’s survival fields and achieve the over-long competitive advantages of the enterprise. It is a kind of marketing thought and means to create demand and create market from the business strategic altitude. According to the strategic marketing, from enterprise’s thoughts of “producing what products” and “how to design the products” before the products have been produced to the thoughts of “how to carry out promotions” after the products have been produced and “how to server customers” after the products have been sold, which means that the whole process of enterprise’s marketing activities shall be on the basis of competition. Strategic marketing requires the enterprise has an overall plan of marketing activities, with the overall plan, the enterprise may finally win in the competition (Wang, 2003).

Level of Strategy
Strategies at different levels prepared by different managements will play different roles. The interaction of the strategies in different levels composes the strategic system of the enterprise. Generally speaking, the strategy of a modern enterprise can be divided into three levels: Corporate Strategy, Business Strategy, Functional Strategy (Grant, 2002, p.21).

(1) Corporate Strategy: the study object of the corporate strategy is the entire enterprise composed by all business units. It is the highest overall strategic program for operation for the highest management of the enterprise to instruct and control all activities of the enterprise. The corporate strategy mainly emphasizes two matters: 1. “What businesses shall we do?” that is to confirm the mission and duty, product and market range of the enterprise; 2. “How do we manage such businesses?” that is how to distribute resources among the strategic entities for the enterprise and what developing orientation shall be adopted.

(2) Business Strategy: also called as competition strategy, prepared by the business units. The reason it is called the competition strategy is that it mainly studies the competition in the market for the product and service. Therefore, competition strategy always becomes a prime consideration for the enterprises.

(3) Functional Strategy: Functional strategy is the strategy prepared for the special functionally management field in the enterprise for the purpose to carry out, implement and support enterprise’s corporate strategy and competition strategy. The emphasis of the functional strategy is to improve the utilizing efficiency of the enterprise resources, to make full use of the enterprise resources. Functional strategy usually can be divided into marketing strategy, human resources strategy, financial strategy, production strategy, study & development strategy, public relation strategy etc.

Corporate strategy, business strategy and functional strategy compose of the enterprise’s strategy system together. Just as what Grant (2002, p.20) had said: “I believe that the key for success of an enterprise is to establish the competition advantages”. In the aspect of analysis, the business strategy shall be superior to the corporate strategy. The true strategy, taking the competition orientation as the key matter, achieves distinctiveness. It shall organize the resources by focusing on its own orientation, establish the operation system and value combination which are different from the competitors, and then form the competition advantages. Therefore, we will mainly discuss the precision strategic marketing and how the enterprises gain competitive advantages in the competitive strategy level.
As the highest level management process, strategic management aims at the overall planning of the company. In David (2005, p.5)’s opinions, strategic management is a cross-functional decision art and science to help the organization achieve its goal through the formulation, implementation and evaluation of strategy. Strategic management is a comprehensive management of marketing, financial accounting, production and operation, research and development and computer information system, so as to help the company succeed.

The strategic marketing covers enterprise’s all activities from production to sales (including process of production and process of circulation) and it takes the competition as driving force, knows its and competitors’ strength by analyzing the strategic environment and then makes out the most suitable strategic decision for the enterprise development. The main goal of the strategic marketing is on the precondition of meeting customers’ demands to looking for enterprise’s living space (Wang, 2003). The traditional marketing activities always emphasize meeting customers’ current interests. However, due to the uncertainly of the demands and the competitors’ disturbance, the enterprise is easy to face difficulties. At the same time, the competition has been extremely absolute, and all works just start from competition’s needs while neglects customers’ demands and social marketing’s demands, such as protection to the environment. The strategic marketing aims to gain long-term competitive advantages through creation of the enterprise’s values, accumulation of recourses and establishment of cooperation relationship (Wang, 2003, p.29). Therefore, the strategic marketing shall start from the customers’ value and take the market division, selection of target markets and market orientation as key factors and the resources allocation as important factors to ensure sustainable advantages of enterprise’s key capacities and its development.

2.2.2 Precision Marketing

*Precision marketing* is a new marketing concept introduced by Kotler at the end of 2005. He believes that precision marketing means company shall have more precise, measurable and high investment return marketing communication and need to pay more attention to the result and the action(*Cited in Jin, 2005*, p.7). Precision marketing management reflects the lean thinking of marketing management theory(*Luan, 2006*). According to precision marketing management, the competitive advantages will be gained through precise management model to improve the delivering efficiency of the enterprises’ value selection, value delivery and value communication. In addition, precision marketing may establish individualized customer communication service system on the basis of precise positioning and relying on modern
information technology, thus realizing the measurable & low-cost expansion for the enterprise (Luan, 2006, p.33).

Luan (2006) introduced the JIT’s lean thinking of TOYOTA into the marketing management, elaborated the improvement of marketing efficiency by construction of precise STP and CRM of enterprises. He thought, it is necessary for a successful enterprise marketing to have precise customers segmentation method and effective customers communication channels (Luan, 2006, p.213). According to the 2/8 rule (Pareto principle), only minority of customers can bring most of the profit while most customers can only bring small profit. This determined that the enterprise should not exert marketing efforts averagely on each customer (Cited in Gu, 2005, p.78). So, Luan(2006) thought, it is key to the success of the marketing to further segment and choose customers based on the original customers segmentation and put the limited resources into the customers group of most potential. It is the same that the 2/8 rules also applies to maintenance of customer relations, the customers shall be further segmented and different service shall be provided for different demands, the limited resources shall be used reasonably to ensure the precision and effect of service and create long-term customers relations. According to the market gap theory brought by the Japanese scholar Soichiro (1990), Bai(2006) elaborated the opinion that the small and medium-sized enterprise with limited resources is not able to compete with large enterprise in a same market, but they could rely on their characters of being flexible and highly adaptive to choose smaller gap market to centralize resources to provide products and service. This means that the small and medium-sized enterprises must make more precise segmentation and provide more precise service. The thoughts of Luan(2006) reflect the importance of precision marketing ideas from the perspective of value choice and customers relations.

Kotler(2006, p.16) has brought out the idea of holistic marketing in marketing management, he used holistic marketing frame (Figure 2) to explain the core problems of management. The holistic marketing theory integrated the process of value exploration, value creation and value delivery. Use a value chain that delivers the excellent products, service and speed to enlarge the market share and build customers loyalty, seize the customers’ lifetime value to make the profit increase constantly(Kotler,2006, p.16).
2.2.3 Strategic-level precision marketing

Dr. Wang (2003, p.231-233) summarized the marketing management in strategic level. In broader sense, precision marketing management includes the following organic components:

(1) **The strategy of precision management.** It can be divided into enterprise’s precise development orientation strategy and precise competitive strategy. The precise development orientation strategy is how the enterprise enters into the industry with higher profit space while precise competitive strategy means creating more value in the industry, that is, to seize the industry link with the higher added value. It can solve the problem that the enterprise suffers low profit because its present industry brings too fewer profit or the existing seized industry position is not good enough. Enterprise’s precise competitive strategy is JIT operation (also named as opportune operation). Opportune operation refers to providing products and services with opportune price and opportune performance to the opportune target customers according to customer’s development direction. It can solve the too-low profit and bad competitive capability of the enterprise due to the inopportune competitive way.

(2) **Precision marketing in narrow sense.** Firstly, the strategy of precision marketing management is opportune marketing, that is, to provide opportune interests for opportune customers with its opportune investment at the opportune place (channel) and opportune time. In other words, within the scale of opportune time, space and goods, enterprise’s marketing activities have met the paying desire and profit gaining desire of opportune customers and have satisfied such customers. It can solve the problems that due to lack of overall marketing...
strategy, enterprise fails to know the key factors in the marketing, so the products don’t sell well though the marketing has been invested much; enterprise is unprofitable or even loses money due to improper choices of customers. In the 80-20 rules, the 20% of the customers on the top creates 80% of enterprise’s profit, while half of the profit is wasted by 30% of the customers at the bottom. It can solve the problem that enterprise has no idea what kinds of customers can bring rich profit for the enterprise.

(3) The strategy of precise production & operation management. It is to provide the products and services with opportune quality (function and performance), opportune quantity and opportune types at the opportune time and place required by customers and downstream working procedures with opportune operation model, opportune operation capability, opportune techniques, opportune transportation and opportune actions. The concept formed by the above content can be called as JIT operation. JIT operation solves the contradiction and exclusive limit of various competitive factors and can realize the competitive advantages in cost, quality, time, flexibility, service and etc. Besides that the quality can be ensured, it also can realize multi types, quick delivery, good service and maintain the cost advantage.

(4) Development of the precision new products. To avoid the valueless activities during the development of the new products, it should develop the new products with opportune function and performance wanted by the target customers with opportune development model, opportune expenditure, opportune design and opportune organization model in time. The abovementioned development model of the new products can be called as JIT new products development. It can solve the problems that the enterprise develops new products slowly, the developed new products can’t meet the market demand, the functions of new products are surplus or insufficient, the performance of new products is too superior or too weak, the cost of new products is too high and etc. Besides, precision marketing in broad sense also includes precision production management, precision service management, precision quality control, precision human resources management and etc.

According to the above theories, I conclude them as the following points in my understanding:

1. The precision marketing shall be considered in an all-round strategy point of view. According to the thoughts of Kotler(2006, p814), the future marketing shall be in a direction towards holistic marketing from marketing department.
2. The precision marketing isn’t confined to traditional 4Ps or 4Cs marketing mix, establishing concept of integrated marketing will improve the efficiency of value communication.

3. The key point of precision marketing is “precision”, according to the Soichiro(1990)’s market gap theory and Luan(2006)’s precision marketing theory, the small and medium-sized enterprise may obtain competitive advantages with more precise market segmentation (STP) and more precise customer relationship management (CRM).

4. According to the holistic marketing concept, lean method of the value chain is also an important part of strategy marketing. Pay attention to the connection of each link of value chain. The improvement of efficiency and effect of management can reduce the cost of products and enhance efficiency of delivery.

The precision marketing introduced the lean thinking(Chen & Ma, 2001, p.10-13) into the marketing, carefully considering the overall value choice, delivery and communication, taking customers as core, reorganizing the management and marketing of enterprises, enhancing the efficiency of value delivery and communication. At the same time, each of staff of the enterprises takes part in the marketing and integrates all the resources outside and inside of the enterprises. The endurable and good relations with customers are established through relations marketing, direct sales and experience marketing.
CHAPTER 3 METHODOLOGY

In this chapter, I summarized the methods and approach, and detailedly explain how to get the data. finally, concluded the creditability of the paper.

3.1 Research strategy and approach

“Bogdan and Taylor (1975) identified the two major perspectives on methodology within the social sciences as positivism and phenomenology” (Cited in Brink, 1995, p. 462). “Quantitative and qualitative methodologies are generally associated, respectively, with the two principal research paradigms which are generally labelled positivism and phenomenology” (Mangan, Lalwani & Gardner, 2004, p.565).

Qualitative research utilizes focused sample sizes and aims to determine the “how & why” of decision making, while quantitative research requires a large sample size and addresses the “what, when and where” (Wikipedia, 2006). Quantitative research can be separated into two different forms: the experiment and the correlational study (Brink, 1995, p. 467).

Both qualitative and quantitative methods have their own advantages and disadvantages. Mangan, Lalwani & Gardner(2004) and Naslund(2002) sum up the advantages of combining the two methods. “Qualitative research methods are essential to provide richness, but they are vulnerable to distortion of data by theory. The quantitative approach is necessary for the precision of hypothesis testing, but, by itself, this method is too critical to be creative”(Brink, 1995, p. 461). Because quantitative method is useful in measuring the results, it will be the dominant part of the research. At the same time, qualitative method is also important. It can provide us with the deeper and non-quantitative perspectives, such as concept etc. In order to get exquisite and rich research, both the two methods are of key importance.

Lee(1989) suggests that field research may involve 3 levels of understanding: interpretive, subjective and positivist. I will adopt research strategies combinations into the research, so as to achieve a comprehensive understanding.

This thesis conducted empirical study based on the above research methods. Through the discussion on theory, we basically understand how to establish the theme field. Firstly,
through the marketing mix theory, discussion on value chain and precision marketing, I get the basic theory frame. Secondly, do empirical research on the basis of setting up a theoretical framework. For experience data, gain data from the investigation to Parker Hannifin(China). Thirdly, do analysis by the experience data gained with the basic theories. In analysis and discussion, analyze the SWOT of Chinese small and medium-sized enterprises at first, point out the opportunities and Threats faced to them at present and draw a conclusion from the introduced theory and the experience data gained on the basis of the characteristics of the small and medium-sized enterprises.

3.2 Data collection

Information collection is the base for the important step from practice to research. Yin(2003) suggests that the sources of evidence in data collection are documentation, interviews, archival records, direct & participation observations and physical artifacts.

In this research, data are collected with these two methods, documentation (secondary data) and interviews (primary data). With the different references used and theory knowledge learnt through course study, taking advantage of the research resources and data resources of Nanjing University, database resource of Nanjing Library, I got direct and effective data information. I also got some supplementary information from the internet. At the same time, acquire the basic information of the management structure of small and medium-sized enterprises with the investigation information report of part of small and medium-sized enterprises. Besides, this thesis obtained basic data information through the investigation to successful enterprise (Parker Hannifin (China)) and achieved details for enterprise operation management structure through the interview with Director of Parker Hannifin (China) Project Department.

3.3 Validity and Reliability of the Research

In this research, validity and reliability are the key factors for the quality. As a result, the researcher shall take certain measures to ensure the creditability of the result. Reliability can be defined as “the consistency of a set of measurements” (Wikipedia, 2006). In quantitative research, the researcher can use the Second-time Measure Method, so as to take some measures to raise the creditability of the quantitative research. This is because the surveys were conducted in different time, the results might be different. Using this method can raise
the stability and reliability. To ensure the high reliability, this research will be conducted in this way. What’s more, for the same survey information, try to collect and check at the same time through different approaches, so as to ensure the veracity and reliability of the data.

Besides, in qualitative research, reliability and validity are not regarded as the sole methods. “Terminology that encompasses both, such as credibility, transferability, and trustworthiness is used” (Golafshani, 2003, p.600). “Precision (Winter, 2000), credibility, and transferability (Hoepf, 1997) provide the lenses of evaluating the findings of a qualitative research” (Golafshani, 2003, p. 600). Stenbacka (2001, p. 551) suggests that the term reliability is in fact irrelevant when evaluating the quality of qualitative research.

In qualitative research, data cannot be measured directly. Seale (1999) argues that trustworthiness is the primary measurement of reliability in qualitative research. One thing is also important, that is, the interviewee has no bias. Brink (1995, p.467) states that “the use of a quantifiable measure may lessen the observer’s bias, but it also disguises such bias and definitely can not completely eliminate it”. In order to realize reliability and validity, triangulation is recommended to be taken, combining with qualitative and quantitative methods Patton (2002, p.247) argues that the use of “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches”. For the purpose of this study, equal weight will be placed upon qualitative as quantitative data.
The chapter will study the feasibility of precision marketing management thoughts of enterprises in China invested by Parker Hannifin (called as *PH (China)*).

### 4.1 The current conditions of Chinese small and medium-sized enterprises

With the developing trend of economic globalization, the barriers in the market have been weakened while the industrial penetrability becomes increasing strong, so the competition among the enterprises becomes extremely fierce in the broader fields (*Wang*, 2006, p.23). According to the data from Ministry of Commerce of People’s Republic of China, from 1992 when Chinese commerce began to open up to the outside world to the end of 2004, accumulatively 314 foreign-capital enterprises invested at China and opened 3997 shops and stores. In 2005, new 554 foreign-capital enterprises invested at China and shops and stores increased at 1130 newly (*Cited in Li*, 2005, p.31). The statistics data shows that after China joined WTO, various famous branded and multinational Corporations have entered into Chinese market and the competitive environment have been greatly changed for the foreign trade barriers decrease.

Professor Lin (2007) points out that Chinese small and medium-sized enterprises have the problems with poor management base and inefficient management to some extent, and the research on global management tools implemented by *Brain & Company* also finds that enterprises in the world use 13 management tools on the average, other Asian enterprises use 16 management tools, while Chinese enterprises just use 7.5 management tools on the average (*Cited in Lin*, 2007, p.21). Under the new competitive environment, the Chinese small and medium-sized enterprises should consider to improve capacity to adapt to the challenge arising from the globalization of market competition.

According to the questionnaire survey which focused on the principals of more than 500 small and medium-sized enterprises in China and was held in 2005 by CPResearch Beijing Branch (*CPResearch Beijing Branch*, 2006, p.28), more than 70% of the small and medium-sized enterprises think that marketing plays a very significant role in the enterprise’s operation, while just 21.9% of them adopt the method that “the product & service will be improved by analyzing market” in deed. Researchers consider that the result shows though the
small and medium-sized enterprises in China pay attention to the marketing generally, there is still room for improvement in terms of the recognition and method. The research result shows that the managers of the small and medium-sized enterprises believe that the most important factor in an enterprise is financial accounting. 47.5% of the enterprise managers believe that their current marketing is to “manufacture or supply products which can be sold”, 30.6% of them believe that “the sales amount mainly is relied on advertisement and promotion” and 21.9% of them believe that “the product and service shall be improved mainly by analyzing the market demands in advance”. Such three kinds of thoughts represent the three typical stages of the marketing, and they are product thought, sales thought and marketing thought. We can know from the above data analysis that almost 80% of the small and medium-sized enterprises haven’t entered the marketing times.

To realize the market goal, the main method of 46% of the enterprises is to “reduce cost to improve productivity to enhance enterprise’s market competitiveness”, the main method of 23% of the enterprises is to “gain market share from competitors”, the main method of 20% of the enterprises is to “stimulate customer needs to develop the overall market” and the main method of 11% of the enterprises is to “aim at the new subdivided market” (CPResearch Beijing Branch, 2006, p.28-29). The research result also shows that half of the visited enterprise managers mainly rely on the emergent marketing strategy. They “reserve the situations and then change plans to adapt to the new situations’, 36.5% of enterprises “forecast the future situations and make corresponding plans” and 13.7% of enterprises “assume the future situations and plan to realize goals”. It shows that though the small and medium-sized enterprises are very sensitive to the market, they lack long-term strategy to guide enterprise’s development.

4.2 Just in Time (JIT) and Lean Thinking

As early as 1970s, Toyota created and promoted lean production thoughts (Cited in Jiang & Chen, 2002, p.20), which contributed it to be a world level company from a lower standard. Lean production (Cited in Jiang & Chen, 2002, p.25) is manufacturing model put forward by MIT, on the basis of the research and conclusion of Toyota Production System (TPS) in its research on “international automobile project”. Professor J. Womack, D. Jones & D. Roos (1990) has published “The Machine That Change the World” (Womack, Jones & Roos, 1990) and “Lean Thinking” (Womack & Jones, 1996), these two books has summed up Lean thinking on the basis of theory, and extended the scope and extension of Lean production.
Just in Time (JIT) always has relation with lean production, and it is a kind of representing way of lean production. Lean production refers to finishing enterprises’ production activities with minimum resources (including time), finding and eliminating all activities which have no contribution to the value added in the production in the whole logistics and the supply chain network. Lean enterprises abide by this principle in all fields. The concept of agility or agile manufacturing (Cited in Xiao, 2002) firstly occurred in American manufacture industry in the beginning of 1990s, when America wished to put forward an operation and management model for the next century to resize the leading position in global manufacture industry from Japanese enterprises. From that time on, agility or agile manufacturing has attracted the attention of academic circle and industrial circle. After the agile manufacturing has been put forward, many scholars regard it as a new model to replace the traditional lean production, enterprise stream reconstruction and complete quality control (Burgess, 1994; Noaker, 1994). After 2000, a new model occurs which unites leanness and agility together occurs on the basis of supply chain framework. Though lean production and agile manufacturing are two clearly different production models, researchers have approved that leanness and agility, the two clearly different production thoughts, can be integrated into a complete supply chain though knowledge on market, rich information and the separation point of customers’ orders.

As the feature of the lean production management (Cited in Xiao, 2002), the principle of Just in Time (Cited in Xiao, 2002) is to determine the supply according to the demand, and that is according to customer’s requirements (called as Kanban) (Chen & Zhou, 2002) on variety, specification, quality, quantity, time, place and others, supplier delivers the just products to the appointed place, not more or less than the appointed quantity, not earlier or later than the appointed time, and all products are zero defective. In the aspect of variety, it ensures the effectiveness of the variety and refuses the unnecessary varieties; in the aspect of quantity, it ensures the effectiveness of the quantity and refuses the unnecessary quantity; in the aspect of time, it ensures the necessary time and refuses the premature or late supply; in the aspect of quality, it ensures the product quality and refuses the defective goods and wastes. Its benefits mainly include the following three aspects (Xiao, 2002, p.52): (1) zero stock. It will supply the amount just required by the users so no stock will occur to occupy the current assets. (2) maximum saving. It won’t order the goods unnecessary for the customers, which can ovoid wastes due to old stock or deterioration and also can ovoid the expenses relevant to loading or discharging, conveying or stock. (3) zero waste. It can limit the losses at the maximum due to
waste stream. No waste will be supplied to customers. Good effect can be achieved by carrying out JIT with some simple tools like Kanban card or signals.

4.3 Introduction to Parker Hannifin

Founded in Cleveland America in 1918, Parker Co. mainly provided spare parts for military aircraft at first and was incorporated with Hannifin Co. in 1954 to be Parker Hannifin Co. because the Company developed quickly. During the twenty years from 1970 to 1990, Parker Hannifin Co. expanded to be a powerful provider of hydropneumatic components in America by expansion. Its sales revenue reached as high as USD 1 billion in 1980. From 1990 to 2002, Parker Hannifin Co. purchased outstanding enterprises relevant to hydro pneumatics over the world every year. Until now, Parker Hannifin Co. has became an multinational company which has more than 50 thousand employees over the world and whose annual output value is more than USD 6 billion. Its components and systems are widely used at motion, stream and pressure control of mechanical devices with various kinds. In the field of motion control, it owns more than 2 thousand production lines and provides services in the aspects of hydraulic, aerodynamic and electromechanical integration and computer motion control plan for the users of more than 1000 industrial and aeronautic markets. The sales model of the Company is the combination of distribution and direct sales, and a sales network composed by more than distributors severs for more than 50 thousand customers over the world. The 8-product group (including instrument & meter, filter, sealing element, industrial and environmental control, fluid connector, automatization, hydraulic pressure and aerospace) operates more than 400 manufacturing factories over the world.

Parker Hannifin Co. founded Parker Hannifin (HK) Co. Ltd. in Hong Kong in 1990 to carry out the business activities in China. For the business developed continuously, the first company named as Parker Hannifin Co. Fluid Control (Shanghai) Co., Ltd. (called as WOFE1) was founded in Shanghai in 1997, together with a warehouse covering an area of 600 square meters, which made it convenient to do the business in the mainland China. The period of goods supply of common products had been shortened greatly which was convenient for users. At the same time, its sales team and logistics team had been developed. To meet the demands of Chinese market for further, the second company named as Parker Hannifin Hydraulic Pressure (Shanghai) Co., Ltd.(called as WOFE2) was founded in Shanghai on November 1997 to produce connector, oil cylinder, air cylinder, sealing element and hydraulic hose assembly. Besides, it also produced part non-standard products required
by customers to perfect the services for the customers and reply more in time and quickly. At the same time, the Company also has a joint venture respectively in Shenyang and Dongguan to produce hose, o-ring and mould specially. Facing the challenges that the international market and customer’s demand change swiftly, PH(China) has been carried out the precision management completely to improve continuously the outstanding manufacturing capacity, high-level service and the capacity of quick flexible response, to provide perfect service before and after sales for the customers at any time and at any place.

4.3.1 The strategic framework of PH(China) to promote Precision management

The strategic framework of PH(China) to promote precision management is to construct “5S” management, promote in-time production and carry out standard operation. The details are as follows:

Construct “5S” management (seiri, seiton, seiso, setketsu and shit-suke)

“5S” management (Cited in Yuan, 2003, p.16) is to clarify “location, method and label” and confirm the “fixed place, fixed volume and fixed quantity” through standardizing the spot and objects, construct a clean and clear work place by using abundant methods and tools like eye-seeing management. Its ultimate target is to improve people’s quality so all staff will have a good habits to treat every affairs carefully and do every thing according to the rules.

“5S” management is the basis of precision management and also the easiest and first factor which shall be achieved during the precision management. The benefits for the enterprise through “5S” management also can be concluded as “5S” (Cited in Yuan, 2003, p.40), and they are (1) sales. A clean factory or workplace will increase customers’ trust and they will be willing to visit, learn and place orders; besides, clean environment will improve employees’ work enthusiasm; (2) saving. It will cut many wastes for the unnecessary materials and tools, reducing “looking for” time and save much precious time. So the work time will be reduces and the efficiency will be improved; (3) safety. All materials can be seen clearly in an open and bright workplace. When the piling limit regulations are well abided by, the danger place can be seen clearly. Because the walkway is defined, the work stream won’t be disturbed due to the material in disorder; (4) standardization. The spot work shall be standardized in the principles of “fixed place, fixed volume and fixed quantity”; people shall perform duties correctly according to the provisions. The stable process will bring stable quality and stable
cost; (5) satisfaction. Bright and clean workplace, the satisfaction of staff will create an atmosphere that all staff are willing to make improvement.

**Implement standard operation**

It is the binding, best at present, safe, effective, reliable and measurable work method. It is the guarantee for the lean production management (*Wang & Fan, 2002, p.28*). How does a company implement standard operation? Simply speaking, it shall instruct the staff to implement with a standard operation guideline and the key issue is to prepare such standard operation guideline. In previous days, after prepared by management officers or technicians, standard operation guideline would be given to the operators to implement. But such kind of standard operation isn’t the best operation way, because with the promotion of the enterprise’s lean, all staff will be affected. Nowadays, the standard operation guideline will be prepared mainly by operators, and the management officers or technicians mainly check the safety and quality and perfect the standard operation guideline mutually during the implementation.

**4.3.2 The strategic thinking of precision management of PH (China)**

The strategic concept of precision management of PH(China) is that under its strategic target and strategic framework, it shall be customer-oriented, pay attention to staff efficiency, expand production capacity, carry out overall quality control and reduce cost gradually.

**Customer-oriented**

PH(China) adopts in-time delivery rate to evaluate customer service. The in-time delivery rate here is not the time which we have promised but is required by the customer. Such measuring standard is customer oriented and the calculation method of customer service is:

\[
\text{The total in-time delivered order quantity at that month}/ \text{the total delivered order quantity at that month}
\]

\[(\text{Taking the date required by customers as benchmark date})\]

Now, I take the period from January 2002 to March 2003 as an example to show the improvement on customer service in the fields of international trade and self manufacture of the PH(China).
1. **International trade:** As PH(China) is a big scale multinational company, the products demanded by customers always will be manufactured abroad and be delivered to the customers through many links. The level of in-time delivery rate during the period from July 2002 to December 2002 was very low and the enterprises were always claimed by customers (Figure 3). To meet customer’s demand better, enterprise began to carry out series improving actions interiorly.

![Figure 3: The Level of In-Time Delivery Rate of Customer Service in PH(China) International Trade during July 2002 to March 2003.](image)

Mr. Wang, the Director of PH(China) Project Department told me by communication that “We had known the shortest delivery period of different products required by our customers through our sales engineers and at the same time, we contacted with the foreign manufacturers to decide the approximate delivery period when customer inquiry. Such lean action eliminated the waste during the process from order to delivery and shortened time greatly, so the in-time delivery rate had been improved continuously. At present, the enterprises strengthen this work further. As of the end of 2003, the in-time delivery rate of our international trade had reached 87%” (Interview with Wang Xiao)

2. **Self manufacture:** The most time of the products manufactured by ourselves can be controlled so its level of in-time delivery rate is comparably high. The PH(China) had paid much attention to the customer service since they had been founded. (Figure4), in-time delivery rate of the products manufactured by ourselves during the period from July 2002 to March 2003 fully embodied this.
Figure 4: Time delivery rate of the products manufactured by ourselves during the period from July 2002 to March 2003

Pay attention to staff efficiency

To evaluate staff efficiency, the PH(China) adopts the staff annual sales method and its calculation method is:

\[ \text{Total quantity of the sales contract in that month} / \text{the staff quantity of the production unit in that month}. \]

Expand production capacity

PH(China) evaluates its production capacity with the following five indexes—stock turnover times, production period shortening, lean training, value stream drawing and pulling system.

1. Stock turnover times (annually)

\[ = \frac{\text{manufacturing cost of three-month sales} \times 4}{\frac{\text{stock quantity calculated with the first-in \& first-out method within the three months}}{3}} \]

It also will use the stock turnover days \((=\text{annual production days/ stock turnover times})\) to evaluate the utilizing conditions of the stock \(\text{for it isn’t very precise, the formula is just for understanding}\). With such indexes, the stocked variety will be adjusted in time and the stock quantity will be reduced at the maximum degree.
2. **Shorten production period:** The methods for PH(China) to shorten production period are:
(1) Good supplier partner relationship; (2) Improvement of the production process; (3) Smooth information flow.

3. **Lean training:** PH(China) pays much attention to the training of lean thinking and establishes special guidance committee, area lean manager and lean team. Besides, it also requires every employee to receive lean training. The Head Office requires that the people who receive 4-hour lean training annually at every area shall account for 95% in all employees at that area. By doing this, the employees will be able to know the precision management thinking much further and also will make improvement in the work.

4. **Value stream chart:** PH(China) have been trying their best to draw main process of all finished products (from the raw materials to the products received by the customer). By doing this, the materials flow and information flow can be connected together, the problems which shall be solved can be seen clearly. What’s more, to promote the mobility of the value stream, the actions also shall be connected. Therefore, the productivity and quality can be improved in the maximum degree by utilizing minimum space and resources only when the stock begins stream, the current stock has been used completely, the batches have been reduced and the group technologies have been used.

5. **Pulling system:** PH(China) utilizes the replenishing inventory signal to drive the implementing system of the actual production, so all processes have been connected together. However, it needs qualified employees who have received lean training to control the working schedule by themselves according to the previous working procedure. To know the process of the previous working procedure more clearly, production card and getting goods card have been prepared and the formula to calculate the production kanban and getting goods kanban of every product have been given.

Production kanban:

\[
= \frac{\text{daily demanded quantity of the spare parts} \times (\text{working time} + \text{waiting time})}{(1+\text{safe stock})/ \text{standard container volume}}
\]
Getting goods kanban:

\[ \frac{\text{daily demanded quantity of the spare parts}(2 + \text{purchase period})(1 + \text{safe stock})}{\text{delivery times every day} \times \text{standard container volume}} \]

**Carry out Total quality management**

PH(China) introduced the total quality management (TQM) thinking in 1988. Every factory and sales office has been certified by ISO quality system to ensure the product and service. At the same time, it constantly learns from the first-class companies all over the world and reduces the defect rate. PH(China) always believes that quality is produced during the manufacture, which emphasizes the importance of the process. The final quality shall be ensured by ensuring the work quality of every link instead that the defects will be found by check finally. Workers have right to refuse the defected spare parts while have no right to deliver the defect to the next working procedure. A more close little “supply chain” exists interiorly: the relationship among the working procedures is that of customer and supplier. As the customer, it has right to refuse its own supplier’s defects (the previous working procedure); at the same time, as the supplier of next working procedure, it must provide qualified work. Such quality thinking doesn’t only cover the product, but also include the whole operation process. Therefore, the quality control isn’t only quality department’s work, but also the whole staff’s responsibility.

**Reduce cost**

PH(China) finds the key problem by analyzing the percentage of the raw material, work in process(WIP) and the manufacture cost of finished products in the average manufacture cost, and tries its best to reduce the stock in all forms.

1. Stock report (until some time)

   - **Raw material and spare parts** ——— $229,520
   - **Work in process** —--------------- $229,520
   - **Finished products** —------------ $259,722

   **Total** $888,937
2. Financial profit report (cost)

Sales revenue ———————————————————— $4091,081

Material ———————————————————— $1,500,000

Direct labor expenses ———————————— $227,118

Additional expenses in machine, labor and management — $1,164,000

Manufacture cost ———————————————————— $2,891,118

Calculate the percentage of material, labor, and additional expenses in the total manufacture cost:

Material% = 1,500,000 / 2,891,118 = 0.52

Labor expenses % = 227,118 / 2,891,118 = 0.07928

Additional expenses % = 1,164,000 / 2,891,118 = 0.40

Work in process (WIP)% = Material% + (1/2)(Material% + Additional expenses %) = 0.76

3. Turn the raw material, work in process and finished product into the corresponding manufacture cost

\[ \text{Formula} = \frac{\text{amount in the stock report}}{\text{the percentage in the manufacture cost}} \]

4. Calculate the average manufacture cost

\[ \text{Formula} = \frac{\text{manufacture cost in the financial profit table}}{\text{annual working days}} \]

Through series of precision management activities, PH(China) has gradually achieved to be customer demand-oriented, produces and designs the products upon customers’ various demands and realizes the guarantee of quality “zero default” principle. The goal that products which satisfy customers will be put onto market quickly has been achieved ultimately. There is no waste during the whole value chain and the enterprise has achieved the goals of real precise and high-efficient production and integration of sales and service.
CHAPTER 5 ANALYSIS AND REFLECTION

Through the analysis of the precision management cases of PH(China), we can see the management thoughts in two aspects, that are, lean thinking of strategic marketing and precision of production process.

5.1 The strategy of enterprises by PH (China) to use Lean thinking

Strategic marketing is a kind of marketing thought and method from a strategic altitude, on the basis of the enterprise’s overall target and plan, and with a goal to find out the enterprise’s survival fields and achieve the over-long competitive advantages of the enterprise. It is a kind of marketing thought and means to create demand and create market from the business strategic altitude. According to the strategic marketing, from enterprise’s thoughts of “producing what products” and “how to design the products” before the products have been produced to the thoughts of “how to carry out promotions” after the products have been produced and “how to server customers” after the products have been sold, which means that the whole process of enterprise’s marketing activities shall be on the basis of competition. Strategic marketing requires the enterprise has an overall plan of marketing activities, with the overall plan, the enterprise may finally win in the competition (Cited in Wang, 2003). The cases of PH(China) reflect well the overall planning management thoughts of strategic marketing.

Porter (Cited in Thompson, 2000, p.145) ever said: “competitive strategy isn’t fixed, which means you shall carry out your value chain activities in various ways or provide unique value mix for your customers by carrying out some activities which are different from your competitors.” PH(China) uses lean thinking to be customer-oriented and carry out overall lean strategy with the hope of becoming an enterprise whose cost becomes lower and lower while the product quality and service become better and better and which can provide more value to the customers.

5.1.1 “Customer demand-oriented”, the basic principle of marketing management

Kotler (2006) thought the key concept of the marketing is the customer value. The marketing is recognized as the process of identifying, creating, delivering, communicating and
supervising customer value. The marketer needs to segment and select target market and positioning (STP) and provide effective customer value through creating, delivering and communicating value (Kotler, 2006, p.25). The elaboration on marketing by Kotler (2006) reflected the customer demand-oriented and core marketing ideas of creating customer value.

**Customer demand:** Under the principle of “customer demand-oriented”, PH(China) uses customer information management system to know well customers’ demand information and then customize and improve the production design for customers and then customers’ demands have been satisfied. At the same time, PH(China) realizes Just in Time (JIT) to distribute the commodities to the appointed places according to the requirements on variety, specification, quantity, time and etc. and also realize the guarantee of quality “zero default” principle.

**Customer relationship:** PH(China) establishes high-efficient operation process to collect satisfactory information from customers to improve product’s quality, reduce product’s cost, improve sales level and the delivery speed; check the procedures satisfying customers systematically; receive customers’ feedback quickly and efficiently and provide such feedback to the relative departments. Officers authorizes every employee to investigate and forecast customers’ satisfactory degree continuously, to predict customers various demands and then to establish close relationship with customers together with the good after-sales service system.

**The process from order to delivery:** PH(China)’s main feature is that it has realized JIT, production at fixed time and production at fixed quantity, which will reduce the waste maximally during the whole value chain from product design, production, delivery and after-sales service. The supporting departments which have indirect relationship with product such as management department, accounting, market, sales, after-sales service, credit department and others also become parts of the enterprise development plan. The goals that products which satisfy customers will be put in to market quickly without waste during the whole value chain have been achieved ultimately. The traditional batch production is easily to result overstocking of the goods, unnecessary waste always is unavoidable so the operational cost will be added. The basic principles of precision marketing are precise and high efficiency so the waste will be reduced greatly. Therefore, that how the enterprise realizes the exact production according to customers’ demands more efficiently becomes the key factor for the precision marketing. PH(China) customer information system will be implemented through
whole value chain system, from collection of customer information, order, production according to customers’ demand, distribution to customer service and other processes, and it provides a good information platform for the whole value creation system.

The lean management group of PH(China) is consisted of management officers who are main members and the external experts and it is responsible for the leading and guiding of the lean work in the whole Company. Special teams will be formed according to the specific projects, which is helpful to carry out works flexibly and will be cancelled when the project has been finished. As an area of the enterprises and the offices in PH(China), they have Steering Committee and the commissaries are consisted of Area General Manager, General Manager of WOFE1, General Manager of WOFE2, Chief Financial Officer and Area Lean Manager. Under the Steering Committee, there is an Action Committee and the commissaries are the medium officers of the Company. There are five lean groups—finance, production, quality, customer service (logistics) and sales (including the three sales offices in Shanghai, Beijing and Guangzhou respectively), and each group has its own specific principal and relevant employees. The function of Steering Committee is to maintain the lean to be carried out continuously, decide the investment order and eliminate the obstacles of the lean actions. It holds meeting regularly (once in every month). The function of Action Committee is to carry out Kanban (Chen & Zhou, 2002) action, check the progress of Kanban actions regularly (once in every month) and write relevant reports. It harmonizes the works of all project teams regularly (once every week) and sets multifunction and crossing action units for the special project. All PH(China) employees shall participate into the lean training at least once every five days and every PH(China) branch shall have a full-time lean manager in the employees (it is suggested that every 2000 employees shall have one lean executor and sub guideline organization); PH(China)’s all areas (including group) shall have a full-time area lean manager to report work to the group president.

The duty of the area lean manager is to carry out lean activities in his own area: introduce the steps to implement lean, find out the defects together with the lean teams, guide to carry out the improvement, communicate with the principals of all lean teams to know the conditions of all lean activities and submit the conclusion reports related to all lean activities to the Steering Committee.

WOFE1 has carried out lean everything completely since the foundation, including factory, office, supplier, distributor and customer. On the basis constructing a high-effective lean
organization, it makes up 5S management (Cited in Yuan, 2003), promotes Just in time production (Cited in Xiao, 2002), carries out standard operation (Cited in Wang & Fan, 2002) to realize customer-oriented service, improve staff efficiency and production capacity, conduct overall quality control and reduce cost through continuous improving the circle of P(Plan), D(Do), C(Check) and A(Action). During the period from 2002 to 2003, PH(China) saved USD 20 million in the equipment balance, the in-time delivery had been improved from 70% to 96% and the stock level also had been reduced greatly. Besides carrying out the three technical methods of original target management continuously, PH(China) also has set for the enterprise five key targets which will be improved continuously and they are customer service, stock, production rate, quality and waste reducing.

5.1.2 Representation of lean thinking

Lean strategy has dual targets: the first is profit target, to increase products’ sale volume and gain more profit by improving product’s quality and reducing cost; the second is capacity target, to improve Company’s overall management level, perfect Company’s operation process, improve employees’ quality and realize leap-forward development of Company’s capacities (from lean capacity to key capacity), thus supply strong drive for the follow-up development of the enterprise by precision management and control of enterprise’s products, service and product delivery (Hu, 2001, p.11-12). The implementation of lean strategy is helpful to supply the products which meet the market demand and have high performance cost ratio and to bring abundant cash flows for the Enterprise; at the same time, it is also helpful to form enterprise’s basic capacity which is also the enterprise’s key capacity, and that is lean capacity, and the enterprise’s competitive capacity will be improved continuously.

The key meanings of PH(China)’s lean thinking include the following three factors:

1. It eliminates all activities which won’t add value in the production by simplifying: in the lean production theories, any process or step is a waste if it can’t add value to the product. It requires cancelling the links and working post which won’t add value to the product directly without mercy.

2. It emphasizes people’s function, and fully plays people’s potential: the lean production way transfer the working duty and responsibility to the workers who add value to the product
directly at maximum to inspire workers’ interest and innovational sprite in work, which will benefit to implementation of lean production.

3. It requires making improvement continuously and takes “perfection” as the ultimate goal: Lean production persists in struggling for the “perfection”, and that means improving the production continuously, eliminating reject, reducing stock, reducing cost and diversifying the product kinds. Perfection means keeping improving, which requires the enterprise to always be devoted to the improvement and progress.

In a word, lean thinking provides a method to gain more output while using less cost—less labor force, less equipment, shorter time and smaller site, and at the same time meet customers’ requirements. The principle of the Lean thinking is to research what will produce value from the customers’ point of view rather than enterprise or functional department; it determines the necessary processes and activities during the supply, production and distribution of product according to the whole value adding, creates the value adding activities without interruption, detour, waiting or reflux; create the value in time just driven by customer and eliminates waste and pursues perfect continuously.

5.2 Precision of production process

Lean thinking is the core thinking in the Lean production, which requires the enterprise to find the best method to supply the customer value, understand the value stream of each product. Therefore, it will be smooth for the product from the initial concept design to reaching customer finally, and the customer is the driver of the product, and it will make progress during the production, constantly perfecting.

The strategy of PH(China) to promote lean thinking at offices mainly including such three parts: 1. eliminate waste gradually by analyzing its waste; 2. promote precision management to diagnose the organizational structure; 3. evaluate the whole lean process of the enterprise.

5.2.1 The key measure for PH(China) to promote the strategy of lean thinking—eliminate waste

Muda specially refers to all activities which consume resources while don’t add value. There are errors which shall be corrected, the unnecessary products have been produced so the overstocking is resulted; unnecessary work process exist; employees have been wildly
transferred and the goods have been wildly transported from one place to another place; the employees of next work process have to wait due to the late delivery of the employees of previous work process; and the commodity and service fail to meet users’ requirement (Womack, Jones & Roos, 2000, p.24). PH(China) analyzes the main source of company’s waste: (1) personnel waste, which is from the handwork employees; (2) process waste, which is from the organizational structure, and that is the operation and mutual relationships among processes and process factors in a complex organizational structure; (3) information waste, and it refers to the useless information stream among the process procedures and the information resources. PH(China) uses visual tool—value process(Wang &Fan, 2002, p.28) to mark the waste phenomenon at the value stream drawing to help analyzing the value-adding or valueless activities or processes in the material stream and information stream.

5.2.2 Analysis on PH(China)’s promotion to the precision structural management

Structural management is to how the enterprise deals with all interior and exterior relationships and commercial activities correctly and the information circulation exteriorly and interiorly(Liang &Zhou, 2000, p.63). Reasonable enterprise structure will ensure all individuals and organizations to be engaged into the enterprise’s production, operation and sales processes to form a high-efficient and flexible enterprise acceleratory. Enterprise’s structural management has three key points: organizational structure, cooperator and information structure (Liang &Zhou, 2000, p.63-64).

1. Organizational structure

Whether enterprise’s organizational structure is reasonable or not, it will effect the implementation of various policies and the achievement of goals. PH(China) precision structural management has five controlling points: teamwork activity, network organization, rewarding & recognition, evaluation & compensation and administration.

(1) PH(China) takes team and group as the basis and emphasizes the sprits of team cooperation among teams to form a mutual-aid and co-operative situation and establish a management system to manage the team activities effectively. In the internal enterprise, it mostly adopts the form of team to carry out work and such team behavior behaves well.
(2) The relationship among enterprise’s departments is in the form of flat network and there is lateral communication and cooperation. The goals for individuals and organizations will be adjusted according to the change of enterprise overall goal and such goals shall be integrate, suitable and clear; the authorization scale of officers shall meet the development demands of the enterprise and individuals.

(3) To reflect employees’ values, PH(China) officers will reword reasonably the teams and individuals which work outstandingly and it is an important link to exert the functions of the teams and individually at maximum degree. A recognition and rewarding system which is exquisite and shall tally with the enterprise policies has been established.

(4) PH(China) establishes “behavior guideline” to evaluate employees’ daily behaviors regularly and encourages teamwork, individual development and information sharing. The establishment of compensation system promotes teamwork. The contributions to enterprise’s overall success from work teams, employees and groups will decide their reward respectively, which means that reward has close relationship with enterprise’s benefit and goals.

(5) PH(China)’s administrative departments shall use “5S” and visual management system strictly. Administrative departments shall reduce costs, for example, reduce occupied space, working procedures, shorten work time, reduce signing times, shorten the necessary work handover processes among the departments and etc.

2. Cooperator

Organizational structure shall reflect employees’ values, remain good relationship with suppliers, and makes outstanding contributions to the environmental protection to gain society’s recognition.

(1) Employees are the basic factor in cooperation. Enterprise shall fully play employees’ role and improve their skills. PH(China) has effective human recourse management to help employees to form positive outlook on life. PH(China) regards employees and their skills as the key factor for the overall company to be successful. Officers understand the value of employees’ trainings sufficiently and carry out production with the most advanced production methods. They encourage employees to join trainings to promote enterprise’s production.
(2) PH(China) regards the relationship with suppliers as an integral part of enterprise’s development group. It cooperates with the excellent suppliers in long term and helps the suppliers develop. Besides, it designs effective work procedures to help suppliers to improve the quality of raw materials, reduce costs and deliver goods in time. It designs effective procedures to make suppliers participate into the development process of the enterprise’s products.

(3) To meet the demands of sustainable development, PH(China) pays attention to the environmental protection and makes sure that the environment won’t be destroyed through using technologies and effective equipments reasonably to gain society’s recognition and government’s supporting.

3. Information structure

Information structure also is an important part of enterprise’s structure. It decides how the enterprise collects, treats and utilize information. Information structure includes four controlling points: work place & visible management, quick feedback system, performance measure and sustainable development report.

(1) PH(China) requires that the work place shall have no defaults and be transparent, visual management shall be implemented. Effective work procedures shall be established and the work place shall be organized so the work environment of the enterprise will be improved. Every object and its callback conditions shall be recorded, equipment, tool, stocking place and the production process of every work team shall be clear. Effective visual management system shall be established to ensure that all kinds of information will exert functions within its using scale. So the management will be absolutely clear.

(2) Quick feedback system refers to that enterprise shall establish a high-efficient feedback system so all kinds of information will be feedback to the relative departments quickly. “Error certification system” shall be established thus every employee can distinguish, report and correct errors (defaults or equipment failure).

(3) An effective performance measure system shall be established and the information shall be feedback to the management department in time. Performance measure system is to provide correct and timely information feedback to improve product value and service quality.
It is convenient to link with the factors like policy, goal, budget, revenue and the balance of payments. Officers will know the actual cost consumption conditions of the product and the distribution of management expenses will be decided by the balance between the energy source consumption and produced added value of each department.

(4) The sustainable development report is used to check whether the enterprise has met the lean standard. A suggestion system shall be established to evaluate the suggestions from employees and customers quickly so the suggestions which are valuable for the enterprise to meet goals can be recognized, awarded and implemented quickly.

5.2.3 PH(China)’s lean process evaluation

As a lean customer-oriented enterprise, PH(China) adopts various evaluation methods to evaluate its lean process, including point level, point gained card, and lean process poster such evaluation tools. It also adopts the circulation of Plan, Do, Check and Action (Zhang & Tong, 2001, p.90) to ensure the continuity of the implementation, so the enterprise will know the degree of the lean process sufficiently and gain periodical results continually and all employees have sufficient confidence in enterprise’s precision management thus the continuous improvement will become the actual activities.

Contrast the traditional production measure to lean process management by using point level evaluation:

Traditional production measurement standard: the percentage of in-time delivery is less than 85%; stock is larger than 121 stock sales days; the average sales amount per person base line shall be calculated; the bad quality cost is larger than 3.2%; time has been established too long and that is longer than 2 hours; there is no percentage of pass for first measure; the automatic equipment is less than 5%; the fund needed in a fiscal year is more than 4% of the sales amount.

After the lean process management has been adopted: the percentage of in-time delivery is between 95% to 100%; stock is less than 45 stock sales days; the improved amount exceeds base line at 35%; the bad quality cost is less than 2.5%; 95% of time has been established within one digit level; the percentage of pass for first measure is 100%; the automatic
equipment is more than 50%; the fund needed in a fiscal year is less than 2% of the sales amount.

The implementation of another evaluation method to trace process, point gained card has improved enterprise and makes it remain leading position in campaign and controlling industry in the world. It will trace all successful strategic plan promoted in PH(China) (including lean). The card adopts five-point level to evaluate process of each measured project. The points will be calculated into the overall points of each department, and then the team point and the company point finally. The goal marked at the point gained card at present only shall be regarded as a jumping-off point. When notable process has been achieved, the measure standard for future will be prepared. Continuous improvement will realize PH(China)’s all potentials. Point gained card will show the correct balance and clear importance so success will be gained continuously.

By above analysis we can know that PH(China) has improved its enterprise key capacities by adopting series of precision management methods and utilizing lean thinking in all aspects from strategic thoughts to actual production operation.
CHAPTER 6       DISCUSSION

Discussion on the basis of value creation system

The key thought of precision management is to create more effective customer value. Combining the theory of Kotler and Porter, when developing a value creation process, an enterprise is in the value exploration stage firstly, it shall definite the new customer’s benefits from the cognitive space and angel of customers to understand the existing and potential needs of customers and determine the value opportunity. Then consider the competency space of the enterprise and the core competence and use the resource space of cooperators to choose and manage business partner. Follow the value chain theory of Porter in the value creation process and carry out efficient management for each link and seek improvement measures to do better than competitors in some activities to gain further competitive advantages. At last, sell the products through marketing methods to realize the customer’s value finally.

In a series of activities of value chains creation, three key elements affecting the value can be summarized: excellent customer’s value, core competence and interrelations of enterprises (Figure 5).

6.1 Value-affecting Element under Traditional Mode

Many scholars proposed many valuable opinions as to the element affecting the value. James Knight(2002) thought, value-affecting element are operation factors that have great influence on results of operation activities and financial operation, this definition includes not only the operation effect but also the motivation mechanism for the implementation of all the decisions, the value-affecting element exist in all the areas of the enterprise, including product development, production, marketing and development and use of human resources, etc. Although this definition of Knight(2002) includes all the process of operation and management of the enterprise for the value-affecting element, but it didn’t extend to the level of relations between enterprises.
Zhou & Liu (2003, p.39-43) divide the enterprise value into two parts, namely resource value of enterprise and process value of enterprise in terms of enterprise theory and attribute the value-affecting element to internal resources and process of enterprises. In terms of ideas of process, they agree with the opinions of “operation and management process” of Knight (2002). This make the value-affecting element extend from static resources-no matter materials resources or human resources- to dynamic process.

Almost all these ideas attribute the value-affecting element of enterprise to internal affecting element of enterprises. Zhu Chao(2002, p.9-10) pointed out that the enterprise value-affecting element include two types, that is, internal element and external element. The internal element affect the production of the enterprise and the external affecting element include social, political and economic environment, market competition state and technology development level.

The value-affecting element under traditional mode restricted the value-affecting element to internal resources, management procedures, organizational structure of the enterprise or industry choice, etc, while ignoring the relations between enterprise and upper stream suppliers, relations between down stream and customer, so they can’t infer the core competency element of the enterprise through comparison, while these are important links of value creation system under value chain mode.

Value-affecting element under value chain mode considered the relations between enterprises. In the system of value chain, supplier, manufacturer, dealer, retailer and customers will create value together and successfully enlarge the value of the whole value chain through core competency of business partners and continuous improvement of harmoniousness between each other.

6.2 Analysis of element of value creation system under value chain mode

The three value elements of creation system of value chain are: customers value, core competence and interrelations of enterprises at nodes of value chain. In these three elements, the customer’s value lies in core position and the core competence and interrelations will be fully reflected through customer’s values.

6.2.1 Core Element – Customer Value
What we will consider firstly will be the theory of utility when we connect the customer value with a customer behavior. Collis (1994, p.143-152) points out that the value perceived by the customers will become the price at which the customers are willing to make the payment when there is only one supplier in the market. The bigger the value perceived by the customers, the more satisfactory the customer will feel under the condition of fixed price and the more loyalty the customers will have towards the enterprise. As a result, the value creation and value-added process of the enterprise will be realized.

Therefore, we can deem that the customer value refers to the value that can be perceived by the customers. The bigger the value perceived by the customers and the lower the price of the product, the more satisfactory the customers will have, and of course the customers will become the loyal customers.

The customer value is the product benefit and service benefit that can be gained under certain price. The basic elements of customer value include the product quality, service quality and price. The elements determining the product quality include the performance, characteristics and reliability of products, and the elements deciding the service quality however include the responsibility, convenience and service skill.

Kotler (2006) has divided the customer value into customer benefit and customer cost, of which, the customer benefit is called by Kotler (2006) as the total customer value. It is composed of product value, service value, person value and image value. The customer cost is called by Kotler (2006) as the total customer cost that consists of monetary price, time cost, energy cost and psychic cost. In fact, his time cost and energy cost mentioned above is equivalent to the element of convenience, so the basic element is the quality and price. Companies may specifically define their own element system of customer value according to their own characteristics, upon which they can make clear the demand of their customers.

The realization of enterprise value is driven by the customer loyalty. As for the logical process from customer value to corporate value, Heskett, Jones et al (1994, p.164-270), through the observation and study, believed that the income increase and profiting ability of an enterprise are mostly determined by the customer loyalty and the customer loyalty is however determined by the customer satisfaction that is finally determined by the customer value.
At the same time, the enterprise creates the value for the customer and the selection of behaviors by the customers will also create the value for the enterprise, for example, what has the customer bought? Why does the customer buy these commodities? And what is their appraisal standard? The valuable information of the customers to the enterprise during the purchase constitutes the important data capital of the enterprise.

6.2.2 Related Element – Core Competence

The core competence is the enterprise-specific knowledge, skill or special assets that are difficult for other enterprise to imitate and can bring the competitive advantage to the enterprise.

An influential brand, a strong R&D team, a smooth sales network and an internal management mode that can inspire the team spirit can become the core competitive competence of an enterprise. The essential condition for enterprise survival and development is to construct and strengthen the core competence.

The introduction of the value chain is in fact a kind of labor division, whose foundation is the core competence of various enterprises. Because the core competence is of value nature, rareness and the nature that is difficult to imitate, we can see from the characteristic of the core competence that all partners enterprises in the value chain have contributed their own core competences in their own advantageous fields such as design, manufacture and retailing sales, and they are unified to supplement one another with advantages, share the risks and interests.

Core Competence VS. Customer Value

(1) Customer Value --- A Footing of Core Competence

The customer value is the footing of core competence of an enterprise. The core competence not only is based on its outstanding core technique, R&D team, marketing network and corporate culture, but also depends on how much value it can provide to the customers. How to maximize the resources and effectively change them into the customer value will be the footing of core competence of an enterprise.
To construct the core competence based on the customer value may ensure a long-term customer-enterprise relationship. This “relationship” may belong to a kind of core competence in a sense. The construction process of core competence is a constantly climbing process of creating the customer value.

(2) Foundation for Creating New Customer Value

The core competence is also the foundation for creating new customer value. The acceleration of enterprise core competence decides the business scope of the enterprise and the scope and depth of creating the new customer value.

Because the core competence cannot be traded and copied, the enterprise may set the market barriers to the competitors who attempt to compete for the potential customer group that has been developed by the enterprise through the efforts. During the growth of an enterprise, the increasing professional assets and the inimitable intangible knowledge may provide to the enterprise the active strategic defense and the continuous and reliable technical protection against the competitors in the developed customer groups, detailed target markets and emerging markets.

6.2.3 Relevant elements-interrelations

Value chain is a dynamic value creation system that is linked through relations between enterprises and relations between enterprises and final customers. Especially the relations of enterprise in the value chain are cooperation relations founded on the cooperation and confidence. People like Maloni and Benton(1997,p.419-429) thought the cooperation and partners’ relation in value chain is strategy union and a relation that is formed by two independent bodies in value chain for achieving a certain objective and benefit. It integrated the core competence of enterprise to make the whole business process simpler and smoother to realize the whole benefit to the maximum extent.

The quality of relations of enterprise in nodes of value chain and the relations of enterprise and final customers will affect the realization of customers value directly and thus affect the value creation of the value chain.

The products and service changed timely. The relations of enterprise in nodes of value chain and the relations of enterprise and customers weaved into a large web that is supported by the
information technology and can tract the personal needs of customers timely. This mutual-activity relation can enable the enterprises to change the manufacturing and sales of products according to the changes of taste of customers and make the updating speed of products accelerated greatly, thus maintain the benefit of customers and win the market as well.

Of course, the realizations of customers value also means the acknowledgement for cooperation of each party to value chain and benefits the interrelations of each other and improve the cooperation quality. Under the value chain mode, the enterprises carry out long-term cooperation strategy instead of short-term narrow attention. They not only share the information but also develop products together through agreement and that will greatly improve the relations of enterprises in value chain and each party, especially the customers will be greatly benefited.

6.3 Enlightenment of management of precision marketing for Chinese SMEs

6.3.1 SWOT analysis

Make following analysis on the small and medium-sized enterprises in China according to the gained research data and my visit to the some enterprises’ managers:

1. Strengths

(1) The superiority of the operational mechanism. Compare to the large-sized enterprises, the small and medium-sized enterprises have small sized and flexible operation mechanism, so they can adjust operation in time according to market’s changes.

(2) The superiority of the organizational structure. Compare to the large-sized enterprises, the small and medium-sized enterprises’ organizational structure is flat. Such organizational structure is in favor of the division and cooperation of interior employees, thus it can reduce enterprises’ encouraging and committing cost.

(3) The superiority of the technological innovation. Innovation is enterprise’s life. Facing the pressure from exterior environment, the officers and staff of small and medium-sized enterprises have the innovative drive in technology and besides, they are more possible to
carry out organizational innovation and management innovation to enhance the adaption to the exterior environment.

(4) The superiority of the space and resource appropriation. The richness of market space’s level can provide more chances for small and medium-sized enterprises to choose suitable strategic orientation. On the product orientation, for the mall and medium-sized enterprises in China is labor-intensive, they always have the superiority of intensive and cheap labor.

2. Weaknesses

(1) The small and medium-sized enterprises lack operational thought and industrial orientation. At present, many small and medium-sized enterprises are held and developed without any strategy. Therefore, the managers of such enterprises have weak strategic consciousness.

(2) They are difficult to finance. In the financing methods, few small and medium-sized enterprises can collect funds in the ways of issuing bond and financing and also few of them can issue stock to finance as a listed company. For the lack of avouching institutions, they also are very difficult to loan fund from banks.

(3) The information channel is obstructed. Small and medium-sized enterprises need the information about market, technology, talent, resource and etc., but the cost is high for them.

(4) They fail to realize the scale and key capacity correctly.

Many small and medium-sized enterprises still adopt extensive management and carry out the scale expanding strategy blindly. Enterprise’s key capacity hasn’t been improved according to the increasing of the staff, but it gets into the situations of variety and homogeneity on the contrary.

(5) They haven’t their own features and the enterprise culture is very backwardness. In the managers’ eyes, the staff of small and medium-sized enterprises is just the laborer and the staff doesn’t regard itself as the enterprise’s host. So staff value hasn’t been played fully and the enterprise’s long-term competitiveness is weak.
(6) Their management level is low and they also lack of human resources. The overall educational background and professional quality of the operators of small and medium-sized enterprises generally are not high, their operational management level is low and the democratic decision mechanism is lacked.

3. Opportunities

(1) In the aspect of political environment. Government pays much attention to the development of small and medium-sized enterprises, and issues series policies to create a policy environment and market environment which encourage small and medium-sized enterprises and non-public economy to develop.

(2) In the aspect of economic environment. The small and medium-sized enterprises have flexible mechanism and strong specialization, and they get closer to the market and have been used to the market competition, so their mechanism superiority can be played for better.

(3) In the aspect of social environment. The changeability, highness, variety and individuality of social consuming demand will make the product to develop towards the directions of high quality, various brand, small batch and quick renovation, which also will strongly simulate the development of small and medium-sized enterprises.

(4) In the aspect of technological environment. New technologies promotes the development of new departments and the developing trends of products that variety becomes more, batch becomes fewer and the scale becomes smaller, so the enterprise scale tends to dispersed and smaller. The small and medium-sized enterprises spring up correspondingly. The development of information technology makes the information communication and feedback among enterprises and between enterprise and customer timely, correctly and quickly, and it provides an effective information platform for enterprises’ cooperation; on the other hand, it breaks the limits of location, time and space, provides possibilities for the small and medium-sized enterprises to adopt more flexible operation methods and also makes the operation of organizational structure and business stream of the small and medium-sized enterprises become more open.

4. Threats
(1) The change of consuming structure will let the small and medium-sized enterprises face grave challenges because they mainly produce the low and medium-grade goods. The too much higher of barriers to entry of the newly rising industries makes too many small and medium-sized enterprises focus on the similar industries, so excessive competition is formed.

(2) The unfairness of market competition. The small and medium-sized enterprises can’t enjoy the State benefits for the large-sized enterprises at the aspects of financing, taxation, land using policy and etc.

(3) Increasing competition. The cancelling of foreign trade barriers after China’s WTO accession makes various famous brands and multinational companies enter into China market, so the competitive environment has changed greatly.

We can know from the above analysis on the small and medium-sized enterprises in China that realizing market thoughts and using strategic methods correctly is the key point and basis of the analysis. For the special rules of small and medium-sized enterprises and their unequalled resources to the large-sized enterprises, utilizing the limit resources reasonably becomes especially important for small and medium-sized enterprises to play their superiorities

6.3.2 Learn the outstanding points of PH (China)’s precision management

Combining the above analysis on small and medium-sized enterprises in China and focusing the features and present conditions of most small and medium-sized enterprises in China, we can know that there are many outstanding points we can learn from PH(China)’s case.

1. In the aspect of management thinking, today is the strategic management times, while many small and medium-sized enterprises in China are still at a disadvantage, so the reality requires the enterprises to carry out new management thoughts as quickly as possible to improve their capacity. The precision marketing management theory is much more suitable for the small and medium-sized enterprises in China to enter the strategic marketing times quickly because that it is from the angle of value chain management and has the over management thought.
2. For lacking of suitable management manners, many enterprises have problems in resource utilization, production efficiency and marketing capacity. Many outstanding points can be learned from PH(China)’s case of precision management.

(1) The concurrent engineering method can be applied in product development.

At the current stage, enterprises of most industries still adopt traditional department division method for new production development, and their product designing period is quite long. If during the designing and developing processes, the developing team of multidepartment multispecialty like marketing, design, techniques, manufacture, check, assembly, maintenance and etc. will be organized to communicate various information about production, technology, market demand and others, and the work of different stages can be carried out concurrently and crossly, the product development period will be greatly shortened, the quality can be improved and the cost can be reduced.

(2) It shall pay attention to combine the production plan and stock management in production plan and controlling.

The greatest feature of lean production is: the production order of any working procedure shall be decided by manufacturing quantity of next working process, which will reduce the stock quantity of the product in process and no product will be produced when it is unnecessary. Enterprises in China form the model of “large and all-inclusive” or “small and all-inclusive” under the traditional planned economic structure, so great waste exists. Such substantial factors shall be paid attention during the implementation, while neglecting the form that passes on the production order just according to the “board”. Combining enterprise’s current conditions, enterprise can carry out production partially at just some production & manufacturing units and then expend to one production line, one workshop or even the whole enterprise.

(3) Good supply marketing system shall be established.

To learn the experience of precision management, the long-term, stable and good cooperative relationship between enterprise and supplier, salesman and users shall be established, they shall form a kind of “destiny community”. A set of overall and reasonable evaluation system and cooperation mechanism for all partners shall be established, and a kind of system in
which the partners undertake the costs and risks and share the profits together shall be established.

(4) The streamline and perfect organizational structure shall be established

To carry out precision management, the streamline and perfect organizational structure shall be established. The traditional organizational structure of enterprise is pyramid-like multilevel management, the department division is highly specialized and the organizational structure is quite huge. So many problems exist, for example, the departments implements divided management and lack of the relationship with the overall benefits; there are many examining & approving and corresponding links, the indirect management fees are huge; though the interior organizational structure of the enterprise is highly specialized, some important departments are seriously lacked: no professional market information study department, no after-sales service agency and no integrated employee training and educational organization.

(5) People-oriented encouraging management mechanism shall be realized.

To carry out precision management, the traditional material-oriented management shall be changed to people-oriented management. Under the current conditions, to realize people-oriented encouraging management mechanism, the first thing shall be done is to establish a set of suitable enterprise culture, integrating individual benefits, enterprise benefits and social benefits together and express the outlook on values of enterprise value, employ value and social value fully.

6.4 Conclusion of the main experience of precision marketing management:

(1) Precision marketing management abides by the basic principle of modern marketing management “customer’s demand-oriented”, and the enterprise value streams shall be planned overall on strategic level and starting from customer value. The above contents discuss the importance of customer value. I have found during the interview of many owners of small and medium-sized enterprises that though they pay attention the marketing’s role in the enterprise operation, they fail to carry out the thought of customer value into the enterprise management but just regard “marketing” as the “sales” department. Therefore, considering the features of small and medium-sized enterprises in China, the correct marketing thought becomes especially important.
(2) The thought of Just in time mode of production. Combining the small-sized and flexible superiority and resource-lacking weakness of the small and medium-sized enterprises in China, flexible production can play the superiorities of the small and medium-sized enterprises much better. Optimized designing of production management system will make the production management to produce products at fixed a quantity, reduce stock and save current fund according to customers’ demand.

(3) The precise modern management manner shall be implemented and the site production shall be controlled by utilizing board. The next working process shall get goods from the previous working process according to the variety, time and quantity required by the board and the previous working process shall produce according to the contents required by the board, so the production will be balanced and stable, the stock and occupied space of production in process will be reduced, and then the production efficiency will be improved.

In a word, the successful experience of precision management manner has been recognized by the top enterprises in the world. Many enterprises adopt such management manners successively and gain nice achievement. Under the environment of global economy, the small and medium-sized enterprises in China shall look for management manners and experience suitable for enterprise’s development.
The lean production method is the Toyota Company’s production and management experience explored during the decades of practice, and is a successful model which closely combines the modern production and management theory to the Japanese culture. As a kind of advanced productive & organizational management manner, precision management pursues the perfection of the whole working process by eliminating all wastes during the work process; it pursues the quality perfection by the strict quality guarantee measures; it pursues the service perfection by satisfying customers’ individual demands. Pursuing perfection is the quintessence of lean thinking.

The paper knows the key factors for PH(China) to attain success by analyzing that they utilize the strategy and policy of lean thinking, and that is to construct “5S” management, promote in-time production, carry out standard operation to realize customer-oriented service, improve staff efficiency, expand production capacity, carry out total quality control and reduce cost through continuous improvement. The lean thinking shall be extended to the whole process of the enterprise operational activities to realize enterprise’s dual targets of profit and key capacity.

During the learning and using for reference of the lean thinking, the Chinese enterprises must combine the present conditions of the enterprise with the Country’s situation, learn its management thinking and change the old thoughts fully. They shall make the all staff accept such operational thoughts and form the behavior manner through continuous practice and consolidation. The lowest cost and best quality for enterprise is not the only target, but enterprise shall pursue customer value and quality satisfying enterprise, pursue the best distribution between cost and quality and pursue the optimization of product’s cost performance.

1. Ideology and conception shall be renovated

Enterprise’ productive and operational management is used to taking the thinking logic of mass production as the starting point to deal with all works of the enterprise. The renovation of ideology and conception is to require all staff of the enterprise changing the traditional
mass production thought to the lean thinking to instruct enterprise’s productive and operative activities.

2. The guidelines that enterprise promotes to apply to lean production shall be carried out fully

Lean thinking is a kind of all-directional and systematic management thinking. If enterprise wishes to promote it, it shall study its meaning deeply and apply it by combining its conditions. The lean thinking covers a series of productive and operative management activities in the enterprise and when the enterprise promotes it, it shall not regard the focus of the work is to launch new projects or carry out the lean thinking completely at one time. By doing these, funds will be invested too many and too centralized, and the risks and difficulties will be added. There, it shall be on the basis of analyzing enterprise’s sharp problem to take the keystone, and that is to carry out lean reconstruction at small sized such as a workshop or a production line, and after nice effect has been achieved, it shall use the experience of one point to lead the whole area and promote it gradually. Practice proves that carrying out precision management starting from productive & manufacturing field can improve production efficiency simply and quickly. For most enterprises are limited at some degree by the exterior environment and interior conditions, obstacles to carry out precision management exist in the fields of product designing, spare part collaboration and sales. While carrying out precision management in productive & manufacturing field and changing the traditional driving-style productive & manufacturing system into promoting-style, it will become much earlier. The stock of product in process, waste and cost will be reduced quickly and palpable effects will be achieved in a short time.

3. An overall planning for the enterprise promoting and applying precision management shall be prepared

Promoting and applying precision management is a complicated systematic project, and enterprise’s all aspects will be involved. Choosing suitable applying methods and organizing & managing the whole applying process scientifically are the important factors for the promoting work to gain effective progress. Generally speaking, the overall planning for the enterprise promoting and applying precision management shall be from the systematical attitude, and its main processes include:
(1) analyze enterprise’s current productive & operational management system, find out its bottleneck question, carry out precision management pertinently and improve such problems.

(2) Emend enterprise’s development goal. Promoting and applying precision management must closely combine with enterprise’s strategy, restudy enterprise’s development goal which is on the basis of the original productive & operational system, and put forward necessary supplement and emendation.

(3) Analyze product structure and techniques, adopt set technology, form the spare part group according to the similarity of the techniques and then achieve the seriation of the product designing; redesign and reconstruction manufacturing units and create conditions for the recomposing productive model and applying in-time system.

(4) Fix the goal to carry out precision management. On the basis of diagnosis of enterprise’s current productive & operational management system and according to enterprise’s development planning and goals, measure the bearing capacity wholly of enterprise’ human resource, material and finance, put forward the basic requirements and necessary indexes for applying precision management, which will make the application of precision management have a clear direction and also provide basis for the system evaluation.

(5) Prepare the plan to apply the precision management. From the angles of enterprise’s actual conditions and the effect to applying precision management, prepare the plan to apply the precision management by paying attention to the integrate application of technology and management.

(6) Carry out evaluation on precision management. Evaluation is to evaluate the benefit, technological progress and risk to apply the precision management.

4. Enterprise’s organizational structure shall be redesign

“Large and all-inclusive” or “small and all-inclusive” is one of greatest features of Chinese enterprises, the hugeness of the systematic structure makes the whole enterprise lack of energy, have lower overall benefit and lower productivity of the staff; while the enterprise with key capacities is the basic organizational structure of an enterprise which carry out precision management, that the capacity of product design and assembling, outsourcing the manufacturing of most spare parts, division of the marketing and productive function of the
product and establishment of special sales company and sales network. It shall establish flexible, quick-response and high-efficient organizational mechanism which means to reconstruct the enterprise, and there are mainly four methods for the enterprise to establish the quick-response organizational mechanism: merge the departments properly which have close relationships, make the organization flat and establish multidepartment team and all staff participates into management.

5. Enterprise’s operational and management manner shall be changed

(1) Change into the in-time production, adopt board management, eliminate overproduction, reduce the stock of product in process and realize the mixed & balanced production of multi varieties and small batches.

(2) Change into the concurrent development manner of work team, and the production developing and designing methods are many, like basic-style, multi flavor-style and modularized.

(3) Change cooperative manner, form the close cooperative relationship, a reasonable cooperative manner in which all partners analyze cost, decide price, share profit together and are impendent each other.

(4) Change into the positive sale, establish and perfect all-direction, multi-function marketing system, perfect the sales network of self sales and agency, strengthen the information communication at the aspects of customer information, production development, productive & manufacturing system and others.

6. The organizational work of precision management shall be applied extendedly

The promotion of precision management is doomed to be obstructed by the traditional customs and conservative ideas, so a powerful command structure is necessary. Leaders’ recognition and determination is one of the important to extendedly apply the precision management successfully. At the same time, training a high-quality staff team is one of precision management’s goals. Improving staff quality mainly relies on education and training, including the systematic training held by the enterprise and the continuous learning and improvement during the practice in the work team. The exterior macro environmental supporting is necessary to apply precision management extendedly. Government shall prepare
guidelines, policies, laws and regulations to encourage applying precision management, strengthen economic laws, perfect the market economy and provide a nice macro environment to apply precision management extendedly.

According to the capacity of the management level and the present conditions of the organizational structure of the Chinese enterprises, efforts shall be made in many aspects to establish lean enterprises. Facing globalization and integration, the small and medium-sized enterprises in China must improve their management level wholly according to the specific conditions. At the same time, government, academic circles and enterprise shall make efforts together to promote and apply precision management. Academic circles shall play an instructing role, enterprise is the main body to promote and apply precision management and government shall play a role of guarantee and promotion. Lean enterprise is the requirement for Chinese economy to change from extensive to intensive. By applying the lean production which is fit for the China’s specific national conditions, enterprise will improve the overall competitive capacity of the Chinese enterprises.

**Practicability and Limitations**

Different from other paper, the paper, in the light of the characters of Chinese existing small and medium-sized enterprises, mainly discusses the application of precision marketing management of small and medium-sized enterprises adopting extensive management. Therefore, it has the particularity in marketing cultural environment, such as Chinese policy and customers' preference; its application shall be more specific, and has stronger pertinence.

Besides, the paper starts with precision marketing management, discusses how to improve the efficiency of value delivery and thus win advantage through changing the extensive management method of enterprises. However, compared with the large-scale multinational companies which have mature brand and management mode, Chinese small and medium-sized enterprises still have the problems such as brand resources and technological resources, etc., therefore, precision marketing can not generally improve the enterprises’ comprehensive competitive capability. Several competition methods, such as technique introduction, strategy alliance and so on are still needed to improve the enterprise’ comprehensive competitive capability, only in this way can the enterprises may win in the competition.
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Research and interviews: Wang Xiao (Director of PH(China) Project Department), Parker Hannifin Co. Fluid Control (Shanghai) Co., Ltd., Aug. 2009.
Appendix

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2. Figure 2: Holistic Marketing Frame, P. Kotler, D. C. Jain & S. Maesincee, Formulating a Market Renewal Strategy, in Marketing Moves, Fig.1-1, Boston: Harvard Business School Press, 2002, p.29.


5. Figure 5: Value Creation System.