

**FRAMEWORK FOR ADOPTION OF CUSTOMER RELATIONSHIP  
MANAGEMENT SYSTEM IN HOSPITAL**

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## Abstrak

Sistem Pengurusan Perhubungan Pelanggan (CRM) membolehkan hospital untuk menyediakan kualiti perkhidmatan yang lebih baik, meningkatkan kepuasan pelanggan, dan meningkatkan keuntungan dan daya saing mereka. Namun begitu, hanya sedikit sahaja perhatian yang diberikan terhadapnya, dan kurangnya penggunaan sistem berkenaan di hospital-hospital swasta di Malaysia. Selain itu, hanya terdapat beberapa kajian sahaja yang meneliti faktor-faktor yang mempengaruhi penggunapakaian sistem CRM di hospital-hospital swasta di Malaysia. Oleh itu, objektif utama kajian ini adalah untuk membangunkan satu kerangka kerja penggunapakaian sistem CRM di hospital-hospital. Soal selidik tadbir sendiri telah digunakan untuk mengumpul data daripada kakitangan pengurusan atasan di hospital-hospital swasta di Malaysia. Sejumlah 148 soal selidik yang diedarkan di mana 79 soal selidik (53%) telah dikembalikan. 72 data soal selidik yang mempunyai ciri-ciri kesahan dianalisis dengan menggunakan teknik Korelasi dan Regresi Berganda untuk mengesahkan kerangka kerja tersebut. Kerangka kerja yang digunakan untuk penyelidikan ini yang telah diubahsuai daripada teori Penyebaran Inovasi (DOI) dan Model Inovasi Sistem Maklumat (IS), telah dibina untuk mengaitkan faktor-faktor inovasi, organisasi, dan alam sekitar dengan persepsi faedah dan pelan pelaksanaan sistem CRM. Dapatan kajian menunjukkan bahawa faktor-faktor inovasi, organisasi, dan persekitaran mempunyai hubungan positif yang signifikan ( $p > 0.05$ ). Keputusan kajian umpamanya kerangka kerja yang dibina menyediakan satu set garis panduan yang diterima pakai yang menyumbang kepada kejayaan penggunapakaian dan pelaksanaan sistem CRM. Kerangka kerja ini juga menyumbang kepada khazanah pengetahuan dalam teori DOI, Model Inovasi Sistem Maklumat, dan domain CRM. Secara praktikal, dapatan yang diperolehi mempunyai implikasi yang banyak seperti memberi penekanan kepada peranan sistem CRM untuk menyelesaikan masalah utama di hospital-hospital dan menggalakkan para pembekal sistem CRM untuk memperbaiki strategi pemasaran mereka serta menyediakan sistem CRM pada harga yang berpatutan.

**Kata Kunci :** Sistem pengurusan perhubungan pelanggan, Penyebaran teori inovasi, Model inovasi sistem maklumat, Perkhidmatan hospital, Kerangka kerja yang digunakan.

## Abstract

Customer Relationship Management (CRM) systems enable hospitals to provide better quality of services, to improve customers' satisfaction, and to increase their profitability and competitiveness. However, there is little attention and lack of adoption of the CRM systems in private hospitals in Malaysia. Moreover, few studies have investigated the factors influencing the adoption of the CRM systems in private hospitals in Malaysia. The main objective of this study is therefore to develop an adoption framework of the CRM system for hospitals. Self-administered questionnaires were used to collect the data from the top management employees in private hospitals in Malaysia. A total of 148 questionnaires distributed in which 79 questionnaires (53%) were returned. The data of 72 valid questionnaires were analysed using Correlation and Multiple Regression techniques to validate the framework. The framework, adapted from the Diffusion of Innovation (DOI) theory and the Model of Information System (IS) Innovation, was built to relate innovation, organizational, and environmental factors to the perception of the CRM system's benefits and implementation plans. Findings indicate that innovation, organizational, and environmental factors have positive significant relationships ( $p > 0.05$ ). The results of the study such as the constructed framework, provide a set of adoption guidelines that contributes to a successful adoption and implementation of the CRM systems. The framework also contributes to the body of knowledge in the DOI theory, the Model of IS Innovation, and the CRM domain. In practical, the results have many implications such as emphasizing on the roles of the CRM systems on solving major problems in hospitals and encouraging the vendors of the CRM systems to improve their marketing strategies and to provide the CRM systems at reasonable prices.

**Keywords:** Customer relationship management system, Diffusion of innovation theory, The model of information system innovation, Hospital services, Adoption framework.

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## **List of Abbreviations**

<b>A&amp;E</b>	Accident and Emergency Department
<b>ADOP</b>	Adoption
<b>APHM</b>	Association of Private Hospitals of Malaysia
<b>CEOs</b>	Chief Executives Officers
<b>COMP</b>	Compatibility
<b>CP</b>	Competitive Pressure
<b>CRM</b>	Customer Relationship Management
<b>CSFs</b>	Critical Success Factors
<b>CX</b>	Complexity
<b>D<sup>2</sup></b>	Mahalanobis Distance
<b>DOI</b>	Diffusion of Innovation
<b>DVs</b>	Dependent Variables
<b>EISS</b>	External (IS) Support
<b>EMR</b>	Electronic Medical Records
<b>ERP</b>	Enterprise Resource Planning
<b>ES</b>	Enterprise Systems
<b>H</b>	Hypothesis
<b>HR</b>	Human Resources
<b>IMP</b>	Implementation
<b>INSE</b>	Innovation of Senior Executives
<b>IS</b>	Information Systems
<b>ISE</b>	Information System Experience
<b>IT</b>	Information Technology
<b>IVs</b>	Independent Variables

<b>KM</b>	Knowledge Management
<b>KMC</b>	Knowledge Management Capabilities
<b>MIS</b>	Management Information Systems
<b>OBS</b>	Observability
<b>OR</b>	Organizational Readiness
<b>PERC</b>	Perception
<b>R</b>	Correlation
<b>R<sup>2</sup></b>	Variance
<b>RA</b>	Relative Advantage
<b>RM</b>	Relationship Marketing
<b>ROI</b>	Return on Investments
<b>SCM</b>	Supply Chain Management
<b>SEC</b>	Security
<b>SPSS</b>	Statistical Package for Social Science
<b>TAM</b>	Technology Acceptance Model
<b>TMS</b>	Top Management Support
<b>TPB</b>	Theory of Planned Behaviour
<b>TRA</b>	Theory of Reasoned Action
<b>TRI</b>	Trialability
<b>TTF</b>	Task-Technology Fit
<b>VIF</b>	Variance Inflation Factor
<b><math>\chi^2</math></b>	Chi-square

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

In the past, organizations were using the supply-push strategy of business which is to produce products and services with different specifications to customer. This strategy was found inefficient, therefore the demand-pull strategy has been raised which focuses on producing products and services based on customer preferences. Consequently, organizations shift from being product centric to become customer centric. This is where the Customer Relationship Management (CRM) could play a role to accomplish the transformation.

CRM could mean different things for different people (Winer, 2001; Buttle, 2004). It is viewed as a business philosophy (Ryals & Knox, 2001; Zablah, Bellenger, & Johnston, 2004b; Huang & Wang, 2009), a business strategy (Parvatiyar & Sheth, 2001; Karakostas, Kardaras, & Papathanassiou, 2005; Tarokh & Ghahremanloo, 2007), or a technological tool (Bose, 2002; Campbell, 2003; Zablah et al., 2004b). Therefore, a balanced view of CRM should be adapted by combining the three views. Hence, generally CRM refers to an organization orientation towards building a customer-oriented culture, by creating plans for acquiring new customers, enhancing the profitability of existing customers, and retaining the profitable customers by gathering, analysing and deploying customer data using an information technology application; and initiating a profitable long term relationship with the customer. The information technology application is known as Customer

The contents of  
the thesis is for  
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only

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