

**IMPLEMENTING CUSTOMER RELATIONSHIP MANAGEMENT AND
SERVICE QUALITY IN SUPPORTING ICT SERVICES FOR CICT, UTM**

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the requirements for the award of the degree of
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“I declare that this thesis entitled IMPLEMENTING CUSTOMER RELATIONSHIP MANAGEMENT AND SERVICE QUALITY IN SUPPORTING ICT SERVICES FOR CICT, UTM is the result of my own research except as cited in references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

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For the two beloved men in my life...

Salleh bin Ahmed

Muhammad Naufal bin Salleh

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ABSTRACT

Good customer relationships are the heart of organizational success. The world today has come to recognize that positive relationships with customers are crucial to an organization's long-term success. ICT service organizations are no exception. These organizations face greater challenge as they must sustain good relationship with customers and ensure quality services are provided. Realizing this factor, this study is set out to support CICT, UTM through the development of a standard framework for implementing CRM and Service Quality, and an IT-based solution. The project goes through four major phases which includes Strategy, Requirements, Design, and Development. These phases are further enhanced into an operational framework with consists of: (1) Phase1- Strategy, (2) Phase2 – Requirements, (3) Phase3 – Develop CRSQ Framework, and (4) Phase4 - Develop CICT Portal. A top-down approach is used to identify objectives, priorities and high level business needs of CICT. In the requirement phase, qualitative and quantitative data collection methods are used to study the information, process, technology and people involved. Internal interview was carried out with CICT top management and a customer survey was conducted to understand the customers' expectations and what is important to them. In Phase 3, the input obtained is analyzed into three categories which are the organizational, CRSQ framework and portal analyses. Based on these analyses and theories, components for the framework and portal are identified. For Phase 4, prototyping of the portal commenced with a hybrid of horizontal and vertical prototypes. Contents structure, a site map, a use case diagram and sequence diagrams were designed as a preliminary approach to the prototyping. As a proof of concept, the framework goes through verification and the prototype portal goes through User Acceptance Test to measure users' acceptance. The result shows that the portal can indeed help CICT in developing good customer relationship and provide quality services.

ABSTRAK

Hubungan baik bersama pelanggan adalah teras kejayaan sesebuah organisasi. Masyarakat dunia kini menyedari bahawa hubungan positif bersama pelanggan adalah penting untuk menjamin kejayaan jangka panjang. Organisasi yang menyediakan khidmat ICT juga tidak terkecuali. Mereka menghadapi cabaran yang hebat kerana perlu menjaga hubungan baik dan menyediakan khidmat yang berkualiti. Menyedari hakikat ini, projek ini dimulakan sebagai satu usaha untuk menyokong CICT, UTM melalui pembinaan rangkakerja CRM dan Kualiti Servis, serta satu penyelesaian IT. Projek ini melibatkan empat fasa utama iaitu Strategi, Keperluan, Rekabentuk, dan Pembangunan. Fasa ini dikembangkan kepada rangkakerja projek iaitu: (1) Fasa1 - Strategi, (2) Fasa2 – Keperluan, (3) Fasa3– Pembangunan Rangkakerja CRSQ, dan (4) Fasa4 – Pembangunan Portal CICT. Pendekatan ‘top-down’ digunakan untuk mengenalpasti objektif, keutamaan dan keperluan bisnes CICT. Dalam fasa Keperluan, kaedah pengumpulan data kualitatif dan kuantitatif digunakan. Wawancara pihak pengurusan CICT dan soalselidik pelanggan dilaksanakan untuk memahami kehendak dan keperluan pelanggan. Dalam fasa 3, hasil kajian dianalisa dan dikategorikan kepada 3 bahagian iaitu analisis organisasi, rangkakerja CRSQ dan portal. Berdasarkan analisis dan teori, komponen rangkakerja dan portal dikenalpasti. Dalam fasa 4, proses prototaip bermula menerusi gabungan prototaip ‘vertical’ dan ‘horizontal’. Struktur kandungan, peta halaman, ‘use case diagram’ dan ‘sequence diagrams’ dibina sebagai langkah awalan proses prototaip. Rangkakerja CRSQ kemudian melalui proses verifikasi, manakala portal melalui ujian kepenggunaan bagi mengukur penerimaan pengguna. Hasil kajian membuktikan bahawa portal yang dibangunkan berkeupayaan untuk membantu CICT dalam membentuk hubungan baik bersama pelanggan dan memberikan perkhidmatan yang berkualiti.

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CHAPTER 1

PROJECT OVERVIEW

1.1 Introduction

Good customer relationships are the heart of organizational success. Research reveals that a satisfied customer shares his positive experience with an average of three people, but a dissatisfied customer shares his negative experience with an average of eight other people. The world today has come to recognize that positive relationships with customers are crucial to an organization's long-term success. Indeed, no business or organization can succeed without creating a base of loyal customers. Customer relationships are also believed to be the basis for achieving increased efficiency and leveraging a competitive advantage for organizations.

Today, CRM is becoming increasingly important as a strategy to learn more about customers' needs and behaviors. In other words, CRM is a strategy that starts, maintains and optimizes relationships to make customers loyal. CRM also helps organizations use technology and human resources to gain insight into the behavior of customers and the value of the customers.

Technology can provide some excellent tool for improving a customer's experience and thus generating positive impact. University of Texas researcher Craig Scott says, "Driving the New Economy [and] concerns related to customer/employee

attachment are various communication/information technologies, ranging from the information rich World Wide Web to more interactive tools such as email and even the telephone. Thanks in large part of these technologies, customers and employees have more information about other products or employees than ever before – putting their loyalty to the test.” (Timm and Jones, 2005).

1.2 Problem Background

CICT or Center for Information and Communication Technology in UTM holds the vision to provide quality and innovative ICT services to UTM. It aims to become a leader in excellent and innovative information technology services, to provide centralized and integrated ICT services, to be the reference center for ICT and to explore new technologies in ICT services and implementation. Being the only center of ICT in UTM, CICT faces great demand in satisfying large number of customers. Its customers include students, staffs, all internal bodies and also external UTM bodies such as SPACE. CICT also faces problems in sustaining good and close relationship with the customers which contributes to higher competition as customers starts to seek external ICT services. CICT also sees the needs to increase staff’s cooperation, collaboration and competency through experience and knowledge sharing.

Being an ICT service provider for large number of customer, CICT faces greater problem as it lacks customer-oriented service. Most of its customers including the community within UTM are not aware of the role of CICT and the services it provides. As an example, when customers face problems relating to ICT, they do not know how they can make reports or complaints and they also do not know who they should report to.

The problems mentioned above may look like only marketing issues are involved. However, in situations where customers’ complaints did receive by CICT,

customers still return negative feedbacks. This may be due to lack of CICT response, slow follow-ups, inefficient service, not understanding customers' problems and not meeting customers' expectations. This means that CICT's major problem is on dealing with the customers.

As a step to solve and overcome the problems, CRM is seen as the solution. This is because CRM is the concept that manages customer relationships. Implementing CRM means that CICT shall be able to create, improve and sustain the relationships with its customers and also ensuring the customers' loyalty. As an ICT service provider, it is also vital for CICT to ensure the quality of the service provided. This is where service quality comes into the picture. However, currently there is no standard framework for ICT service provider to implement CRM and service quality.

1.3 Problem Statement

In order to address the issues highlighted in the previous section, there are two main problem areas that need to be tackled. The first problem is that there is no standard framework on implementing CRM concepts and quality service for ICT service organizations. Another problem is that there is no effective IT means that integrates all CICT services and supports the objectives of CICT. This brings us to two research questions namely:

- i. How can CICT create and sustain a better relationship with the customers, and gain competitive advantage through CRM and service quality concepts?
- ii. How can IT assist in developing a successful system for CICT that helps maintain customer relationship?

1.4 Project Objectives

The project objectives as listed below are expected to be able to answer and provide solutions to the problem statements mentioned above:

- i. To study the customers' expectations of CICT services;
- ii. To develop a framework on implementing CRM concepts with integration of service quality for ICT services organizations that provides standard guidelines towards achieving good customer relationships; and
- iii. To develop a prototype of CICT portal that utilizes CRM concepts as well as centralizing and integrating all CICT services to the customers.

1.5 Project Scope

This project will cover three main scopes as highlighted below:

- i. The subject domain is restricted to CICT and CICT customers from 6 zones which include faculties, HEP, clinic, colleges, administration, PHB, PSZ, PPIPS, Penerbit, SPACE and industrial centers;
- ii. The framework development will focus on CICT as an ICT service provider for a higher educational institute; and
- iii. The end products of this project will be a framework on implementing CRM concepts and a prototype portal that help realizes CICT vision and missions.

1.6 Importance of Study

As CRM encompasses wide aspects which include people, culture, technology, process and leadership, its implementation within an ICT service organization will give major contribution and guidance towards the organization's success. This is further elaborated in the following aspects:

i. Organizational

As CICT core business is to provide ICT services, CRM concepts is essential in contributing to organizational success as it is the foundation that determine customers' loyalty to CICT. Acquiring customers loyalty means that CICT must be able to gain customers' overall satisfaction, create their willingness to commit an ongoing relationship with CICT and their willingness to recommend CICT to others.

ii. Cultural

Culture is another vital aspect touched in CRM. The culture within CICT working environment should be geared towards a clearly defined customer orientated business strategy. Sharing and generating knowledge through CRM will add value to both the customers and CICT.

iii. Practical

Technology offers the capacity to succeed but not the ability. A successful CRM strategy relies on highly motivated and competent staffs to maximize the potential that the technology brings to the business. Thus, the study on CRM will push CICT management and staffs practicality to utilize technology as well as other resources efficiently.

iv. Economical

The effort to sustain customer relationship is crucial to ensure CICT's success. CICT competitiveness depends mainly in creating more value to the ICT services provided to customers compared to its competitors. Gaining competitive advantage in the market will return higher economic profitability for CICT.

v. Theoretical

The importance of the study in theoretical aspect is derived from the needs for a guide on how to implement both CRM and service quality concepts for an ICT service organization such as CICT. Understanding the theory of CRM is extremely essential because focusing on technology alone without considering primary concepts of CRM will only lead to a waste of resources and finally result in the organization's failure.

1.7 Summary

As an ICT service organization for large number of customers, CICT faces problems in creating, improving and maintaining good relationships with its customers. CICT also faces the challenge in satisfying customers' expectations. Realizing these problems, the author sees the needs to study and analyze the concepts of CRM and service quality. Integrating these concepts together shall produce a useful framework for ICT service organization. This framework will then be used as a guide to implement a prototype portal for CICT.

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