CRITICAL SUCCESS FACTORS OF CUSTOMER RELATIONSHIP MANAGEMENT AT PRIVATE HOSPITALS IN MALAYSIA

By:

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**Research report in partial fulfillment of the requirements for the degree of
Masters of Business Administration
May 2005**

ACKNOWLEDGEMENTS

The dissertation would not have been possible without the dedicated assistance, support and help of the following individuals:

- My Wife: Dalilah Marican, to whom I dedicate this dissertation, who gave me the opportunity and means to study

- My supervisor: Dr. Noornina Dahlan for her support and never ending guidance in showing me the way to completing this research

- My lecturer: Mr T Ramayah, special thanks for his guidance on statistic

- My friends: All of them which would not be able to mention all of them here

- Final but not least, my sincere thanks to all lecturers in MBA program

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ABSTRAK

Tujuan penyelidikan ini adalah untuk mengkaji faktor yang penting mendorong kepada kejayaan dalam perlaksanaan Perhubungan Pengurusan Pelanggan di hospital Malaysia. Setelah mengkaji beberapa artikel berkenaan faktor kejayaan Perhubungan Pengurusan Pelanggan, antara faktor kejayaan tersebut termasuklah, sokongan dari pengurusan atasan, kesediaan teknologi dan juga keupayaan pengurusan pengetahuan. Semua faktor ini adalah sebagaimana yang telah dikaji juga oleh Croteau dan Li (2003). Pengkaji juga ingin mengetahui apakah kesan ke atas ketidakmahuan pekerja semasa perlaksanaan Perhubungan Pengurusan Pelanggan di hospital. Hasil kajian menunjukkan faktor sokongan dari pengurusan atasan adalah salah satu faktor terpenting kepada kejayaan luaran Perhubungan Pengurusan Pelanggan sebagaimana yang dianggap oleh hospital. Sementara itu faktor keupayaan pengurusan pengetahuan telah menunjukkan sebagai faktor terpenting kepada kejayaan dalaman Perhubungan Pengurusan Pelanggan. Walaubagaimanapun kesediaan teknologi tidak mempunyai apa-apa kesan terhadap kejayaan sama ada dalaman atau luaran kepada Perhubungan Pengurusan Pelanggan. Tiada hubungkait telah ditemui di dalam penyelidikan ini mengenai ketidakmahuan pekerja yang akan membawa kesan kepada kejayaan semasa perlaksanaan Perhubungan Pengurusan Pelanggan di hospital Malaysia.

ABSTRACT

The purpose of this study is to explore the critical success factors of Customer Relationship Management (CRM) in Malaysian private hospitals. After reviewing the related literatures about CRM success factors, it was found out that the among critical success factors are the top management support, technological readiness, and knowledge management capability are the independent variables that the researcher is interested to study. These are main factors that were defined by Croteau and Li (2003). The researcher would like to investigate also what is the impact of the employee resistance during the introduction of the CRM system in the hospital organization. The findings suggest that top management support is a critical success factor when CRM is going to be implemented to the external success as perceived by the hospital. Knowledge management capability was found to be most significant critical success factor affecting the internal locus of success. However, technological readiness was not significant with respect to CRM success both internal and external success in Malaysia private hospital. No relationship was found on the employee resistance as the moderator in the study.

Chapter 1

INTRODUCTION

1.1   Introduction

In recent years many organizations have identified the need to become more customer-oriented with increased competition. The emergence of electronic business, organizational dynamics, and cultural change issues are dramatically shifting organizations' functional units to focus on customer. They have realized that customers are the organization's best assets. As a result, customer relationship management (CRM) has risen to the agenda of many organizational strategies.

Laudon and Laudon (2005) define CRM as both a business and technology discipline that uses information systems to coordinate all the business processes surrounding the organization's interactions with its customers in sale, marketing and service. It tracks all the ways in which the company interacts with its customers and analyzes these interactions to optimize revenue, profitability, customer satisfaction, and customer retention.

In other words, CRM is, essentially, a business strategy that aims to help organization maximize customer profitability from streamlined, integrated customer-facing processes. Organizations have perceived CRM as a success enabler in the world of electronic business. Before adopting CRM, it is vitally important for organizations to understand CRM strategies and technologies. In other words, clear awareness of the strategic implications of CRM is a key to success of implementing CRM.

From another perspective, CRM is a strategic view of how to handle customer relations from a company perspective. The strategy deals with how to establish develop

and increase customer relations from profitability perspective. Based upon knowledge about the individual customer's need and potential, the company develops customized strategies describing how different customers should be treated to become long-term profitable customers, the basic philosophy underlying CRM is that the basis of all marketing and management activities should be the establishment of mutually beneficial partnership relationship with customers and other partners in order to become successful and profitable. (Spitler, 1997)

In order to manage customer relationships more efficiently; CRM focuses on effectively turning information into intelligent business knowledge. This information can come from anywhere inside or outside the firm and this requires successful integration of multiple databases and technologies such as the Internet, call centers, sales force automation, and data warehouses. (Galbreath & Rogers, 1999).

The real value to a organization lies in the value they create for their customers and in the value the customers deliver back to the organization. Accordingly, it is important to mark that the value does not lie in more information and in more advanced technology. The value lies in the customer knowledge and in how the organizations use that knowledge to manage their customer relationships. (Newell, 2000)

Unfortunately, few organizations are transforming the information to customer knowledge and therefore they miss the opportunity to provide value to their customer. However, applied in the right way, CRM is the tool that contributes to profit. If the organizations are transforming the customer data into knowledge and then uses that knowledge to build relationship it will create loyalty, followed by profit. (Newell, 2000)

As it is known, Malaysia is still in the infancy stage in CRM. For this reason, more and more organizations are looking to CRM systems to improve customer satisfaction and operating efficiency.

1.2   Problem Statement

In today's competitive healthcare environment, the successful organizations are the ones that focus on winning and retaining a loyal customer base. With this in mind, many hospitals and health systems are investing heavily in customer CRM programs. A case study examines on health system's use of a CRM system reveals the positive impact of CRM for the system and the results include individual hospital profits and losses. Clearly, using a CRM system designed for healthcare helped this network realize more financial success and increased patient loyalty. (Yih, 2003).

The important dimension is the ability to deliver the strategy successfully. CRM strategies through its critical factors are only effective or successful if they deliver positive outcomes, as the fundamental goal of CRM is to improve organizational profitability through efficient and effective customer relations. If the CRM strategy is struggling to influence profitability, after reasonable period of time, then the organization is clearly failing. If a CRM strategy can be shown to improve profitability, then the organization is obviously on the right path and succeeding. However, profit may not be the ultimate goal for non-profit organizational. In the case of such organization, in order to meet the goal of quality improvement and cost efficiency, the organization must make efforts to establish mutual relations with customers.

Few studies had been conducted on critical success factor for CRM technological Initiatives for example Croteau and Li (2003), Chen and Chen (2004), Schoder and Madeja (2004). However, there is no study on the success factors of CRM in private hospitals particularly in Malaysia.

Furthermore, the previous researches were done on the generalized basis organizations and done overseas. As suggested by Croteau and Li (2003), since CRM initiatives are long-term business strategies, longitudinal studies could be undertaken with the same organizations if the same findings hold over time. There no research carried out on critical success factors focusing on a particular organization especially hospital organization. As so, the problem statement of this research is what are the critical factors that contribute the successful of the CRM implementation in Malaysian private hospital and the effect of employee resistance as moderator?

1.3   Research Objectives

This study primarily aims to explore the critical success factors of CRM in Malaysian hospitals. The critical success factors of top management support, technological readiness, and knowledge management capability are the independent variables that the researcher is interested to study. The researcher would like to investigate also what is the impact of the employee resistance during the introduction of the CRM system in organization.

1.4   Research Questions

The researcher hopes to be able to answer some of these questions in his research.

1. What are the critical success factors of CRM in Malaysian hospitals?

2. What would be the impact of employee resistance as the moderator in the model?

1.5   Significance of the Study

The critical success factor can be of importance at crucial decision points in the hospital organization strategy by understanding what contributes toward CRM success. Awareness of the critical success factor would help hospital organization to develop appropriate strategies to enhance their success.

Currently there is lack of such literature on this particular subject in Malaysia. Hence, it could certainly help initiate other similar studies, which further contribute to the resource base and benefit to the particular industry. This research project is primarily concerned with the factors that drive the success of CRM within the particular organization. It is intended that the propositions and the framework developed are useful in sustaining its long-term organization effectiveness.

1.6   Definition of Key Term

1.6.1 Customer Relationship Management (CRM)

Defined as both a business and technology discipline that uses information systems to coordinate all the business processes surrounding the organization's interactions with its customers in sale, marketing and service. (Laudon & Laudon 2005).

1.6.2 Top Management Support

As mentioned by Rai and Bajwa (1997) and also Croteau and Li (2003), top management support refers to the extent to which information technology implementation efforts are promoted by the top management in an organization.

1.6.3 Technological Readiness

Iacovou et al. (1995), the technological readiness refers to the level of sophistication of Information Technology usage and Information technology management in an organization.

1.6.4 Knowledge Management Capabilities

The knowledge management capability is the ability of an organization to capture, manage, and deliver real time authenticated customer, products and services information in order to improve customer response and provide faster decision-making based on reliable information. (Alavi & Leidner, (1999), Jutla, Craig, & Bodorick, (2001), Vance (1997)).

1.6.5 Employee Resistance

Brehm (1966) defined resistance as an aversive motivational state, initiated when one perceives that ones' freedom is threatened and directing thought and action toward regaining the threatened freedom.

1.7   Organization of the dissertation

This chapter explains the background of the research. The next chapter is an overview of literature on critical success factors (top management support, technological readiness, knowledge management capability, and employee resistance) for CRM implementation, which will then be followed by the formulation of the theoretical framework and hypotheses formulation. Chapter 3 discusses on the methodology to be used in the study. The study as it is, planned to find out if the critical success factors could influence the CRM implementation. Four 4-Step hierarchical regression analyses will be test the hypotheses formulated. In chapter 4, data collection is described. A summary of descriptive statistic of the hospital demographic profile will be presented in this chapter. Elaboration on the analysis conducted in the study, such as test for goodness of measure (factor Analysis), Reliability of Measures, Descriptive Statistics, Correlation Analysis and Test of Hypotheses (Hierarchical Regression). At the end of the chapter, the results of all the hypotheses will be tabulated. Finally, in Chapter 5 will be the conclusion of the study, which will include the discussion of the findings. The limitation, problem, implication and suggestion for future research will be discussed.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents reviews of the various literatures pertaining to top management support, technologies readiness, knowledge management capabilities, employee resistance and CRM success. The theoretical framework and the hypothesis developed for this study are also included in this chapter.

2.2 Top management support

The dimension of top management support is especially important in the situation where a redesign or change of work processes and functional activities is likely to happen. As mentioned by Rai and Bajwa (1997) and also Croteau and Li (2003), top management support refers to the extent to which information technology implementation efforts are promoted by the top management in an organization. Meanwhile Richard and Harvey (1993) have indicated top management influence on innovations is explained largely by executive characteristics rather than by organizational or environmental factors. Moreover, top management functional expertise has been found to be a source of influence on strategic decisions (Gouy, 1978; Hambrick, 1981).

In industrial settings, leadership from the top seems to be a critical factor for overcoming the skepticism and reluctance of organizational process owners and middle managers (Deming 1986; Ishikawa 1985; Juran 1988, 1989).

From the research done in hospitals, Bryan et al (1997) suggested that leadership from the top is a key success factor in promoting clinical involvement in the hospital quality improvement efforts. As suggested by Rai and Bajwa (1997) and also Croteau and Li (2003), top management support is, therefore, proposed to be a critical factor that influences the success of CRM will be one of the factors to be studied.

In the Malaysia context, Kuan, Dahlan, Ansari, and Dahlan (2004) reveals that change agents adopt different influence tactics in responding to the user's level of resistance. In the research, shown that the involvement from the agents play an important role of influencing the results.

2.3   Technology readiness

In a study of the success factor driving electronic MBA program by Mamod, Dahlan, Ramayah, Karia, and Hasmi (2005), found out that fear of rapid change in technology as one of the key factor in influencing their behavior intention. Technology changes are unavoidable as the world facing competitive environment. With the availability of the technology, it is a waste or an organization can be phased out from the competition if they do not take a full use of it.

On the different research by Lee, Dahlan, Ramayah, Karia, and Hasmi (2005), found out that both individual differences and organization context have an impact on the perceived ease of using the digital library. This shows that even though the technology readiness is there, it is still dependent on users characteristic.

As depicted by Croteau and Li (2003) from Iacovou et al. (1995), the technological readiness refers to the level of sophistication of Information Technology usage and Information technology management in an organization. Due to the high level of integration between all functional areas such as organization's supply chain encompassing its' sales, support and service, and marketing, it is then proposed that a good Information technology infrastructure must have technological resources in order to support the CRM success.

2.4   Knowledge management capabilities

What is knowledge management? Knowledge management (KM) simply means putting the collective intelligence of your company at the users' fingertips when they want it, and in the desired format. It should be easily accessible, offering a variety of search techniques to fit the skill level and personal preferences of the user. But Knowledge Management implies more than just an information store. (John, 1999).

Rastagi (2000) argued that knowledge management is a systematic and integrative process coordinating organization-wide activities of acquiring, creating, storing, sharing, diffusing, developing and deploying knowledge by individuals and groups in pursuit of major organization goals. It is the process through which organization create and use their institutional and collective knowledge.

In other definition, Nerney (1997) argued that knowledge management is about creating a business process and technology structure that effectively leverages a company's knowledge capital. This means managing knowledge assets to optimize their value and provide a return on investment. Knowledge management may sound like the

new kid on the block, but the concept dates back at least a decade. Search-and-retrieval software, databases, workflow software, data warehousing, push technology and the proliferation of intranets has revolutionized the ability of organizations to find, accumulate, organize and access information.

Again as depicted by Croteau and Li (2003) from (Alavi & Leidner, (1999), Jutla, Craig & Bodorick, (2001), Vance (1997)), the knowledge management capability is the ability of an organization to capture, manage, and deliver real time authenticated customer, products and services information in order to improve customer response and provide faster decision-making based on reliable information.

Skyrme and Amidon (1998) stressed that it is important for organizations to develop knowledge management and to possess adequate knowledge management capabilities in order to succeed in the dynamic global economy.

Croteau and Li (2003) further quoted from Atkinson, Waterhouse, and Wells (1997), Bohn (1994), Skyrme and Amidon (1998), however, traditional asset-based measurement systems, of which financial accounting is the most developed, are merely based on measures of physical and tangible items and do not measure intangibles such as knowledge and intellectual properties.

In the Malaysia context, Fong, Dahlan, Ramayah, Karia. and Hasmi (2005) found out that knowledge embedded ness, learning culture, knowledge distance, and norm distance have the significant impacts on the knowledge transfer success. This is part of the knowledge management capability that organizations need to pay attention too.

2.5   Employee resistance

As extracted from Kuan et al. (2004), Brehm (1966) defined resistance as an aversive motivational state, initiated when one perceives that ones' freedom is threatened and directing thought and action toward regaining the threatened freedom. People resist major changes in organization because of lack of trust; belief that change is unnecessary; belief that the change is not feasible; fear of personal failure; loss of status and power; threat to values and ideas; and resentment of interference. (Yulk 1994).

In recent Malaysia studies, Dahlan, Ramayah and Looi (2002), Dahlan, Ramayah and Koay (2002), and Ramayah, Dahlan and Adni (2003) are all found that positive attitudes towards technology adoption led to increased technology use, and therefore, it is crucial to gain positive attitudes among new technology use.

Change triggers emotional reaction because of uncertainty involved, and most organizational change efforts run into some form of employee resistance. Resistance to change can be overcome by education and communication, participation and involvement, facilitation and support, negotiation and rewards, and coercion and manipulation. (Mampane, 2001)

This study is not going to explore deeply the resistance of the new technology as developed by Davis (1985) of the popular technology acceptance model (TAM) but just to look into the impact of resistance as the moderator to the independent variables defined or adopted from the earlier researchers.

2.6   CRM success

The CRM success or its impact is referred to the actual benefit that the hospital received. It is derived from Jutla et all (2001) as mentioned by Croteau and Li (2003) where customer-focused evaluation framework was used because of its high pertinence of measuring CRM success as the ongoing performance, costs, and effectiveness. It is then divided into internal and external focus. The internal focus is representing the hospital organizations' level of satisfaction due to implementation of CRM. This consists of customer retention rate that refers to existing customer retention rate for new and existing customers. On the other hand, external focus is covering the customers' level of satisfaction due to implementation of CRM application. Customer satisfaction refers to the degree of customer satisfaction due to the introduction of innovative products and services, on-time delivery, anticipation of emerging needs, customization and convenience.

2.7   Theoretical Framework

Past research conducted on critical success indicate that there are many factors that may contribute to CRM success. Based on the review of literatures, the overall conceptual model was developed. The theoretical framework for this research is developed and adapted based on review of Croteau and Li (2003). The difference is that instead of having five independent variables, two were dropped out from this study, which is Operational perceived benefits and Strategic perceived benefit. This is because it did not show any significant different. In this study, the researcher would like to find out whether

independent variable of the adopted critical success factor would have direct relationship on CRM success and its effect of the moderator introduced.

Independent Variable   **Dependent Variable**

```
┌──────────────────┐
│ Top Management   │
│ Support          │
└──────────────────┘

┌──────────────────┐                                    ┌──────────────────┐
│ Technological    │ ──────────────────────────────────▶│ CRM Success      │
│ readiness        │                                    │                  │
└──────────────────┘                                    └──────────────────┘

┌──────────────────┐        ┌──────────────────┐
│ Knowledge        │        │ Employee         │
│ Management       │        │ Resistance       │
│ Capabilities     │        └──────────────────┘
└──────────────────┘
```

Moderator

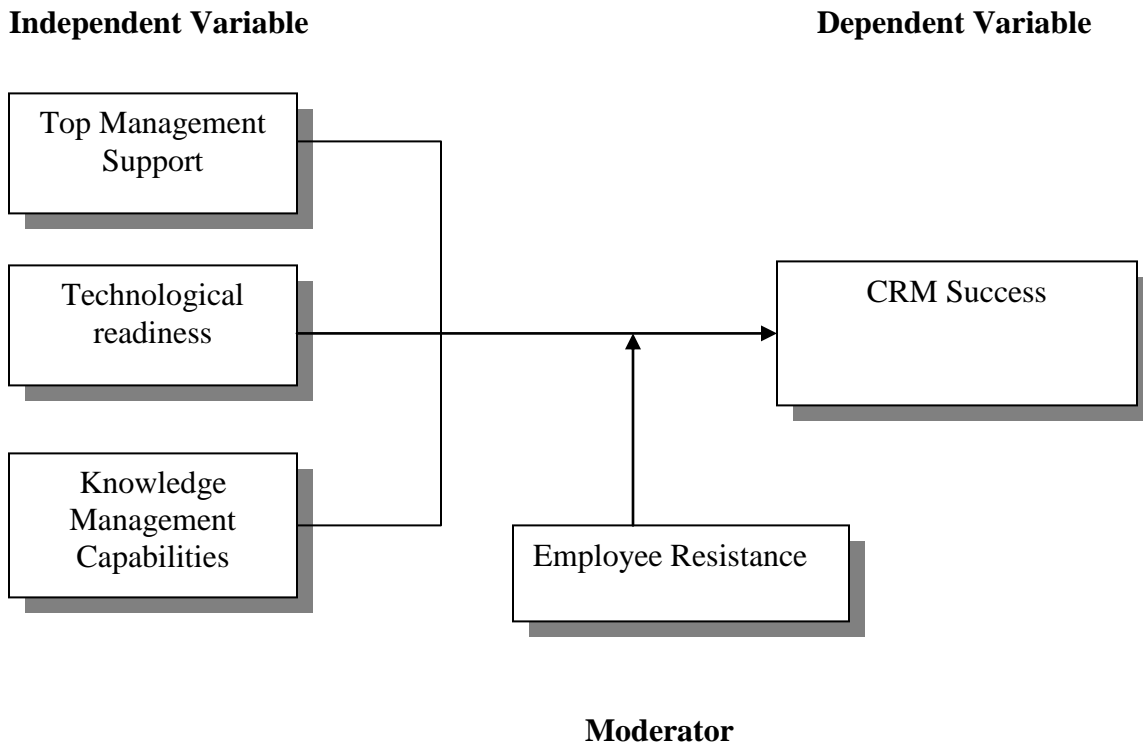*Figure 2.1.* Theoretical Framework: Relationship of various critical success factors to the CRM success

2.8   Research Hypotheses

The literature review as discussed in Chapter 2 suggests that critical success factors (top management support, technological readiness, and knowledge management capability) affect the CRM success.

2.8.1   *The Relationship between Top Management Support and CRM Success*

Results from Croteau and Li (2003) indicate that top management support is one of the significant critical success factors. Hence, it is crucial for a success of CRM implementation in hospital. Therefore, it is hypothesized that:

H1: Top management support is positively linked to CRM success

2.8.2 The Relationship between Technological Readiness and CRM success

Even though study from Croteau and Li (2003) shows insignificant of the variable, it is proposed that that a good Information technology infrastructure must have hospital technological resources in order to support the CRM success. Hence, it is hypothesized:

H2: Technological readiness is positively linked to CRM success

2.8.3 The Relationship between Knowledge Management Capability and CRM success

As argued by Nerney (1997) in order to achieve organization goals, it is important of managing knowledge assets to optimize their value and provide a return on hospital investment. Therefore, it is hypothesized that:

H3: Knowledge management capability is positively linked to CRM success

2.8.4 The Relationship between Independent Variables and CRM success is moderated by employee resistance

Various literatures on employee resistance have been discussed in this chapter. The researcher hence would like to see if there is any impact of the hospital

employee resistance as a moderator to the independent variables. Hence, it is hypothesized that:

H4: Top Management Support and CRM success is moderated by employee resistance

H5: Technological readiness and CRM success is moderated by employee resistance

H6: Knowledge management capability and CRM success is moderated by employee resistance

2.9   Summary

Having reviewed the past literature on critical success factor, a theoretical framework and several hypotheses have been formulated to investigate the relationship among the dependent variable (CRM success), the independent variable (top management support, technological readiness and knowledge management capabilities) and the moderating variable (employee resistance).

Chapter 3

METHODOLOGY

3.1   Introduction

This chapter outlines the methodology used in this study. It explains the research design, the variables in the study, population or samples to be used, data collection method and the various analyses that will be utilized.

3.2   Research Design

3.2.1   *The Population*

The population of this study consists of 103 private hospitals in Malaysia. This list of hospitals was obtained from the Association of Private Hospital of Malaysia, an endorsed association by the Malaysian Health Ministry. (Appendix B)

3.2.2   *Questionnaires*

A total of 103 sets of questionnaires were prepared for all the listed Hospital in the Association. As the questionnaires are the structured questions, it was distributed through post. A returned envelope with pre-paid stamp was attached together with the questionnaire. The researcher had given the dateline of returning back the questionnaires by 1st April 2005.

3.3   Variables and Measurement

This study focuses on three independent variables (Top Management Support, Technological Readiness and Knowledge Management Capabilities), one moderator

(Employee Resistance) and the dependent variable (CRM success). The questionnaires distributed consisted of 36 items. A total of eight items were used to measure employee resistance variable, four items were used to measure top management support, six items were used to measure technological readiness, six items were used to measure knowledge management capabilities, and 12 items were used to measure the CRM success. The layout of the items, which constructs are from various references used in the questionnaire, is depicted in table 3.1.

3.4   Independent Variables

For all independent variables in this study, the response format was based on the 5-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

Table 3.1
Matrix of constructs and corresponding measurement references

Construct	# of items	Measurement references
Top management support	4	Rai & Bajwa (1997)
Technological readiness	6	Iacovou et al. (1995)
Knowledge management capability	6	Kaplan & Norton (1992), Alavi & Leidner (1999)
Employee resistance	8	Created by researcher
CRM success	12	Jutla et al. (2001) & researcher created

3.5   Dependent Variable

The dependent variable in this study is the CRM success. The response format was based on the 5-point Likert scale ranging from (1) Very Low to (5) Very High.

3.6   Moderator

The moderator for this study is the employee resistance. The response format was based on the 7-point Likert scale ranging from (1) Strongly Disagree to (7) Strongly Agree.

3.7   Method of Analysis

Factor analysis was initially performed to establish a goodness of measure for the scale used. In order to identify the separate dimensions of the construct and to determine the extent to which each construct of interest is explained with its respective dimensions. Variables measured were divided into independent variable, dependent variable, and the moderator. The items were subjected to the principal component factor analysis using Varimax rotation.

Assumption underlying factor analysis was verified by examining Kaiser-Meyer-Olkin (KMO) and Bartlett test of sphericity, as well as anti image correlation. It is assumed that the minimum acceptable value for Kaiser-Meyer-Olkin (KMO) is set at 0.6 and Barlett test sphericity should be significant (Hair, Anderson, Tathma & Black, 1998). The measure for anti-image correlations was acceptable with diagonal value of measure of sampling adequacy (MSA) for each item is set at 0.5 and above (Hair et al. 1998). Once this was performed, the factors, which had eigenvalue of equal to or more than 1.00, will be selected (Hair et al., 1998). The item's loading should be at least 0.50 on

one factor and less than 0.35 on another factor (Igbaria, Livari, & Maragahh, 1995). Once all the factors were extracted, the items were regrouped and renamed accordingly.

3.8   Reliability Measure

Reliability analysis was performed to assess the degree of internal consistency among multiple measurements of a variable. This determined that the individual items of the scale were measuring the same construct. Cronbach's coefficients alpha were computed to estimate the reliability of the scale for each identified factor. The generally agreed upon lower limit for Cronbach's alpha is 0.70 (Hair et al, 1998).

3.9   Descriptive Analysis

Descriptive statistics such as means, standard deviation, maximum and minimum values for each variable were computed to get the feel of the data. This analysis was used to check on the variations in each of the variables investigated.

3.10   Regression Analysis

Finally, hierarchical regression was employed to test the hypotheses of the study. Four 4-step hierarchical regressions were used to test the hypotheses. Given the potential effects of demographic variables such as number of employee, number of year operating, number of beds, and number of consultants, these factors were statistically controlled in the analysis. All these demographic variables were entered in Step 1. In Step 2, all the independent variables were entered. In Step 3, the moderating variables were entered to test whether they had an independent effect on CRM success. And finally, in Step 4, all

the interaction terms were entered. The significance of each block of variables will be based on whether there is any significant of R^2 change in each step. The change in R^2, which represents the additional variance in the dependent variable as explained by each block of variable was noted.

3.11 Summary

In this chapter the researcher has explained the research methodology, which comprises of the population of the study, sample size, sampling method, and the data collection techniques. This chapter also mentions the different analysis that is to be conducted in this study. In next chapter, the researcher will discuss all the findings and results of the hypotheses testing.

Chapter 4

RESULTS

4.0   Introduction

This chapter presents the hospital demographic profile and results of the statistical analysis. There are three sections where the first section presents an overview of the data collected. In the second section will focus on the respondent's demographic profile. The last section it will cover the results obtained from the various analysis carried out which include the factor analysis, descriptive statistics, reliability tests, and hierarchical regression analysis.

4.1   Overview of Data Collected

Out of the 103 questionnaires that were sent out, 39 were returned. All questionnaires returned were used, yielding a response rate of 37.86%. Table 4.1 represents the response rate sample from different states in Malaysia.

Very low response rate was observed initially during the final week of the dateline given with only 11 questionnaires were returned. The researcher took an initiative of calling up some of the hospitals, however still few were returned. Eventually the researcher collected five questionnaires personally from hospitals in Penang.

4.2 Demographic Profile of Hospitals

Demographic variables of the hospital organization comprise of number of employee, years of operating, number of beds, number of consultants, number of years CRM implemented, and its level of CRM.

Table 4.1
Response rate from the sample

No	States	Total Questionnaires Sent	Total Questionnaires Returned
1	Johor	13	4
2	Kedah	4	2
3	Kelantan	3	1
4	Melaka	3	1
5	Negeri Sembilan	3	0
6	Pahang	3	1
7	Perak	8	3
8	Penang	14	8
9	Sabah	2	0
10	Serawak	5	0
11	Selangor	23	8
12	Federal Territory	22	11
	Total	**103**	**39**
	Response Rate		**37.86%**

Since the questionnaires of the demographic portion were structured in open-end questions, the figures obtained are in absolute number. Table 4.2 shows the descriptive statistic and demographic profile of the hospitals.

Table 4.2
Summary of descriptive statistic

Demographic Variables	N	Minimum	Maximum	Mean	Std Deviation
Number of employee	39	19	670	220.51	184.4
Number of year operating	39	4	30	13.69	6.4
Number of beds	39	10	356	100.51	79.6
Number of consultants	39	1	20	9.36	5.2
Number of years CRM implemented	39	0	10	2.77	2.0

Table 4.3
Summary of demographic profile

Demographic Variables	Categories	Frequency	Percentage (%)
Level of CRM	Low	9	23.1
	Medium	16	41.0
	High	14	35.9

Two main points that researcher think that need to be noted here are that as mentioned in Chapter 1 of the introduction, the CRM system in the hospital is still at the infant state in Malaysia which at mean 2.77 years implementing the CRM. Secondly, 41.0% of the hospitals are the medium level of CRM.

4.3   Analysis

In this section, the results of the statistical analysis will be discussed. The analysis undertaken involves factor analysis, reliability test, descriptive statistics, correlational analysis, and hierarchical multiple regression.