A Study on Service Demand in Customer Relationship Management for Taiwan's Small and Medium-sized Enterprise

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Abstract

Due to the globoal economic effect, Taiwan's small and medium-sized enterprise (SME) is much threatened by China. Since remarkable advances have being made in information technology, taking competition advantage for an enterprise has become a very important issue when facing rigorous global competition. However, the business of the enterprise starts with finding the customers' demands, and ends with fulfilling customers' demands. Therefore, in order to increase competition advantage for SME, the customer management must be effectively strengthened, especially by increasing customer satisfaction and maintaining good relationship with the customer. This is the key for an enterprise leading to success. The purpose of this study is aiming to discussing the relational analysis between customer and SME by viewing the four aspects of customer relationship management (CRM), which are relation marketing, customer service, customer value, and customer satisfaction. Moreover, this research will perform an empirical analysis on CRM for a typical small and medium-sized company so as to grasp its real definition and enterprises' demands. The conclusions will be drawn from our literature survey and practical experience as well as site investigation. Recommendations are evolved from discussing the interaction between customers and enterprises in improving their constructing factors and increasing benefits and values.

Key Words: Small and Medium-sized Enterprise, Customer Relationship Management

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1. Introduction

With the liberalization and internationalization of global industry environment, at present, Taiwan's small and medium-sized enterprise (SME) faces domestic and foreign challenge and competitiveness. The business of the enterprise starts with finding the customers' demands, and ends with fulfilling customers' demands. Therefore, in order to increase competition advantage for SME, the customer management must be effectively strengthened, especially by increasing customer satisfaction and maintaining good relationship with the customer. This is the key for an enterprise increasing the benefits. In the previous literature explorations in Taiwan, Wu (2002) proposed to precisely understand and control the movement of customers' demands and developed the value and strategies beneficial for customers and enterprises which led to the upgrading of customers' satisfaction and enterpriese benefits. Tsai (2003) indicated that when understanding the design spirit and system technique of Customer Relationship Management (CRM) more deeply, he found out that for service industry, this sophisticated and proper connection is certainly the best tool to rapidly transform "relationship" (cost) to the creation of customers (benefits). Wang (2003) believed that the enterprise internal resources planning and its relationship integration with upstream and downstream companies rely on the establishment of organizational culture, efficient operation of marketing strategies and CRM to increase industry competitiveness and create prominent organizational performance. Dai (2002) operated efficient managerial function planning and implemented it; besides, the researcher integrated the optimized operational strategies to help the enterprise more efficiently fulfill the upgrading of customers' satisfaction, enterprise benefis and the establishment of overall image which is the best mission of CRM. In CRM, Fan (2003) introduced the concept of knowledge management and related techniques and applied the ulmiately extracted knowledge to the management of customer relationship which efficiently offered the customers rapid and high-quality service for maintaining customers' loyalty, attracting new clients, increasing enterprise competition advantage, create enterprise wealth and ensure the niche market.

As to foreign literatueres, Kalakota and Robinson (1999) proposed "customer relationship management" in order to allow all of the departments and employees in the enterprise to work for satisfying all customers' demands and upgrade the competition advantage and performance; Daniel (1961) proposed a kind of strategic adoption and further reached the optimized benefit through learnig more about customers' demands and behavior and developing strengthened relationship with customers; Tiwana (2001) indicated that from different perspectives, the enterprise attempts to understand and segment customers in order to develop a kind of combined model of enterprise process and information technology suitable for customized products or service. The purpose is to manage the relationship with old customers, allow them to reach the highest level of loyalty, continuity rate and benefit contribution and

efficiently select and attract new customers. This research uses Taiwan's SME as an example and aims to explore service demand of CRM in SME and understand how this SME offers better service to the customers, creates channels of good interaction with customers and provides customers customized service. After receiving the service, the customers create their customer value and customers' satisfaction for reflecting the relational exploration in CRM. The researcher uses questionnaire survey to investigate the items of customer demands and explores customers when enterprise implements CRM and in CRM of SME, studies and analyzes four related aspects ("relationship marketing", "customer service", "customer value", "customers' satisfaction") under the implementation of enterprise. From the perspective of CRM and with the demand of customer service, this research uses four aspects of CRM ("relationship marketing", "customer service", "customer value", "customers' satisfaction") to explore relational analysis between Taiwan's SME and customers in order to understand customers' actual demands. The purposes of this research can be generalized as follows: (1) to explore the difference between current situation of service demand in Taiwan's SME and actual customer service demand; (2) to explore the items needed for further enhancement when enterprise operates CRM through related literature of CRM; (3) to explore the analysis of effect of customer demands toward different industries' CRM implementation; (4) to propose the suggestions for Taiwan's SME according to discriminative analysis.

2. Literature Review

2.1 Current Situations of SME in Taiwan

In developed, new industrialized or developing countries, there are SMEs; in Taiwan, there are many SMEs with flexible characteristics which create wide-spreading opportunities of employment and are the main motive power for domestic economic growth and social stability; as to the financial characteristics of Taiwan's SME, it is more capacble of handling the changes in the market and using resources to upgrade its competition advantage (Wu *et al.*, 2004). SME literally means the enterprise with smaller scale. Measuring the scale of SME determines the size of the enterprise. The scale of enterprise means, on the one hand, capital volume; that is, the capital volume declared when registering to the related institutions of the government or the capital volume actually received from the shareholders; on the other hand, the scale of enterprise also refers to business volume which is the sales volume generated annually by operating the enterprise; besides, there is also numbers of employees involved. The following refers to the regulations of related laws and the changes of industry structure (MOEA, 2003). The articles regulate that the business with company registration or business registration according to the laws and complied with the following standards are

considered as SME which is defined as follows: (1) manufacturing industry, construction industry, mining industry and quarrying industry with less than 60 million dollars of actually-received capital volume or with less than 200 frequent employees (the companies with less than 20 employees are small-sized enterprise); (2) Agriculture, forestry, fishery industry and animal husbandry, electricity, gas and water industry, business, transport, storage and communication, finance and insurance, real estate, industrial and business service, social and personal service industry with less than 80 million business volume in the previous year or less than 50 frequent employees (the companies with less than 5 employees are small-sized enterprise). The business complies with the following conditions is still regarded as SME: (1) After the expansion under guiding, the SME with scale larger than the original standard is treated as SME for two years from the date of expansion; (2) After merger under guiding, the SME with scale larger than the original standard is treated as SME for three years from the date of merger; (3) guiding institutions, guiding system or related institutions manage the centralized guidng for SME industry. As to some of the enterprises with scales larger than original standard, if the guiding institutions, guiding system or related institutions believe it is necessary for guiding of merger, they will be treated as SMEs during centralized guiding (Yu *et al.*, 2000).

2.2 Customer Relationship Management (CRM)

Recently, CRM has become a popular issue and thus the enterprises focus their attention on the customers and the customers' consuming patterns. The customers' satisfaction after consumption also becomes more significant. Therefore, this section is aiming to exploring the interactive relationship between enterprise and customers and studying the reorganized framework of CRM and related literatures.

2.2.1 The Origin of the Concept of CRM

CRM originates from the development in America. At the time, there was the interaction between buyers and sellers. At the beginning, it refers to so-called contract management in the 80s which mainly collected all of the data of connection between customers and companies in order to access to ideology of consumption for satisfying all of the customers' demands. Through the interaction between customers and companies, the information required by the customers can be controlled which led to customers' satisfaction; in 1990, it was gradually transformed to customer service such as telephone service center and customer service supporting data analysis. It also further operated information technique tools to allow the integration of data between enterprise and customers which led to the fulfillment of customers' satisfaction and creation of customer value. These data techniques include: Data warehouse, Data Mining, Database integration which can explore the customers' service demands and reach the ultimate goal of CRM (Wu, 2000).

2.2.2 Definition of the Concept of CRM

CRM is a major issue considerably valued by business circle. It is mainly related to the basic condition of the survival of an enterprise and it can maintain good relationship with customers and allows the enterprise to be more competitive. As to the definition of CRM, in early times, there are many domestic and foreign scholars proposing the definitions which are reorganized in Table 1.

Table 1. Definition of CRM

Scholars	Definitions
Wayland and Cole (1997)	"Customer relationship management" includes sharing four elements: customer combination management, value positioning, additional-value role and reward & sharing which determine "customer value".
Bhatia (1999)	So-called CRM is to use the support of software and related technology to focus on sales, marketing, customer service and support to automate and improve the enterprise process. Besides, the application software of CRM not only possesses the coordination of multiple enterprise functions (sales, marketing, customer service and support), but also integrates diverse channels to communicate with customers: face to face, Call center and Internet which allows the organization to select different customers' preferred interactive models according to different situations.e
Kalakota and Robinson (1999)	"CRM" means to allow all of the departments and employees to work for satis-fying all of the customers' demands. CRM is a set of system which integrates sales, marketing and after-sale service.
Wu (2000)	CRM can function as the communication model among enterprise, customer and supplier under the coordination based on internet.
Robinson (2000)	The enterprise can manage the application of all of the customer perspectives from sales data collection to self-service website on which customers can learn by themselves, purchasing of products, analysis of customers and techniques of competiton management system that mainly includes sales, service, marketing automation and everything.
Rogers and Peppers (2001)	Definitino of CRM: establishing relationship with customers in individualized media and delivering the data collected to different people that allow the customers and companies to have mutual benefits through transaction as long as the customers can contribute their data to reward the individualized service designed particularly for their demands.
Tiwana (2001)	From different perspectives, the enterprise understands and segments customers in order to develop a kind of combination model of enterprise procedure and information technology suitable for customized Product/Service which aims to manage the relationship with old customers and allows them to reach the highest level of loyalty, continuity rate and benefit contribution and efficiently selects and attracts new customers.
Lu et al. (2001)	In order to win new customers and stabilize original customer relationship and increase customer benefit contribution, the enterprise constantly communicates with customers and affects customers' behavior.
Daniel (2002)	A kind of strategic adoption and developing strengthened relationship with customers by learning more about customers' demands and behavior.

2.2.3 Phases of CRM

Kalakota and Robinson (1999) proposed that CRM mainly includes three different phases: Acquisition, Enhancement and Retention. For the customers, the creation of value derives from the situation in which the enterprise actively offers the consumers the products they are interested in. When facing different customers and product characteristics, the strategic change of any phase will certainly cause the alteration of other parts. Thus, the three phases are actually connected with each other.

2.2.4 Framework of CRM

Chen (2000) proposed that in CRM, one can understand customers' psychology from various kinds of channels in order to establish good interactive relationship. Thus, CRM is divided into two parts: (1) Knowledge of Customer Information Platform; (2) Interaction Platform for maintaining good relationship with customers. In CRM, in order to reach the optimized goal, one must start from the handling of plenty of customers and acquire data from individual database through Data Mining, On-Line Analysis Processing (OLAP) and other analytical tools to accomplish the supports of decision making. In Russell's (2001) CRM system framework, there were seven major CRM steps: (1) establishing customer database; (2) analyzing data; (3) customer collecting; (4) target customer marketing; (5) relationship marketing; (6) private rights management; (7) measurement of benefits of CRM.

2.2.5 Customer Value of CRM

So-called customer value refers to Net Value of each customer's costs spent (money, time, etc.) when shopping and the benefits acquired after purchasing (acquisition of substantial objects, spiritual satisfaction, etc.). Christy *et al.* (1996) indicated that on-line shopping can offer customers more potential advantages than substantial shops. In order to allow the customers to actually feel various advantages of on-line shopping, on-line shops access to different consumers' "Customer Value" through interview with customers. For enterprises, precisely approaching different customers' variance values is the prior key factor to attract consumers to shop on line.

2.2.6 Introducing the Benefits of CRM

Chen (2000) believed that CRM can bring many benefits for enterprises and the main items are as follows: (1) increasing profits; (2) increasing profit rate; (3) reducing costs; (4) upgrading concentration of the market; (5) reducing cycle times of implementation of new sales activities; (6) increasing times of small-sized target marketing; (7) increasing knowledge. Wu (2000) believed that after enterprise introduces CRM, the capacity to react to the market will enormously increase. For enterprises, the main competition advantages brought along are the following three: (1) upgrading loyalty; (2) increasing business volume; (3) trimming the costs.

2.3 Relationship Marketing

2.3.1 Origin of the Concept of Relationship Marketing

The formation of the concept of "relationship marketing" is mainly caused by the exploration of Industrial or business-to business marketing in Europe in 1962. At the time, some scholars in Sweden pointed out that in transaction network, buyer and seller are relationship partners without the difference of the primary and the secondary. Marketing roles are played by the whole employees of the enterprise. The expanded development of relationship marketing is explored by Morgan and Hunt (1994) who studied the effects of long-term relationship and legal contract on transaction relationship. In the literature of service marketing, Berry and Parasuraman (1991) formally introduced the term "relationship marketing" and defined it as "attracting, maintainng and strengthening the relationship with customers". Until now, the development of relationship marketing has involved many fields and Kotler and Armstrong (1994) called it as "new marketing paragon" which reveals the trend of replacing traditional marketing concept and becoming generalized.

2.3.2 Definition of Relationship Marketing

According to different scholars' definitions of relationship marketing in different times, the researcher reorganized them as Table 2.

Table 2. Summary of definitions of relationship marketing

Scholars	Definitions of marketing relationship marketing
Rapp and Collins (1990)	Relationship marketing is a method which can closely integrate marketing, quality of, customer service and maintenance of customers. It is a kind of commitment with high touch and overall quality marketing orientation.
Berry and Parasuraman (1991)	It is the process to attract, develop and maintain relationship with customers.
Morgan and Hunt (1994)	All of the activities establishing, developing and maintaining successful relationship of transaction marketing.
Evans and Laskin (1994)	Relationship marketing is a kind of customer-centralized method. The enterprise can use it to establish long-term business relationship with future and current customers.
Perrien and Richard (1995)	It is a kind of unequal and individualized marketing process which is persistent due to in-depth understanding toward customers' demands and characteristics. Two parties' sharing belief is also formed.
Kolter (1996)	Establishing long-term and satisfying relationship with important targets such as customers, suppliers and distributors in order to maintain two parties' fixed co-operation and business relationship.
Williams et al. (1998)	Through the implementation of customer-oriented strategy to obtain long-term customers' satisfaction and additional value of sales.
Gummesson (1995)	Relationship marketing is the marketing exploring relationship, network and interactive relationship.
Christy et al. (1996)	Based on voluntary and mutually beneficial behavior, two parties of buyers and sellers establish a kind of formal transactional behavior which increases the possibilities of future transaction.
Wang and Momen (1997)	Relationship marketing is for mutual interests and benefits as well as cultivating and maintaining long-term relationship in organizational and persistent way.

Thus, this research defines relationship marketing as that in order to establish, develop and strengthen long-term relationship with customers, the enterprise accomplishes long-term and mutually beneficial relationship through offering customers individualized service.

2.3.3 Levels of Relationship Marketing

Kotler and Armstrong (1994) divided the relationship between companies and customers into five levels and there are rankings among these levels. The implementation of relationship marketing will be different due to the closeness level of relationship between enterprise and customers. Berry and Parasuraman (1991) indicated that relationship marketing can be divided into three levels according to the combination ways with customers. The researchers believe that the higher the levelf of fulfillment, the more rewards the enterprise can acquire. Structural combination means that the enterprise offers valuable service to customers. The value service cannot be easily imitated by competitors such as the techniques which can upgrade the clients' production efficiency. With the value service, the customers can increase the transferred costs and will not easily depart from structural combination.

2.4 Customer Service

With the rise of consumers' consciousness and the advancement of information technology, the flow of information accelerates and the development of enterprise transforms from traditional production orientation to customer-centralized service model. Thus, the enterprise's operational direction should focus more on the strategy of how to offer customer service. Armistead and Clark (1992) indicated that offering good customer service and support according to customers' needs is a challenge for enterprise operation in the 90s; customer service and the offer of support rely on the overall integration of internal activities of the company for good performance. In addition, two scholars propose the concept of customer service triangle. Customer service should concretely include task-oriented activities that involve personnel, telephone communication and e-mail communication with customers and treat "customer satisfaction" and "operation efficiency" as the measurement indicators of design and execution (Lovelock, 1996). Kotler (1996, 1997) believed that customer service is the activities or benefits an organization needed for offering other group. The service might be directly associated with or without substantial products. Besides, the company focusing on products must offer customer service support with substantial value and significance.

2.5 Definition and Content of Customer Value

Zeithaml (1988) pointed out that customer value is the process in which customers completely evaluate the effectiveness of products due to product acquisition and cost payment. Monroe (1990) indicated that the past consumer behavior model was established on situation with complete information and assumed that the consumers would generate rational be-

havoior. However, in reality, the consuming environment is under the situation with in-complete information and the consumers would generate their preference or selection of the products according to their evaluation toward the products. Thus, Monroe proposed that con-sumers' perceivedvalue can be divided into the replacement relationship of perceivedbenefit and perceivedsacrifice.

The definition of value refers to the comparison of "acquisition" and "contribution". Morton and Rys (1987) defined "acquisition" as the situation when consumers are having a kind of consuming behavior, they sense the effectiveness obtained from certain product or service; "contribution" means what the consumers contribute when having this consuming behavior. Value is thus extended as the comparison between the acquisition of service stand-ard and payment of price. From the perspective of the consumers, "price" means the con-sumers should abandon or sacrifice something for obtaining this product or service (Bolton and Drew, 1991; Zeithaml, 1988). Here, price refers to the one with broad sense which is sensed by the consumers and can be called perceived price. The price does not simply in-volve in market price, it should include perceived nonmonetary price and objective price. Zeithaml (1988) believed that value and quality are two kinds of different concepts. Compared to quality, value is a kind of individualized perception with higher-level of abstract. Cronin *et al.* (2000) reorganized the related literatures in the past with respect to service value and analyzed the conclusions of 6 kinds of service industry. They believed that service value would affect customers' satisfaction and intentions of customer behavior.

2.6 Related Studies of Customer Satisfaction

Hunt (1977) and Oliver (1980) pointed out that customer satisfaction offers the messages with respect to consumers' evaluation toward certain product or service performance. Thus, customer satisfaction can be treated as after-sale evaluation in a specific purchasing occasion or timing. Treating personal emotion as the base of measurement, Howard and Sheth (1969) and Westbrook (1980) indicated that as long as the consumers feel good, satisfaction is gen-erated; on the contrary, when they have negative feelings, dissatisfaction will be created. Oliver (1980, 1981) pointed out that being satisfied or dissatisfied is consumer's emotional reaction toward certain things. Thus, the level of satisfaction is affected by perception per-formance and expectation performance. As to the measurement model of customer sat-isfaction, after the studies of scholars, the main theoretical framework generalized includes four measurement variables: customers' expectation, performance of product, inconsistency and customer satisfaction (Churchill and Surprenant, 1982). Kotler (1996) indicated that cus-tomers' satisfaction refers to the consistency of customers' expectation toward product or service purchased with the actual result. In other words, it is a kind of evaluation reaction with respect to the difference between customer's expectation level and actual perception. In

addition, Churchill and Supreant (1982) treated customers' satisfaction as the cost and benefit analysis in customers' mind; cost refers to money, time and effort paid by consumers for buying products and benefit is the performance or profit acquired after using the products. Based on the above scholars' views, customers' satisfaction is determined by the interaction between consumers' "expectation toward product or service" and "product performance perception after purchasing". The difference between the above two represents satisfaction or dissatisfaction.

3. Research Methdology

3.1 Research Framework

Most of the research targets are the domestic SMEs and questionnaire design mailny includes four major aspects "relationship marketing", "customer service", "customer value", "customers' satisfaction". According to related literatures of CRM and the purpose of this research, the researcher explores the overall framework of CRM and studies the correlation and difference of four aspects with respect to the service demand of CRM of SME and the different effects of various characteristics of the industry on four aspects.

3.2 Questionnaire Design

1. Targets of questionnaire design: The questionnaire design of this research is based on the overall framework of CRM and treats Taiwan's SMEs as research targets.
2. Purpose of questionnaire design: The purpose of this questionnaire design is aiming to understanding CRM under service demands between enterprises among Taiwan's SMEs and thus managing in-depth exploration of CRM system application in industry.
3. Scale of questionnaire design: This research questionnaire adopts Likert five-point scale.
4. Content of questionnaire design: The questionnaire design of this research is mainly divided into two main parts. The first part refers to basic information of industry which aims to understand the business volume, capital volume, numbers of employees and funds of research & development of the industry. It also explores the application and cognition of CRM in the industry. The second part is the enterprise's application and analysis of CRM which is divided into four aspects: "relationship marketing", "customer service", "customer value" and "customers' satisfaction", through these four aspects, the researcher can understand the operation and effects of CRM in SME.

3.3 Research Hypothese

According to SME's service demand level of CRM, this research proposes the research

hypoethese as the following Table 3.

Table 3. Research hypotheses

Hypothesis	Research hypotheses
H_{1a}	Different industry categories do not reveal prominent difference toward "relationship marketing" aspect
H_{1b}	Different industry categories do not reveal prominent difference toward "customer service" aspect
H_{1c}	Different industry categories do not reveal prominent difference toward "customer value" aspect
H_{1d}	Different industry categories do not reveal prominent difference toward "customers' satisfaction" aspect
H_{2a}	Capital volume of the industry does not reveal prominent difference toward "relationship marketing" aspect
H_{2b}	Capital volume of the industry does not reveal prominent difference toward "customer service" aspect
H_{2c}	Capital volume of the industry does not reveal prominent difference toward "customer value" aspect
H_{2d}	Capital volume of the industry does not reveal prominent difference toward "customers' satisfaction" aspect
H_{3a}	Business volume of the industry does not reveal prominent difference toward "relationship marketing" aspect
H_{3b}	Business volume of the industry does not reveal prominent difference toward "customer service" aspect
H_{3c}	Business volume of the industry does not reveal prominent difference toward "customer value" aspect
H_{3d}	Business volume of the industry does not reveal prominent difference toward "customers' satisfaction" aspect
H_{4a}	Numbers of employees of industry do not reveal prominent difference toward "relationship marketing" aspect
H_{4b}	Numbers of employees of industry do not reveal prominent difference toward "customer service" aspect
H_{4c}	Numbers of employees of industry do not reveal prominent difference toward "customer value" aspect
H_{4d}	Numbers of employees of industry do not reveal prominent difference toward "customers' satisfaction" aspect
H_{5a}	Expenditure of research & development funds of industry does not reveal prominent difference toward "relationship marketing" aspect
H_{5b}	Expenditure of research & development funds of industry does not reveal prominent difference toward "customer service" aspect
H_{5c}	Expenditure of research & development funds of industry does not reveal prominent difference toward "customer value" aspect
H_{5d}	Expenditure of research & development funds of industry does not reveal prominent difference toward "customers' satisfaction" aspect

The research framework is based on four major aspecs of CRM: "relationship marketing", "customer service", "customer value" and "customers' satisfaction" as Table 4. When this research uses statistical method to validate the hypothese, the prominent standard is set as $\alpha = 0.05$. If the analytical result reveals that P value is more than or equal to α ($P \geq 0.05$), the hypotheses are accepted; otherwise, the null hypotheses are rejected.

Table 4. Questions of this research aspects

Part one: Relationship marketing
1. According to your cooperative experience with enterprise, when the enterprise implements customer level segmentation and offers different service, will you be willing to have larger business transaction with the enterprise?
2. According to your cooperative experience with enterprise, when the enterprise offers customers design development service, will you be willing to have larger business transaction with the enterprise?
3. According to your cooperative experience with enterprise, when the enterprise adopts absolute confidential measure with customers' products for ensuring the security, will you be willing to have larger business transaction with the enterprise?
4. According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?
5. According to your cooperative experience with enterprise, when the relationship between the enterprise and customers is closer, will you be willing to have larger business transaction with the enterprise?
6. According to your cooperative experience with enterprise, when the enterprise offers customers short-distance and immediate service, will you be willing to have larger business transaction with the enterprise?
7. According to your cooperative experience with enterprise, when the enterprise arranges the schedules of service personnel to customers for the sake of the customers' business arrangement, will you be willing to have larger business transaction with the enterprise?
8. According to your cooperative experience with enterprise, when the enterprise's professional capacity is better, will you be willing to have larger business transaction with the enterprise?
9. According to your cooperative experience with enterprise, when the enterprise implements the above CRM item, will you be willing to introduce new customers to the enterprise?
10. According to your cooperative experience with enterprise, when the enterprise implements the above CRM item, as to payment, will you be willing to offer cash payment or reduce usance?
Part 2: Customer service
11. According to your cooperative experience with enterprise, when the enterprise's reputation is better, will you be willing to have larger business transaction with the enterprise?
12. According to your cooperative experience with enterprise, when the enterprise sets up various channels of service, will you be willing to have larger business transaction with the enterprise?
13. According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?

14. According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?

15. According to your cooperative experience with enterprise, when the enterprises upgrade the service attitude of service personnel, will you be willing to have larger business transaction with the enterprise?

16. According to your cooperative experience with enterprise, when the speaking manner of the operators of the enterprise is better, will you be willing to have larger business transaction with the enterprise?

17. According to your cooperative experience with enterprise, when the enterprises implement and fulfill the above CRM items, will you be willing to introduce new customers to the enterprise?

18. According to your cooperative experience with enterprise, when the enterprises implement and fulfill the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?

Part 3: Customer value

19. According to your cooperative experience with enterprise, when the enterprise establishes good managerial capacity of upstream and downstream relationship, will you be willing to have larger business transaction with the enterprise?

20. According to your cooperative experience with enterprise, when the enterprise offers free projects of certain items (such as mold) to A level customers, will you be willing to have larger business transaction with the enterprise?

21. According to your cooperative experience with enterprise, when the enterprise increases the organization of service personnel for maintain customer relationship and satisfy customers' demands, will you be willing to have larger business transaction with the enterprise?

22. According to your cooperative experience with enterprise, when the enterprise offers service on "customer is the focus", will you be willing to introduce new customers to the enterprise?

23. According to your cooperative experience with enterprise, when the enterprise offers service on "customer is the focus", as to payment, will you be willing to offer cash payment or reduce usance?

Part 4: Customers' satisfaction

24. According to your cooperative experience with enterprise, when the enterprise offers sample service in 24 hours, will you be willing to have larger business transaction with the enterprise?

25. According to your cooperative experience with enterprise, when the enterprise picks up the phone and can immediately respond to what you need, will you be willing to have larger business transaction with the enterprise?

26. According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, will you be willing to have larger business transaction with the enterprise?

27. According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?

28. According to your cooperative experience with enterprise, for the enterprise satisfied you, will you be willing to introduce new customers to the enterprise?

29. According to your cooperative experience with enterprise, for the enterprise satisfied you, as to payment, will you be willing to offer cash payment or reduce usance?

3.4 Methods of Data Collection

The research targets are Taiwan's SMEs and the researcher investigates enterprise's cognition and exploration with respect to the service demand of CRM. As to the research targets, the researcher mails the questionnaires for the execution of survey in December 2005 and there are 815 questionnaires distributed by mail. Retured questionnaires are 263 and valid ones are 222. Return rate is 32.26%.

3.5 Methods of Data Analysis

This research mainly uses SPSS 10.0 to manage data handling. The description of the methods of data analysis is as follows: (1) Descriptive statistics; (2) Reliability analysis; (3) One-Way ANOVA; (4) Correlation analysis.

4. Data Analysis and Empirical Results

This section will deal with statistical analysis and data analysis with respect to the returned data of questionnaires in order to validate the research hypotheses.

4.1 Structural Analysis of Samples

This research treats Taiwan's SMEs as research targets. The first part of questionnaire is the basic information of companies. Other items are the bases of analysis and questions include properties of industries, annual business volume of companies, current registered capital volume, numbers of employees, expenditure of research & development, sales spots of products of the companies, employees' educational background, etc. The summarized descriptions of basic information acquired by this research are as follows:

1. Categories of industry: service industry (21.2%) is the most, food industry and electronics industry (10.8%) are the second (11.3%).
2. Annual business volume: less than 50 million (41.9%) is the most, the second is 50 million~100 million (29.7%) and 70% of enterprises' annual business volume is less than 100 million.
3. Capital volume: less than 50 million (50.9%) is the most, the second is 50 million~100 million (25.7%). Most of them are small-sized enterprises.
4. Numbers of employees: 6~20 employees (26.6%) are the most, the second are 21~50 employees (22.1%), and over half of enterprises own less than 50 employees.
5. Expenditure of research & development funds: as to the percentage of research & development expenditure in business volume, 0~1% (34.2%) is the most, 1~3% (31.1%) is the

second. In other words, 65% of enterprises' research & development funds are less than 3% of business volume.

6. Categories of sales districts: mostly in domestic districts (67.6%), the second is Mainland China district (14.4%). Thus, we find out that most of the enterprises develop in the districts of the same culture and race.

7. Categories of educational level: as to the percentage of educational background in the company, over college is the most (90.5%) and the second is over high school (83.8%).

4.2 Reliability Analysis

As to reliability, this research uses Cronbach's α value to measure the internal consistency of each dimension. Guilford (1965) indicated that when Cronbach's α factor is more than 0.70, it is high reliability value. The values between 0.7 and 0.35 are fine. When the values are less than 0.35, they should be rejected for use. The current reliability of overall variable of the questionnaire reaches 0.8560 which is extremely high reliability value. Thus, this questionnaire can actually reveal the field for research. In addition, reliability of four variables and the whole questionnaire is more than 0.7 which is high reliability. Therefore, the questionnaire used by this research possesses sufficient internal consistency.

4.3 Descriptive Statistics Analysis

As to average and standard error of each question of this research, in terms of standard error, there are four items reveal standard error which is more than 1 (item 10 "relationship marketing - According to your cooperative experience with enterprise, when the enterprise implements the above CRM item, as to payment, will you be willing to offer cash payment or reduce usance?", item 14 "customer service - According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?", item 23 "customer value- According to your cooperative experience with enterprise, when the enterprise offers service on "customer is the focus", as to payment, will you be willing to offer cash payment or reduce usance?", item 29 "customers' satisfaction - According to your cooperative experience with enterprise, for the enterprise satisfied you, as to payment, will you be willing to offer cash payment or reduce usance?"). In each dimension, there is one question for improvement. Thus, when the enterprise implements CRM, if it can offer "face-to-face communication", offers service on "customer is the focus" and adopt "confidential measure" for the service content toward customers, the customers will be more satisfied and they will be more willing to cooperate with the enterprise with more preferential and larger transaction.

However the averages of each variable question in four aspects are between 3.35 and

4.21. It means that most of the respondents tend to agree with the questions listed which reveal certain degree of consistency; among them, the agreement degree of item 3 is the highest (4.21) ("when the enterprise adopts absolute confidential measure with customers' products"). It means that as to enterprise's confidentiality of the consumers' product, the consumers require its precise measurement for the sake of security. It is the main factor reaching the best goal when the whole enterprise implements CRM items.

4.4 Effect Difference Analysis of Each Variable Toward Four Aspects

This section will explore the correlation of questions of each aspect in questionnaire with respect to different items of the basic information of company (categories of industry, capital volume, business volume, number of employees and proportion of research & development funds).

4.4.1 Difference Analysis of Different Industries Toward Four Aspects

The result reveals that when prominent standard is 0.05, in the question of relationship marketing aspect, item 4 "According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?", item 5 "According to your cooperative experience with enterprise, when the relationship between the enterprise and customers is closer, will you be willing to have larger business transaction with the enterprise?", item 8 "According to your cooperative experience with enterprise, when the enterprise's professional capacity is better, will you be willing to have larger business transaction with the enterprise?", item 9 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM item, will you be willing to introduce new customers to the enterprise?" reveal significance. In LSD multiple test of the four factors, we can find out that factor of "According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?" is significantly better than the companies of mechanical manufacturing industry, material industry and electric machinery industry; electric machinery industry and service industry's factor of "According to your cooperative experience with enterprise, when the relationship between the enterprise and the customer is closer, will you be willing to have larger transaction with the enterprise?" is significantly better than electronics industry, optoelectronics industry, plastic manufacturing, mechanical manufacturing, textile industry and material industry; optoelectronics industry's factor of "According to your cooperative experience with enterprise, when the enterprise's professional capacity is better, will you be willing to have larger transaction with the enterprise?" is significantly better than the companies of electronics, plastic, mechanical, textile, electric machinery and food industry. In the questions of customer service aspect, item 13 "According to your cooperative experience with enterprise,

when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?", item 15 "According to your cooperative experience with enterprise, when the enterprises upgrade the service attitude of service personnel, will you be willing to have larger business trans- action with the enterprise?" reveal significance. In the LSD multiple test of these two fac- tors, we can find out that optoelectronics, pharmaceutical industry and service industry com- panies' factor of "enterprise offers network for immediate connection with customers" is sig- nificantly better than electronics, textile, material and electric machinery industry companies; service industry companies's factor of "enterprise upgrades service attitude of service person- nel" is significantly better than plastic manufacturing, mechanical manufacturing and electric machinery industry companies. In addition, noticeably, in customer value aspect, each ques- tion of different industries does not have significant correlation and in this aspect, the per- formance of different industries does not reveal significant difference. Finally, in the ques- tions of customers' satisfaction aspect, item 25 "According to your cooperative experience with enterprise, when the enterprise picks up the phone and can immediately respond to what you need, will you be willing to have larger business transaction with the enterprise?", item 26 "According to your cooperative experience with enterprise, when the enterprise im- plements the above CRM items, will you be willing to have larger business transaction with the enterprise?" reveal significance.

In LSD multiple test of these two factors, we find out that service industry companies' factor of "According to your cooperative experience with enterprise, when the enterprise picks up the phone and can immediately respond to what you need, will you be willing to have larger business transaction with the enterprise?" is significantly better than electronics, instrument and facilities, plastic manufacturing, mechanical manufacturing, textile, pharmaceut- ical industry andelectric machinery industry companies; Food and service industry companies' factor of "According to your cooperative experience with enterprise, when the enterprise im- plements the above CRM items, will you be willing to have larger business transaction with the enterprise?" is significantly better than electronics, mechanical manufacturing and material industry companies. According to the above analysis, we find out that apart from customer value aspect, part of questions in other aspects reveal significant difference with respect to different industries. However, it is difficult to distinguish if the overall performance of cer- tain industry is prominent or inferior.

4.4.2 Difference Analysis of Different Average Capital Volume Toward Four Aspects

The result reveals that when significant standard is 0.05, the companies' average capital only shows significant standard in the item "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" ofrelationship marketing. After LSD

multiple test, we find out that compared with companies with average capital volume "less than 50 million", the ones between "50 million to 100 million" reveal higher degree of identificationin this item. The analytical result of One-Way ANOVA shows that in the item of customer service aspect, item 13 "According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?", item 14 "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?" and item 18 "According to your cooperative experience with enterprise, when the enterprises implement and fulfill the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" reveal significance. Through LSD multiple test, we find out that the compared with the enterprises with average capital volume "less than 500 million to 1 billion, the ones with "over 1 billion" reveals higher degree of identificaiton in the item "According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?"; compared with companies with average capital volume "less than 50 million", the ones with capital volume between " 50 million to 100 million" reveal higher degree of identificationin the item of "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?"; compared with enterprises with capital voluem "less than 50 million", the ones with capital volulme between "50 million to 100 million" reveal higher degree of identification in the item of "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?".

Like the industry categories in the previous section, the companies' average capital volume in the question of customer value aspect also does not reveal significant standard. Thus, the size of capital volume would not affect the customers' value cognition. Finally, as to the question of customers' satisfaction aspect, only item 27 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" reveals significance. After LSD multiple test, we can find out that compared with the enterprises with capital volume "less than 50 million", the ones with average capital volume between "50 million to 100 million" reveal higher degree of identificationin the item of "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" Based on the above analysis, we realize that as to the size of the companies' capital volume in 29 questions in

questionnaire, there are only five questions reaching significant standard. There is even no question in one aspect (customer value) reaching the significant standard. With regard to the questions revealing significant standard, generally speaking, the enterprises with more capital volume have better performance.

4.4.3 Difference Analysis of Different Average Business Volume Toward Four Aspects

The result reveals that when the significant standard is 0.05, the companies' average business volume in relationship marketing with respect to "According to your cooperative experience with enterprise, when the enterprise implements customer level segmentation and offers different service, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the enterprise offers customers design development service, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the enterprises implement the above CRM items, will you be willing to introduce new customers to the enterprise?" and "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" reveal significant standard.

After LSD multiple test, we find out that the enterprises with average business volume of "over one billion" in the factor of "implementation of customer level segmentation" is significantly better than enterprises with average business volume between "500 million to 1 billion"; enterprises with average business volume between "300 to 500 million" reveal lower degree of identificationin the factors of "According to your cooperative experience with enterprise, when the enterprise offers customers design development service, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the relationship between the enterprise and customers is closer, will you be willing to have larger business transaction with the enterprise?", "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" than other enterprises with different business volume; enterprises with average business volume "over 1 billion" reveal lower degree of identificationin the factor of "According to your cooperative experience with enterprise, when the enterprises implement and fulfill the above CRM items, will you be willing to introduce new customers to the enterprise?" than the companies with business volume "less than 1 billion". In the questions of customer service aspect, item 13 "According to your cooperative experience with enterprise,

when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?", item 14 "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?" reveal significance. Through LSD multiple test, we find out that the enterprises with average business volume "over 1 billion" in the factor "According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?" are significantly better than the companies with average business volume between "300 to 500 million"; the enterprises with average business volume "over 1 billion" in the factor "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?" reveal higher degree of identification than the companies with average business volume "less than 50 million" and between "300 to 500 million".

In customer value asepct, only "According to your cooperative experience with enterprise, when the enterprise increases the organization of service personnel for maintain customer relationship and satisfy customers' demands, will you be willing to have larger business transaction with the enterprise?" reveals significant standard. After LSD multiple test, we find out that the enterprises with average business volume "over 1 billion" in the factor "According to your cooperative experience with enterprise, when the enterprise increases the organization of service personnel for maintain customer relationship and satisfy customers' demands, will you be willing to have larger business transaction with the enterprise?" are significantly better than the companies with average business volume between "300 to 500 million". Finally, the companies' average business volume in customers' satisfaction aspect does not reveal significant standard. Thus, the business volume of the enterprises does not show significant difference of identificaiton with respect to customers' satisfaction aspect. According to the above analysis, we find out that apart from customer satisfaction aspect, some of questions in other aspects reveal significant correlation with business volume (9 out of 29 items). The industry with more business volume does not necessarily allow the respondents to have significant identification.

4.4.4 Difference Analysis of Different Numbers of Employees in the Companies Toward Four Aspects

The result reveals that when significant standard is 0.05, as to the numbers of employees in relationship marketing aspect, only the factor "According to your cooperative experience with enterprise, when the enterprises implement the above CRM items, will you be willing

to introduce new customers to the enterprise?" reveal significant standard. After LSD multiple test, we find out that the enterprises with over 500 employees reveal higher degree of identification in the factor "According to your cooperative experience with enterprise, when the enterprises implement the above CRM items, will you be willing to introduce new customers to the enterprise?" than the companies with less than 500 employees. In the questions of customer service aspect, only item 14 "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?" reveals significance. After LSD multiple test, we realize that the enterprises with over 6 employees reveal higher degree of identification in this question than the companies with less than 5 employees. In the questions of customer value aspect, item 20 "According to your cooperative experience with enterprise, when the enterprise offers free projects of certain items (such as mold) to A level customers, will you be willing to have larger business transaction with the enterprise?" reveals significance. In LSD multiple test, we find out that the enterprises with over 500 employees reveal higher degree of identification in this question than the companies with less than 200 employees. In addition, customers' satisfaction aspect does not reach prominent standard which is the same as business volume in the previous section. It shows that the numbers of employees of the companies would not directly affect their operational situation and customers' satisfaction. Therefore, the companies should deploy well the employees in order to reach optimized state. In this section, we find out that as to the numbers of employees in the enterprises in the questions of each aspect in questionnaire, there are only 4 items with significant correlation (out of 29 items). In the questions revealing correlation, we notice that the numbers of employees are not related to the performance. Therefore, in this research, enterprise scale does not match the characteristic of "plenty is beauty".

4.4.5 Difference Analysis of the Amount Of Companies' Research & Development Funds Toward Four Aspects

According to the result, when the significant standard is 0.05, as to the companies' research & development funds in the question of relationship marketing aspect, only item 10 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" shows significance. Through LSD multiple test, we find out that the enterprises with research & development funds of over 10% show higher degree of identification than the enterprises with research & development funds less than 1~3% in the factor "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?". As to the companies research & development funds in customer service aspect, the facotrs

"According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?" and "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?" reveal significant standard. Through LSD multiple test, we find out that the enterprises with research & development funds of over 10% show higher degree of identification than the enterprises with research & development funds less than 1~3% in the item "According to your cooperative experience with enterprise, when the enterprise offers network for immediate contact with customers for the sake of business, will you be willing to have larger business transaction with the enterprise?"; the enterprises with research & development funds over 5-10% show higher degree of identification than the enterprises with research & development funds between 0-1% in the item "According to your cooperative experience with enterprise, when the enterprise operates video conference to communicate with customers face-to-face in order to reduce operation time, will you be willing to have larger business transaction with the enterprise?".

Noticeably, all of the questions with respect to the companies' research & development funds in customer value and customers' satisfaction do not reach significant standard. It shows that the enterprises' research & development function is not meaningful in Taiwan customers' mind. In this section, we realize that as to the amount of the companies' research & development funds in the questions of each aspect in the questionnaire, there are only 3 items with significant correlation (out of 29 items). In other words, people are not familiar with the research & development department behind the scene. However, in the questions with correlation, we find out that when the research & development funds are more, generally speaking, the performance will be better. Thus, the value of research & development still exists.

4.5 Empirical Results of Research Hypotheses

This section will compare the research hypotheses proposed in section 3 of this research with the results of statistical tests in the previous section and explore if they match each other. In the following, the researcher will respectively introduce the basic information.

4.5.1 Significant Analysis of Different Industry Categories Toward Four Aspects

As to the hypothese of this research, after statistical analysis, we respectively find out that different industries have inconsistent views toward four aspects. The views toward H_{1a}, H_{1b}, H_{1c} in this research are consistent. Some of the questions reveal significant difference. In H_{1a}, as to different industry categories in "relationship marketing" aspect, the factors of "upgrading the reputation of its brand", "closer relationship with customers", "better performance

of enterprise's professional capacity" and "enterprises' implementation of the above CRM items" reveal significant difference. In H_{1b}, as to different industries toward "customer service" aspect, the factors "enterprise offers network for immediate connection with customers" and "enterprise upgrades the service attitude of service personnel" reveal significant difference. In H_{1d}, as to different industries in "customers' satisfaction" aspect, the factors "enterprise picks up the phone and fulfills what customer need" and "enterprises' implementation of the above CRM items" reveal significant difference. In H_{1c}, different industry categories do not reveal significant difference toward "customer value".

4.5.2 Significant Analysis of Different Capital Volume Toward Four Aspects

In H_{2a}, as to different capital volume toward "relationship marketing " aspect, "as to payment, the factor "offer cash payment or reduce usance" reveals significant difference. In H_{2b}, as to different capital volume toward "customer service" aspect, the factors "enterprise offers network for immediate conneciton with customers" and "enterprise operates video conference to communicate with customers face-to-face" reveals significant difference. In H_{2d}, as to different capital volume toward "customers' satisfaction" aspect, the factors "enterprises' implementation of the above CRM items and as to payment, offering cash payment or reduce usance" reveal significant difference. In H_{2c}, different capital volume does not reveal significant difference in "customer value" aspect.

4.5.3 Significant Analysis of Different Business Volume Toward Four Aspects

In H_{3a}, with regard to different business volume toward "relationship marketing " aspect, the factor "implements customer level segmentation", "the enterprise offers customers design development service", "upgrading the reputation of its brand", closer relationship with customers", "enterprises' implementation of the above CRM items" and "as to payment, offering cash payment or reduce usance" respectively reveal significant difference In H_{3b}, with regard to different business volume toward "customer service" aspect, facotrs "enterprise offers network for immediate connection with customers" and "the enterprise operates video conference to communicate with customers face-to-face" reveal significant difference. In H_{3c}, with regard to different business volume toward "customer value" aspect, factor "the enterprise increases the organization of service personnel" reveals significant difference. In H_{3d}, with regard to different business volume toward "customers' satisfaction" aspect, the factor "enterprises satisfied you" reveals significant difference.

4.5.4 Significant Analysis of Different Numbers of Employees Toward Four Aspects

In H_{4a}, different numbers of employees toward "relationship marketing" aspect, the factor "the enterprise implementates the above CRM items" reveals significant difference. In H_{4b}, different numbers of employees toward "customer service" aspect, the factor "the enterprise

operates video conference to communicate with customers face-to-face" reveals significant difference. In H_{4c}, different numbers of employees toward "customer value" aspect, the factor "the enterprise offers free projects of certain items for A level customers" reveals significant difference. However, in H_{4d}, different numbers of employees toward "customers' satisfaction" aspect, all of the questions do not reveal significant difference.

4.5.5 Significant Analysis of Different Research & Development Funds Toward Four Aspects

In H_{5a}, different research & development funds toward "relationship marketing" aspect, the factor "as to payment, offering cash payment or reduce usance" reveals significant difference. In H_{5b}, different research & development funds toward "customer service" aspect, the factors "the enterprise offers network for immediate connection with customers" and "the enterprise operates video conference to communicate with customers face-to-face" reveal significant difference. However, in H_{5c} and H_{5d}, different research & development funds toward "customer value" and "customers' satisfaction" aspects do not reveal significant difference.

5. Conclusions and Suggestions

This chapter will examine the conclusions of how the past domestic and foreign scholars constructed CRM system,compare it with this research finding, generalize the difference and explore the mangerial significance. Finally, this chapter will propose suggestions for the future researches.

5.1 Conclusion

5.1.1 Analysis of Implementation Degree (Test Value = 3)

Testing if the target companies have "no comment" toward the questions and seting up this test as: H_0: $\mu = 3$, H_1: $\mu \neq 3$. The test result reveals that the target companies do not have "no comment" for all of the questions.

5.1.2 Analysis of Implementation Degree (Test Value= 4)

Testing if the target companies "agree with" all of the questions and the test is: H_0: $\mu = 4$, H_1: $\mu \neq 4$. The test result is shown as Table 5.

Table 5. Analytical result of Implementation degree (test value = 4)

Degree of agreement	Questons
agree	(2)(4)(5)(6)(7)(8)(9)(11)(12)(13)(14)(15)(16)(17)(19)(20)(21)(22)(24)(25)(26)(28)
agree~no comment	(1)(10)(18)(23)(27)(29)
Totally agree~agree	(3)

5.2 Variance Analysis

The main purpose of this research is to explore the service demand of SME which is different from the past scholars of studies of CRM system construciton. The former is to understand the SME's service demand toward suppliers from the standpoint of customers; this section lists this research finding for the comparison with the scholars' research results generalized in the previous section and elaborates the mangerial significance. This research result reveals that the diffemce analysis of literature research conclusions and this research conclusion with respect to each aspect is as follows:

1. "Relationship marketing": (1) "ordinary~agree" shows three items out of 10 and among them, there are 2 items without the exploration in the past literature; those are, item 1 "According to your cooperative experience with enterprise, when the enterprise implements customer level segmentation and offers different service, will you be willing to have larger business transaction with the enterprise?" and item 10 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM item, as to payment, will you be willing to offer cash payment or reduce usance?". It means that when the customers contribute more, they are more likely to expect for attention. Thus, when the enterprise implements CRM and satisfies the customers, the customers are not only willing to have larger transaction with the enterprise, but also would like to pay by cash or reduce usance". (2) "Agree" shows in five items out of 10 and among them, there are two items without the exploration in the past literature; those are item 4 "According to your cooperative experience with enterprise, when the enterprise increases the reputation of its brand, will you be willing to have larger business transaction with the enterprise?" and item 8"According to your cooperative experience with enterprise, when the enterprise's professional capacity is better, will you be willing to have larger business transaction with the enterprise?" It shows that when the customers view enterprises' "upgrading the reputation of its brand" and "strengthening the performance of professional capacities", they are not only willing to have larger transaction with the enterprise, but also would like to pay by cash or reduce usance. (3) "agree~ totally agree" shows 2 items out of 10 and one of them is not explored in the previous literature: item 2 "According to your cooperative experience with enterprise, when the enterprise offers customers design development service, will you be willing to have larger business transaction with the enterprise?" It means that the customers considerably value the enterprise's offering of design and development service. If the enterprise enhances this point, it will lead to enormous benefits.
2. "Customer service": (1) "ordinary~agree" shows in one item out of and this item is not explre in the past literature: item 18 "According to your cooperative experience with enterprise, when the enterprises implement and fulfill the above CRM items, as to

payment, will you be willing to offer cash payment or reduce usance?" Therefore, for the consumers, the enterprise's implementation is very important. (2) "agree" shows in 6 item out of 8 and one of them is not explored in the past literature: item 11 "According to your cooperative experience with enterprise, when the enterprise's reputation is better, will you be willing to have larger business transaction with the enterprise?" If the enterprise particularly values the construction and enhancement of reputation, it will satisfy the consumers more in customer service aspect. (3) "agree~totally agree" shows in one item out of 8: item 15 "According to your cooperative experience with enterprise, when the enterprises upgrade the service attitude of service personnel, will you be willing to have larger business transaction with the enterprise?".

3. "Customer value": (1) "ordinarly ~ agree" shows in one aspect out of 5 and this item is not explroed in the past literature: item 23 "According to your cooperative experience with enterprise, when the enterprise offers service on "customer is the focus", as to payment, will you be willing to offer cash payment or reduce usance?" Thus, when the enterprise estalishes the concept of "customer is the focus" to offer serive, it will certainly create customer value. (2) "agree" shows in 2 items out of 5 and one of them is not explored in the past literature: item 19 "According to your cooperative experience with enterprise, when the enterprise establishes good managerial capacity of upstream and downstream relationship, will you be willing to have larger business transaction with the enterprise?" Thus, we realize that when the enterprise establishes good upstream and downstream relationship managerial capacity, it is more likely to satisfy the customers' demands. It is also beneficial for enterprise's creation of customer value. (3) "Agree~ totally agree" shows in 2 item out of 5 and one of them is not explored in the past literature: item 20 "According to your cooperative experience with enterprise, when the enterprise offers free projects of certain items (such as mold) to A level customers, will you be willing to have larger business transaction with the enterprise?" It means that when the customers contribute more, they are more likely to expect for attention. When the enterprise offers free proejct of certain item (such as mold) to A level customers, it means that the enterprise values A customers who will be more satisfied and be willing to have larger transaction with the enterprise.

4. "Customers' satisfaction": (1) "Ordinary ~ agree" shows in 2 items out of 6 and these two items are not explored in the past literature: item 27 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, as to payment, will you be willing to offer cash payment or reduce usance?" and item 29 "According to your cooperative experience with enterprise, for the enterprise satisfied you, as to payment, will you be willing to offer cash payment or reduce usance?" Therefore, at this stage, customers considerably value the enterpries' implementation of CRM and how they satisfy the consumers. When the customers are satisfied, they will satisfy the

enterprise by paying by cash or reducing usance. (2) "agree" shows in 2 items out of 6: item 26 "According to your cooperative experience with enterprise, when the enterprise implements the above CRM items, will you be willing to have larger business transaction with the enterprise?" and item 28 "According to your cooperative experience with enterprise, for the enterprise satisfied you, will you be willing to introduce new customers to the enterprise?" Thus, at this stage, customers considerably value the enterpries' implementation of CRM and how they satisfy the consumers. When the customers are satisfied, they will be willing to have larger transaction with the enterprise and introduce new customers to it. (3) "agree~totally agree" shows in 2 items out of 6: item 24 "According to your cooperative experience with enterprise, when the enterprise offers sample service in 24 hours, will you be willing to have larger business transaction with the enterprise?" and item 25 "According to your cooperative experience with enterprise, when the enterprise picks up the phone and can immediately respond to what you need, will you be willing to have larger business transaction with the enterprise?" It shows that the customers value enterprise's rapid service and response the most. If the enterprise enhances these two points, it will be more beneficial for the enterprise's implementation of CRM.

CRM aims to explore the interaction between the customers and enterprises. This research uses SME as an example, explores the difference between the enterprise's implementation of CRM items and customers' actual service demands, finds out the aspects and items the enterprise should strengthen and futher increases its benefits and value. With regard to SME in CRM, the researcher proposes the following conclusions: (1) Upon the exploraito from the perspective of customers' demands, we find out that when the enterprise's capital volume is more, there will be more employees and research & development funds. Besides, the degree of identificaiton with respect to implementation of CRM would be higher. The amount of business volume will be different depending on the customers' demands. (2) Based on the difference analysis and comparison between related literature and this research, the researcher obtains the following conclusions: (a) In relationship marketing asepct, the enterprise must be ahead of the competitors and stregthen the aspects of "upgrading the reputation of brand" and "enhancing the performance of professional capacity"; (b) what the customers demand is the enterprise's serivce. The better the enterprise's customer service is, the better the enterprise's image to the customers will be. Therefore, in "customer service" aspect, the reputation of the enterprise should be stregthened; (c) In CRM, customer value is an important item which cannot be neglected. Customer-enterprise-supplier should closely rely on each other and connect with each other. The good interaction is required for the stitution of three wins; (d) Enterprise's searching of customers' satisfaction indicator should be treated as the key of CRM implementation. It is considerably beneficial for customers' satisfaction and en-

terprise's improvement. (3) The result of statistical analysis reveals that apart from "customer value" aspect, for different industries, some questions in other aspects reveal significant difference since different industries' views toward "relationship marketing", "customer service"and "customers' satisfaction" aspects will be different according to the difference of industry characteristics.

5.3 Contributions of Research

According to the above explorations and conclusions, the research provides the following research contributions: (1) As to the research's exploration of SME's implementation of CRM, since it is more difficult for mall and medium-sized enterprise to construct CRM system, the reseracher must start from the data in customer group. This research uses questionnaire survey to explore the customers' demands of service in CRM and as to customers' information acquired, through empirical study, the researcher implements it in CRM of the enterprise in order to reduce the cost of system establishment and obtain better results; (2) As to the exploration of difference analysis of literatures and this research items, this resarech proposes several critical causes of customer demands which are not mentioned in other literatures. Besides, with direct obtainment of CRM perspective, this research is more practical; (3) when exploring different industries, the researcher proposes different demand characteristics of each industry and systematically reorganize the priority of each industry's implementation of CRM so that it is beneficial for each industry to upgrade the benefits of CRM implementation.

5.4 Research Suggestions and Future Research Directions

Based on the above explorations and conclusions of the research, the researcher offers the following suggestions: (1) In exploration of CRM in SME, since CRM is critical for customers' interaction, the enterprise should maintain old customer interactive relationship and look for potential new customers. In order to be more successful when implementing CRM, the enterprise should reorganize and apply customers' data acquired for the best operation of CRM implementation; (2) If one can establish efficient CRM system for SME and validate it by empirical study and case interview, the best result and benefit will be obtained. This research only focuses on the items needed to be strengthened when the enterprise implements CRM and does not study how to upgrade the items. Therefore, the future reseachers can focus on the following suggestions for in-depth studies which can be more beneficial for the enterprise's implementation of CRM: (1) In relationship marketing aspect, how the enterprise "upgrade the reputation of the brand" and "strengthen professional capacity" is the direction of research; (2) In customer service aspect, enhancing the in-depth exploration of strengthening the item of "how the enterprise establishes reputation"; (3) In customer value

aspect, one should focus on how the enterprise establishes upstream and downstream relationship managerial capacity and how enterprise uses "customer is the focus" and offers service of free projects in certain items. (4) In customers' satisfaction aspect, what kind of customers' satisfaction indicator items should the enterprise establish in order to prove if the enterprise's implementation is effective in this aspect?.

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