

## Strategic analysis of customer relationship management—a field study on hotel enterprises

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**ABSTRACT** *The value of a customer relationship is well recognized by many leading companies, especially by those in the service sector. For high quality hotel enterprises, application of Customer Relationship Management (CRM) is a great opportunity to increase customer value and provides a way to systematically attract, acquire and retain customers. The main purpose of this study is to provide a framework to review the strategic analysis related to customer connections in high quality hotel enterprises. This study has taken high quality hotel enterprises in Taiwan as an example to perform a field study. A strategic CRM framework based on Wayland and Cole's model is introduced in order to classify the subjects from a customer-oriented perspective. From the responses of the surveyed high quality hotel enterprises in Taiwan, it is demonstrated how they can develop their customer connection strategies based on their current and future positions in four dimensions of the value compass model. In this way, the field study shows that there is still a considerable amount of space for high quality hotel enterprises in Taiwan to improve their knowledge about customers further and put some more efforts into seizing the opportunity of informed pursuit of continuous quality improvement and business excellence. In the future, customer relationship management and knowledge management together will help businesses accumulate customer knowledge, build up better relationships between them and their customers, enhance customer satisfaction and achieve business excellence.*

### Introduction

The implementation of e-business applications has continuously grown in a seemingly unabated fashion worldwide. Many companies are transforming themselves to customer-focused organizations nowadays and the importance of establishing Customer Relationship Management (CRM) to understand better what their customers want is becoming increasingly recognized. For businesses, CRM is more than a software package, it is a 'killer application'. It aims to understand, anticipate and manage the needs of organizations' current and potential customers (Brown, 2000). However, based on a recent survey, there are only a few companies that have implemented CRM systems in Taiwan (Lyu & Lin, 2001a, b).

This research performs a field study to explore how high quality hotel enterprises in

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Taiwan can improve the relationships between themselves and their customers. The selection criterion of high quality hotel enterprises in this study is that their ratings are four stars and above. Specifically, this paper studies three interrelated objectives in order to get a holistic view of customers and their relationship with the entire enterprise as follows.

- (1) To provide a framework to review the strategic analysis in relation to customer relationship management.
- (2) To conduct a field study of the CRM applications on high quality hotel enterprises in Taiwan.
- (3) Based on the findings, discuss the opportunities for high quality hotel enterprises in Taiwan to leverage customer knowledge, create value for customers, inform further quality improvement, enhance customer satisfaction and pursuit business excellence.

### **Theoretical background**

As the business world shifts from product focus to customer focus, managers are discovering that the enhancement of existing customer relations will be of benefit for profitable and sustainable revenue growth. Brown (2000) defines CRM as 'the key competitive strategy you need to stay focused on the needs of your customers and to integrate a customer-facing approach throughout your organization'. Chatterjee (2000) also points out that CRM is a discipline which focuses on automating and improving the business processes associated with managing customer relationships in the area of sales, management, customer service, and support. Actually, CRM is very important because acquiring customers is much more expensive than keeping them. Srivastava *et al.* (1999) have developed a framework for understanding the integration of marketing with business processes and shareholder value. They have also emphasized that the CRM process addresses all aspects of identifying customers, creating customer knowledge, building customer values, and shaping customers' perceptions of an organization and its products. Some people may argue that a basic purpose of CRM is to increase sales revenues. The cash-flow enhancing potential of customer relationships has led to the recognition that customers are market-based assets. Successful implementation of CRM sub-processes can contribute to greater switching costs and loyalty.

CRM may also contribute to quality management at a higher level. Quality is considered as the ability to meet the stated and implied requirements of customers rather than elegance. Crosby (1979) points out that '[i]nstead of thinking of quality in terms of goodness or desirability we are looking at it as a means of meeting requirements'. The International Organization for Standardization (ISO) (1994) also defines quality as 'the totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs'. CRM may enable a business to understand better the stated and, especially, the implied requirements of its customers. With this understanding, a business may have a better opportunity to provide its customers with products or services that are more in tune to their requirements and their view of quality.

CRM may provide for a business the opportunity of informed continuous quality improvement at a higher level. CRM may enhance the understanding of the requirements of customers and continuous improvement of quality may then be guided by these better understood requirements. Russell (1999) argues that it is important for a business to understand not only the view of its internal stakeholders but also that of its external stakeholders such as customers in order to have a clearer sense of direction and prevent changes in the wrong direction. Thus, quality may be continuously improved in the light of better customer knowledge provided by CRM.

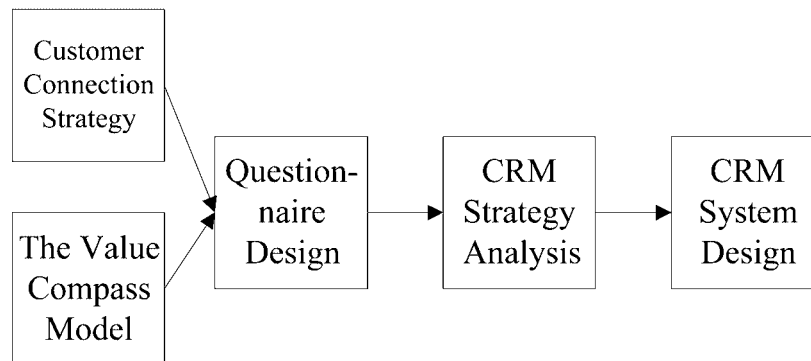
CRM may also contribute to business excellence. CRM enables a business to keep in tune with the requirements of customers and enhance customer relations and satisfaction. Peters (1988) points out that being close to customers and listening to them are important for a business when it would like to manage change and pursue excellence. Waterman (1987) also emphasizes the importance of regarding information such as customer knowledge as a business's main strategic advantage, and also looking at the business itself from a different perspective, such as that of its customers, for the pursuit of businesses excellence. In addition, Kanji (1998) and Kanji & Wallace (2000) argue that customer satisfaction is a critical success factor for business excellence. Therefore, CRM that may create value for customers, inform further quality improvement and enhance customer satisfaction plays an important role in the pursuit of business excellence and a close examination of the CRM strategies of a business is very important for that reason.

In Taiwan, high technology enterprises such as Acer and Microsoft TWN have established field service and sales force automation. There are reports indicating that some enterprises in the areas of communication, finance, and insurance have already set up call centres. Although a call centre is not the same as an integrated CRM solution, its importance is widely recognized by the practitioners since it meets the basic requirements of increasing customer response speed.

Pepper & Roger (1999) have focused on four steps (identify, differentiate, interaction and customize) for one-to-one marketing. Brown (2000) presents the strategic customer care five-pillars model to build up a CRM model for enterprises. Handen (2000) considers five dimensions (strategy, organization, technology, segmentation and process) to implement a CRM project effectively. Curry & Curry (2000) have written a clear, step-by-step guide to profit from CRM, with strategies that are aimed at the small and medium-sized business owners. Swift (2001) emphasizes the right customer, right offer, right channels and right time for keeping customers' loyalty. Dyche (2002) provides for an enterprise the guidance for adopting and implementing its own CRM solution. Williams (1970) emphasized that all other aspects of strategy are for naught if one doesn't target the right customers. It is very important to build the right customer portfolio. Cole & Goldsmith (1997) have shown a good example to select the right range of the value proposition. Wayland & Cole (1997) have presented the value compass model, which makes the explicit connection between what managers know about their customers and how they can leverage that information to create customer value. A framework has been developed by Srivastava *et al.* (1999) to comprehend the integration of marketing with business processes and shareholder value. Lin (2000) presents a systemic integrated communications model that may help enterprises identify the potential issues of CRM. Liedtka *et al.* (1997) have created a generative cycle to link knowledge and relationships. These researches imply that customers will increasingly seek to use new technologies to enhance information transparency and companies need to prepare themselves for this trend.

### **Research design**

Strategic analysis of customer relationship management is performed under the research structure presented in Fig. 1. There are five phases in this study. Since customer connection strategy is so important, customer knowledge management, customer-connecting technologies and customer economics applied in high quality hotel enterprises in Taiwan have been reviewed first. Then, a strategic CRM framework based on the value compass model is proposed and four dimensions of the relationship value (customer portfolio management, value proposition design, value-added role as well as reward and risk sharing) are identified.



**Figure 1.** *Research structure.*

Customer knowledge, customer-connecting technology, and customer economics are the foundations of customer-connected strategy. They make it possible to determine where a business can position itself along each of the four dimensions of the value compass model. An appropriate questionnaire is designed to collect the field information with subjects restricted to high quality hotel enterprises in Taiwan. CRM strategies can be recommended considering the data analysis from the field study. Finally, suitable solutions are suggested to fit the needs of CRM demands. Each phase is further explored below.

### *1. Customer connection strategy*

Previous research has identified that customer knowledge management could help companies to assess their improvement progress (Arthur Andersen Business Consulting, 1999). In general, companies that are good at dealing with customer relationships are also good at managing customer knowledge, using customer-connecting technologies and understanding customer economics (Wayland & Cole, 1997: 31). Wayland & Cole (1997) also define customer knowledge management to be the effective leverage of information and experience in the acquisition, development, and retention of a profitable customer portfolio; customer-connecting technologies are the physical or electronic links between companies and customers; and customer economics is the analysis of the value of a business in terms of the number and quality of its customer relationships. The CRM strategy is therefore determined by a combination of these three components. High quality hotel enterprises in Taiwan can evaluate how they have done on these components through questionnaires and so understand what they have to do in the future.

### *2. The value compass model*

The four dimensions of the value compass model provide ways for business to identify and manage customer relationships, to measure business's contribution to its customer value chain, to decide the position of the company within the industry value-added chain, and to decide, on this basis, which customers and suppliers can create and share better value. High quality hotel enterprises in Taiwan can evaluate where they are on the value compass model at present and in the future and furthermore get ideas about CRM strategies.

### 3. *Questionnaire design*

There are three parts in the questionnaire in this study: part 1 collects the basic information of subjects; part 2 finds out the status of customer knowledge, customer-connecting technologies and customer economics of the high quality hotel enterprises in Taiwan; and part 3 projects a desirable position of a hotel within the four dimensions in the value compass model. The questionnaire designed in this research aims to discuss the following three questions.

- (1) What do high quality hotel enterprises in Taiwan consider about their customer connection strategies?
- (2) What are the current and forthcoming marketing strategies for high quality hotel enterprises in Taiwan on the value compass model?
- (3) What kinds of CRM applications are best for high quality hotel enterprises in Taiwan?

### 4. *CRM strategy analysis*

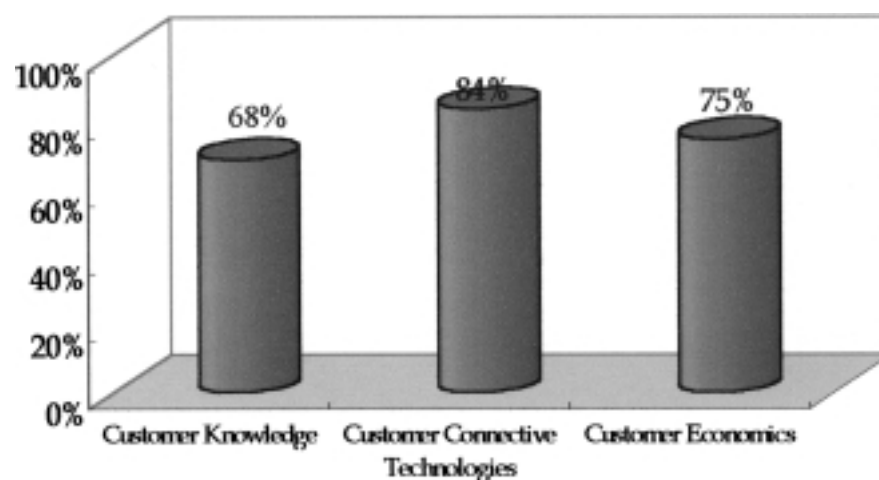
After the submitted questionnaires are returned, careful data analysis and results discussion should be executed. One can refer to some successful cases from western countries, as illustrated by Wayland & Cole (1997), to carry out the strategy analysis. These examples provide role models for companies to start the CRM approach. Based on the CRM visions, strategies and activities derived from the successful cases mentioned above, this study would like to explore how the strategy analysis may provide fruitful suggestions for high quality hotel enterprises in Taiwan. Strategic initiatives will then be proposed through the CRM strategy analysis and the CRM solutions will be developed thereafter.

### 5. *CRM system design*

We have built up an electronic business laboratory in the department of Industrial Management at Southern Taiwan University of Technology and bought BrioQuery Explorer (Business Intelligence Software for the web) and a local CRM system. With the laboratory and the facilities, it was easier to design a CRM system component to show high quality hotel enterprises in Taiwan how they can benefit from a CRM system. However, the design of a CRM system needs to select the appropriate software and hardware. Professional consultant knowledge is also necessary to make the integrated solution successful. The awareness ratio of CRM vendors, based on a recent survey (ARC, 1999), is as follows: IBM (17%), NCR (15%), ORACLE (13%), HP (10%), LUCENT (8%), MICEOSODT (8%), NORTEL (6%), SAS (5%), SYBASE (4%), Other (14%). The ranking is only for reference and the selection of the vendors should be decided based principally on the demands of the high quality hotel enterprises in Taiwan.

## **Research findings and discussion**

Descriptive analysis of the questionnaire results is now provided. The questionnaires were sent to all 19 high quality hotel enterprises in Taiwan. Telephone calls were made to all the managers of these high quality hotels, and their agreements upon the completion of these questionnaires were obtained before the questionnaires were sent. Follow-up calls were also made to ensure that they understood all the questions in the questionnaire and that all questionnaires were completed. As mentioned above, the selection criterion of high quality



**Figure 2.** *Customer connection strategies.*

hotel enterprises in this study was that their ratings are four stars and above. There were 19 responses from these 19 hotel enterprises. The analysis of customer connection strategies and their positions on the value compass are discussed below. Moreover, we have carried out interviews with three hotel managers in these enterprises. As a result of the questionnaires they completed, we provided them with some experiences from the western countries (Wayland & Cole, 1997) and they agreed upon the suggestions provided.

### *1. Customer connection strategies*

The first priority was to investigate the purpose of customer connection. Figure 2 shows a comparison of what high quality hotel enterprises in Taiwan consider about their customer connection strategies. These hotels, based on the surveyed data, have the connections for customer knowledge in 68% of cases, for customer-connective technologies in 84% and for customer economics in 75%. Clearly, there is still a considerable amount of space for them to improve customer knowledge. However, customer knowledge creates value when companies incorporate it into planning and operating activities. The implications are as follows.

#### *(a) Customer knowledge*

The availability of the large volume of data on customers, made possible by new technology tools, has created opportunities as well as challenges for businesses to leverage the data and gain competitive advantage. Shaw *et al.* (2001) presented a systematic methodology that uses data mining and knowledge management techniques to manage the marketing knowledge and support marketing decisions. Lesser *et al.* (2000) identified four approaches (customer knowledge development dialogues, facilitating the capture of knowledge relevant data, demonstrating enterprise leadership, commitment to customer knowledge) that can expand the availability and use of customer knowledge. Tiwana (2000) identifies knowledge management and customer relationship management for every business decision-maker and IT professional. Since customer knowledge is very important, but only 68% of the respondents have done well to collect customer knowledge, several suggestions (Wayland & Cole, 1997:

45), as shown below, are identified to help build up a knowledge management system that captures information, creates, shares and leverages knowledge.

- (i) Build the stock of knowledge: a customer knowledge database may be established to store transaction records and complete customer behaviour patterns, such as some customers' preferences for softer pillows.
- (ii) Generate knowledge at the right level and the right depth: currently, customer knowledge is generated merely from the point of view of the whole hotel industry and the entire requirements of all customers. In the future, try to attract different types of customers, and customer knowledge should be gathered from customers of different types such as business, travelling, and recreation customers.
- (iii) Generate the right kind of the knowledge: customer knowledge may be correctly generated through three ways of knowledge acquirement—dialogue, observation and prediction—with the facilitation of an information system to integrate and classify it.
- (iv) Leverage knowledge: customer knowledge may be utilized to understand the actual needs of every customer and to provide the services needed. Further effort may be made on actively exploring the not-yet-surfaced needs of customers in order to serve them better and to create higher value.
- (v) Apply the knowledge management model: customer knowledge should be correctly generated to develop a way of maintaining customers and the internal process of knowledge management.
- (vi) Build up call centres: currently, call centres of high quality hotels in Taiwan do not integrate all the service processes of acquiring customer information. In addition, customer information mainly comes from passive information such as customer complaints. In the future, in addition to telephone marketing, call centres of high quality hotels in Taiwan may be integrated with electronic commerce and the hotel information portal in order to understand the demands of potential customers.

(b) *Customer-connective technologies*

As shown in Fig. 2, the strategy of customer-connective technologies has the highest proportion (84%) compared with the other two strategies. Customer-connective technologies, which focus on the physical or electronic links between customers and companies, can support long-term planning for both parties. Some suggestions (Wayland & Cole, 1997: 75) are presented in the following.

- (i) *Identify the main purposes.* More emphasis should be put on customer requirement orientation, including expanding existing customer relationship, providing the services that are really needed and innovative services, building new customer relationships, and attracting potential customers.
- (ii) *Set up a feedback loop.* Programming and the database should be utilized to provide different customers with specifically designed web pages in order to establish high value interaction between the hotel and these customers. The content of the website should be enriched and innovative. For instance, an electronic bulletin board may be established to let customers elect the best service staff in the hotel or the most popular or thoughtful service provided by the hotel and to let them provide suggestions for the development of customized services.
- (iii) *Implement new database systems and agent technologies.* Database systems should be utilized to connect with specifically segmented customers and trace these customers'

demands and preferences. Better extended services may be developed by satisfying these traced demands and preferences.

- (iv) *Conduct an online relationship*. An enriched and thoughtful content of website services may be the basis of making an electronic connection with customers. The interactive function of an online survey or discussion may also be utilized to create the value of relationships.

(c) *Customer economics*

Seventy-five percent of the respondents are concerned about customer economics, as shown in Fig. 2. Customer economics means the analysis of the value of customers in terms of the frequency and quality of their relationships. Some suggestions (Wayland & Cole, 1997: 101) are proposed below.

- (i) *Estimate the value of customer relationships*. The value of all customer relationships may be re-evaluated through the integration of an information system. This includes the re-evaluation of the accumulation of points of membership purchase, the types of rooms (luxurious, general or economic) booked, individual customers or group customers, preferred facilities and the cycle time of staying for business customers.
- (ii) *Understand the distribution of the customer relationship value*. Pareto's 80/20 principle may be better utilized with the facilitation of customer portfolio management to provide different customers with differentiated services.
- (iii) *Manage the customer portfolio for maximum growth*. Currently, market segmentation is not utilized to focus on valuable customer relationships. In the future, market segmentation may be utilized to provide valuable customers with better service and information in order to create higher value.

2. *The value compass*

The current and future positions for the subjects on the value compass are shown in Table 1. As shown in Fig. 3, high quality hotel enterprises in Taiwan will stay on market, total solution, network manager, and outcome levels in the future. Based on the experience in western countries (Wayland & Cole, 1997), these respondents can aim to approach their markets very broadly; making few distinctions among the customers for their products; creating a set of related products to address their customers' needs for management

**Table 1.** *The current and future positions of the subjects*

Dimension	Position	Present position	Future position
Customer portfolio management	Market	13	13
	Group	6	5
	Individual	0	1
Value proposition design	Core Product	6	0
	Extended Offer	7	7
	Total Solution	6	12
Value-added role	Product Manager	9	6
	Process Manager	6	6
	Network Manager	4	7
Reward and risk sharing	Neutral	7	2
	Performance	6	8
	Outcome	6	9



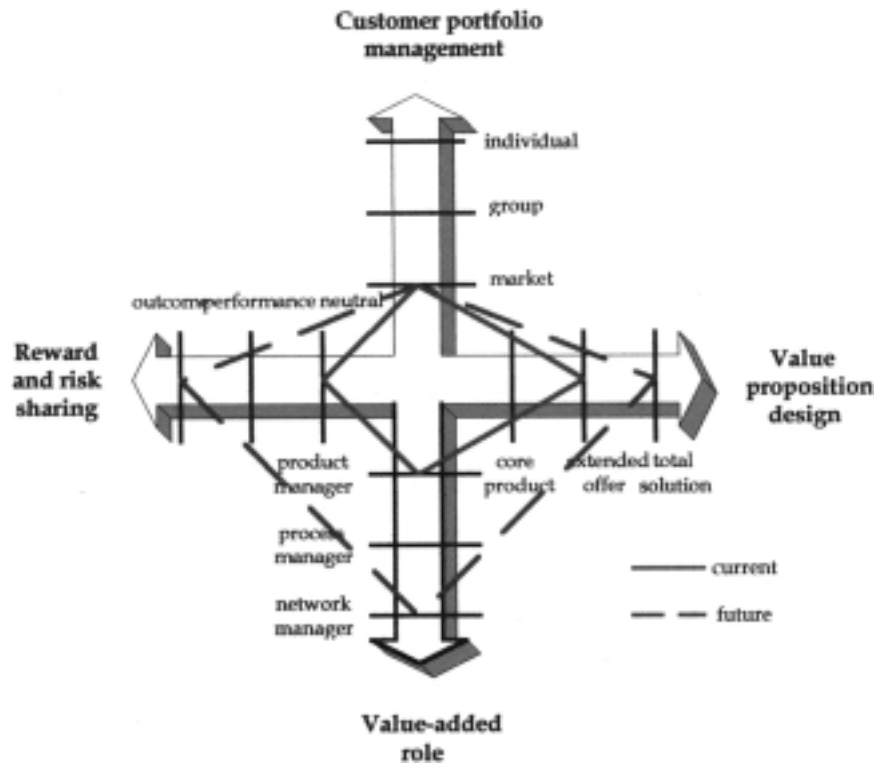


Figure 3. The current and future positions on the value compass.

knowledge; expending the market by making it more economical for hotels and customers to connect with one another; and assuming part of the risk and reward that the total enterprise will succeed. Strategies of high quality hotel enterprises in Taiwan are analysed in detail as follows.

(a) Customer portfolio management

As shown in Figs 4 and 5, it can be seen that, out of the 19 respondents, about 68% currently choose market level, 32% percent choose group level and none of the respondents chooses individual level. In the future, out of the 19 respondents, 68% will choose market level, 26%

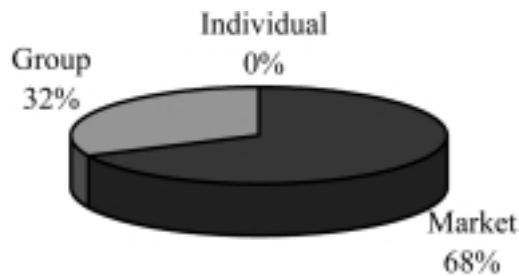


Figure 4. Customer portfolio management (current).

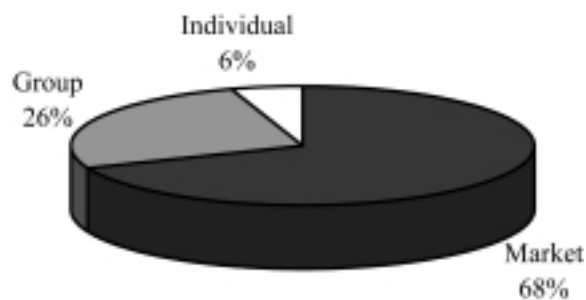


Figure 5. Customer portfolio management (future).

group level and 6% individual level. It is clear that the customer portfolio of these respondents will not change much in the future. Some suggestions (Wayland & Cole, 1997: 131) are therefore presented below.

- (i) *Attract the largest share of the company's potential customer base.* More innovative services and unique features may be developed to attract more potential customers.
- (ii) *Offering a moderate level of product variety might be effective.* A variety of products and customized services, such as a free romantic dinner for couples, may be developed and provided for different customers.
- (iii) *Achieve the most efficient levels of mass operations to produce a fairly uniform product.* Standardized products may be added by differentiated services to provide a variety of products for the general requirements of customers.
- (iv) *Rely on brand image and customer self-selection.* Brand image and unique style may be strengthened to attract customers.
- (v) *Apply the strategy that the right market is targeted with the right product with right image.* The right market may be targeted and the right product and brand image may be utilized to attract customers.

*Do not try to distinguish and manage relationships with several different customer groups.* In the future, cost and benefit will not be well managed and the operation will have problems.

(b) *Value proposition design*

As shown in Figs 6 and 7, of the 19 respondents, about 32% currently choose core product level, 36% choose an extended offer level and 32% choose a total solution level. In the future, none of the 19 respondents will choose core product level, 36% will choose an extended offer level and 64% will choose a total solution level. The strategy of the high quality hotel

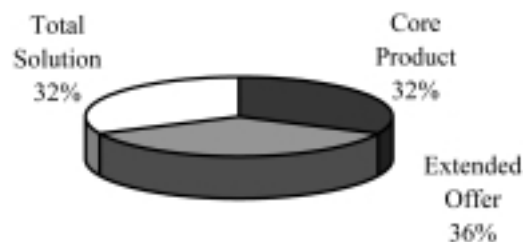


Figure 6. Value proposition design (current).

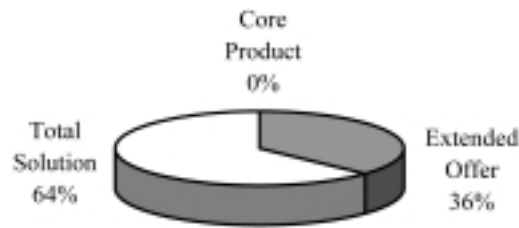


Figure 7. Value proposition design (future).

enterprises in Taiwan will switch from an extended offer level (current) to the total solution level (future) based on the survey. In general, business can assess the value better when it creates value for customers and can identify opportunities to increase the value through the realization of the customers' value chain and total experience. Some suggestions (Wayland & Cole, 1997: 157) are shown in the following.

- (i) *Use information and knowledge to enhance the value proposition.* Existing customer information and knowledge may be utilized to develop a variety of customized services and create further value.
- (ii) *Enhance the core product.* The core product may be enhanced in order to move towards the provision of extended services and total solution.
- (iii) *Understand the buyer's criteria with respect to the value chain.* Customer requirements should be better understood and positioned in order to develop and provide satisfactory services.
- (iv) *Appreciate the customer's value and decision-making process in its value chain or experience.* Customers' decision-making processes should be actively understood through the connections with customers. For instance, when a business customer stays in the hotel, the hotel may actively try to understand his or her schedule and arrange for transportation and other assistance if appropriate.
- (v) *Extend the range of the offer.* The range of services may be extended. For instance, in addition to facsimile and copy services, further services such as translation or secretary services may also be provided.
- (vi) *Bring the three components of a total solution strategy.* Leverageable competencies, reputation, and identification with its customer base.

(c) *Value-added role*

As shown in Figs 8 and 9, it can be seen that, out of the 19 respondents, about 47% currently

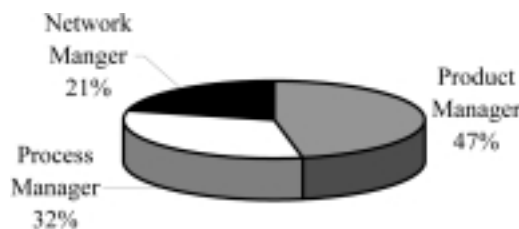


Figure 8. Value-added role (current).



**Figure 9.** Value-added role (future).

choose product manager level, 32% choose process manager level and 21% choose network manager level. In the future, 32% out of the 19 respondents will choose product manager level, 32% will choose process manager level and 36% will choose network manager level. A smaller proportion of the respondents chooses product manager level in the future and 15% (36%–21%) of the respondents want to move to network manager level in the future. Some suggestions are presented below based on the experience from successful case studies (Wayland & Cole, 1997: 181).

- (i) *Increase the application of information and technology to forge new relationships and partnerships.* The utilization of customer knowledge and the integration of the CRM system may be emphasized to maintain and create new partnerships in the whole value-added chain.
- (ii) *Add value to the company's core product.* The hotel industry belongs to the service sector. Therefore, in the future, the value of the core product, such as that of services provided should be emphasized in the whole value-added chain.
- (iii) *Assign responsibility for some portions of the buyer's production function or value chain.* The value-added role may be strengthened by providing better services for customers in order to increase their dependence on hotels.
- (iv) *Provide for both buyers and sellers a form of connection more efficient than either of them can achieve when operating independently.* The connections between hotels and their customers may be made in a form through which both parties will benefit.
- (v) *Add capacity that exists in the seller's industry.* Competition is getting severe in the hotel industry and high quality hotels in Taiwan should shift towards a total solution provider and provide innovative services and enhance brand image to increase their competitiveness.
- (vi) *Enjoy knowledge-based advantages over the buyers.* The CRM system may be effectively utilized to accumulate customer knowledge in order to provide better services.
- (vii) *Improve operating efficiency and expand the professional capacity:* Customer requirement orientation should be emphasized more in the whole value-added chain. In addition, customer connection technologies may also be utilized to improve operating efficiency and innovative services should be continuously developed to increase professional capacity.

(d) *Reward and risk sharing*

As shown below in Figs 10 and 11, it can be seen that, out of the 19 respondents, about 36% currently choose the neutral level, 32% choose the performance level and 32% choose the outcome level. In the future, 11% of the 19 respondents will choose the neutral level, 42% will choose the performance level and 47% will choose the outcome level. Apparently, a larger proportion of the respondents will choose the outcome level in the future. Two

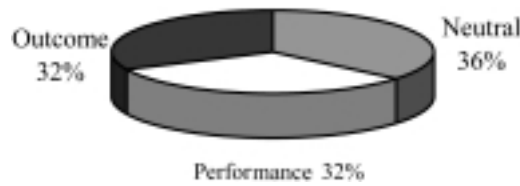


Figure 10. Reward and risk sharing (current).

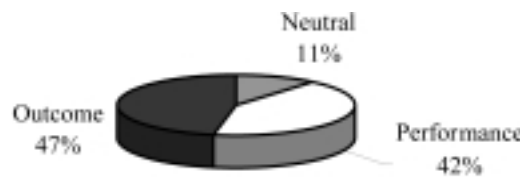


Figure 11. Reward and risk sharing (future).

suggestions based on some successful case studies (Wayland & Cole, 1997: 203) are discussed in the following.

- (i) Define clearly what is meant of the value created in a relationship, what constitutes the shares of the value received by buyers and sellers and how the shares can be changed. In addition to the processes of service provision, hotels may also emphasize the interactive processes of information exchange and sharing, in order to collect the customer knowledge needed to define the value created and shared in a relationship.
- (ii) Consider outcomes-based rewards for advertisements over the Internet. The penalty may be added to the content of quality assurance and it may become a part of the norms for strategic allocation of corporate resources.

According to Table 1, these hotel enterprises choose the market level currently, and in the future, on the customer portfolio management dimension. There are six more respondents (12–6) who choose the total solution level in the value proposition design dimension. There are three more respondents (7–4) who choose the network manager level in the value-added role dimension. There are three more respondents (9–6) who choose the outcome level. Since there are three conditions for each category, we use Test 44 (Kanji, 1993): the Chi-square test to test the independence between present and future position. Table 2 shows whether there is a significant difference between current and future position by the way of the  $\chi^2$ -test. It is clear that there is a significant difference between current and future position in the dimension of value proposition design. Therefore, the suggestions in this dimension have to be urgently considered.

Table 2. Significant difference between current and future position

Dimension	$\chi^2$	Result
Customer portfolio management	1.073	No significant difference
Value proposition design	8.137	*Significant difference
Value-added role	3.979	No Significant difference
Reward and risk sharing	5.100	No Significant difference

$$\alpha = 0.05, v = (3-1)(2-1) = 2, \chi^2_{2,0.05} = 5.99$$

### 3. CRM system component design

As shown by the survey, there is still a considerable amount of space for high quality hotel enterprises in Taiwan to improve customer knowledge. So, the component of customer knowledge was included in the CRM system and BrioQuery Explorer. BrioQuery Explorer accesses database tables from the CRM system in order to create enterprises' own data models, queries, and reports. Figure 12 is an example from BrioQuery Explorer. On the left of Fig. 12, high quality hotel enterprises in Taiwan can design their system component in the sections part, and the database tables can be transformed from the CRM system. In a pie chart, categories represent itemized slices of the pie and facts define the quantitative whole of the pie. We have designed the customer knowledge component for high quality hotel enterprises in Taiwan to help their managers obtain the analysis by themselves. In particular, they can choose the results and make the analysis as complicated as they want.

Another result from the survey is that high quality hotel enterprises in Taiwan want to move to the position of total solution provider. In Fig. 13 we have designed the value proposition design component for these hotel enterprises in order to help their managers know what their customers need more. High quality hotel enterprises in Taiwan can analyse customer's favourite service and, furthermore, give them a coupon for another service that they might also be interested in.

Furthermore, we would like to emphasize that both the CRM system and BrioQuery Explorer are web-based systems. Therefore, no matter where the managers are or when they

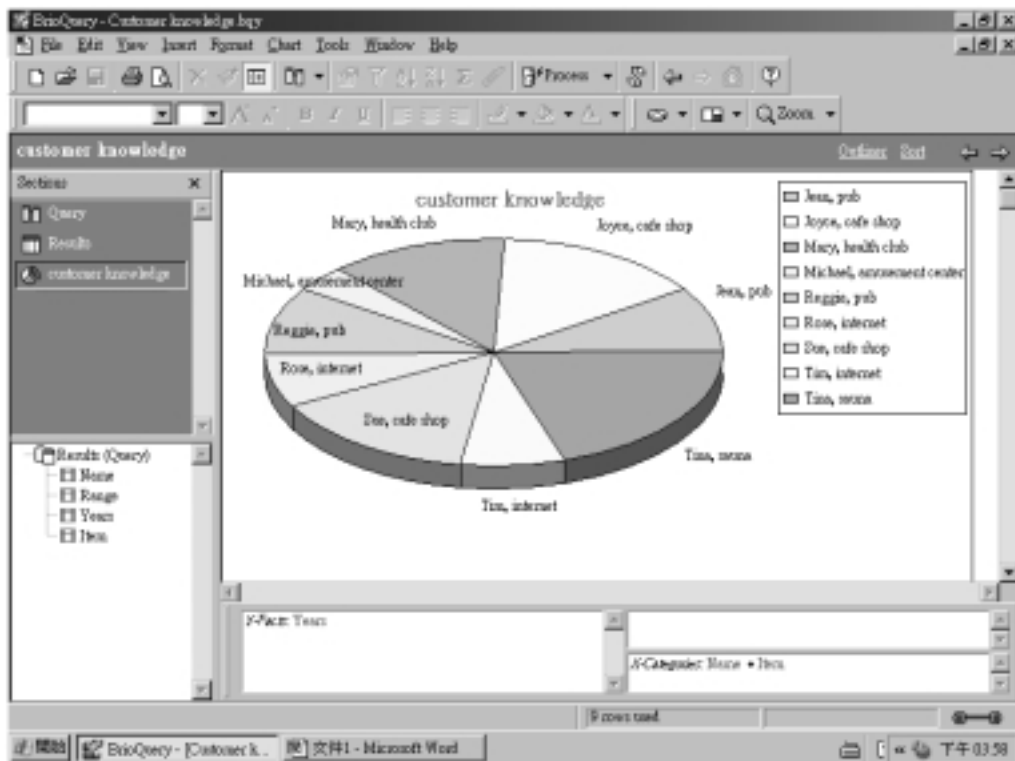


Figure 12. The component of customer knowledge.

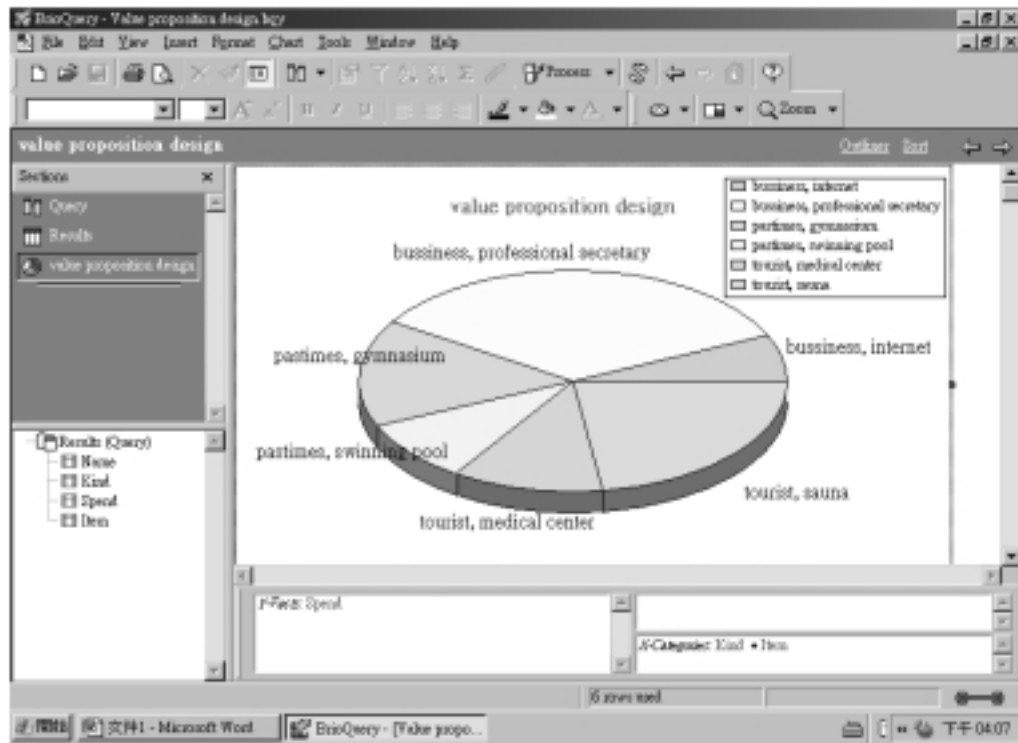


Figure 13. The value proposition design component.

want the information and analysis, they can just connect to the Internet and make their decision immediately.

## Conclusions

Customer relationship management is neither a concept nor a project. It is a business strategy to help companies understand and anticipate the needs of an enterprise's current and potential customers. A summary of the findings is as follows.

- (1) There are only 68% of the respondents who have done well to collect customer knowledge. Perhaps high quality hotel enterprises in Taiwan do not realize the importance of customer knowledge and they do not know how it works. It is time for the awareness of customer knowledge. If these high quality hotel enterprises successfully manage customer knowledge, they can react faster to marketplace trends, increase brand loyalty, and facilitate purchase and use of their products and services.
- (2) Although the respondents have a larger proportion for customer-connective technologies, it is important to create mutual value and strengthen bounds to engage in the e-commerce era in order to expand the market share.
- (3) The respondents have shown that they understand the distribution of the customer relationship value because of a larger proportion noting customer economics. However, high quality hotel enterprises in Taiwan can further maximize their rate

of profitable growth by deploying their resources in proportion to the value of relationships.

- (4) High quality hotel enterprises in Taiwan can go for the purposes of approaching their markets very broadly; making few distinctions among the customers for their products; creating a set of related products to address their customers' need for management knowledge; expanding the market by making it more economical for buyers and sellers to connect with one another; and assuming part of the risk and reward that the total enterprise will succeed.
- (5) There is a significant difference between the current and future positions in the dimension of value proposition design. Therefore, appreciating the customer's value and decision-making process in its value chain or experience and extending the range of the offer are very important for high quality hotel enterprises in Taiwan to move to the position of total solution provider.
- (6) Actually, the value proposition is more extensive and the customer knowledge must be more intensive. The customer-centric knowledge management in e-business for high quality hotel enterprises in Taiwan is critical.

This study collects the information about CRM and takes high quality hotel enterprises in Taiwan as an example. The strategic opportunities for high quality hotel enterprises in Taiwan to leverage customer knowledge and create value for customers have been provided. These opportunities may be used for further quality improvement and enhancement of customer satisfaction. The design, findings and suggestions of the study may also offer other enterprises an example of how they may examine their CRM strategies. As mentioned in this paper, the management of the knowledge of customers is vital to the market share growth. It is also argued that CRM may create value for customers, inform further quality improvement, enhance customer satisfaction and play an important role in the pursuit of business excellence. Despite its importance, most of the companies in Taiwan are still in the preliminary stage in the application of CRM.

We have just received another big project to do a CRM strategy analysis for one leading beauty enterprise. The same research design will be done for this case and to make the comparison between its CRM strategies applied in Taiwan, Hong Kong and China. In the future, CRM together with Knowledge Management (KM) may be further studied to accumulate customer knowledge, build up better relationships between them and their customers, enhance customer satisfaction and achieve business excellence.

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