IMPLEMENTING ITIL- SERVICE SUPPORT IN THE INFRASTRUCTURE AND SERVICE UNIT OF CICT, UTM

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A project report submitted in partial fulfillment of the

requirements for the award of the degree of

Master of Science (Information Technology – Management)

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ABSTRACT

ITIL implementation is rapidly growing in the organizations. One of the major parts of ITIL framework is service support which is including of several processes especially Configuration Management, Helpdesk Management and so on. In addition, there are several ITIL-based frameworks such as Microsoft Operation Framework (MOF) that they are trying to show some guidelines to implement those best practices processes too. Centre Information Communication Technology (CICT) is the heart of UTM in terms of information technology and related platforms. Infrastructure and Service Department is one of the sub-organizations of this centre that it is includes four different units with their specific tasks. The aim of this research is to provide a framework to guide this department to document and standardize department's activities based on ITIL best practices. The proposed ITIL framework will try to improve the quality of services at Infrastructure and Service Department of UTM. The proposed framework includes KPI', Steps, Scope of work and other related information to prepare guideline to implement ITIL-Service Support at Infrastructure and Service Department of UTM. In order to achieve to this objective the needed information gathered from several resources such as interview, observation,

questionnaire and available documents. Moreover, this research includes a tool to automate these ITIL-service support activities that calls ADU@ITIL system.

ABSTRAK

Perlaksanaan ITIL kini pesat berkembang dalam organisasi. Salah satu bahagian utama dalam kerangka ITIL ialah sokongan perkhidmatan yang merangkumi pelbagai proses seperti Pengurusan Konfigurasi, Pengurusan MejaBantu dan sebagainya. Selain dari ini, terdapat pelbagai kerangka berdasarkan ITIL seperti Kerangka Operasi Microsoft (MOF) yang juga cuba memaparkan garis panduan untuk melaksanakan proses amalan terbaik. Pusat Teknologi dan Komunikasi Maklumat (CICT) merupakan nadi UTM dari segi teknologi maklumat dan platform yang berkait. Jabatan Perkhidmatan dan Infrastruktur adalah salah satu sub-organisasi pusat ini, dan terdiri dari empat unit berasingan masing-masing dengan tugas tertentu. Tujuan penyelidikan ini ialah untuk membentuk satu kerangka sebagai panduan untuk jabatan ini mendokumenkan serta menentukan piawaian aktiviti jabatan berdasarkan kepada amalan terbaik ITIL. Kerangka ITIL yang dicadangkan akan cuba memperbaiki kualiti perkhidmatan Jabatan Perkhidmatan dan Infrstruktur UTM. Kerangkan cadangan memasukkan KPI', Langkah dan Skop Kerja serta maklumat yang berkaitan dalam penyediaan garis panduan untuk melaksanakan Sokongan Khidmat-ITIL di Jabatan Perkhidmatan dan Infrastruktur UTM. Untuk mencapai objektif ini, maklumat yang diperlukan dikumpul melalui pelbagai sumber seperti temubual, pemerhatian, soal selidik dan dokumen yang sedia ada. Seterusnya, penyelidikan ini memasukkan juga sebuah

perkakas untuk mengautomasikan aktiviti sokongan khidmat-ITIL yang dipanggil sebagai sistem ADU@ITIL.

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CHAPTER 1

PROJECT OVERVIEW

1.1 Introduction

This chapter includes the initial stage of research related to researcher’s project. The first outline is Problem Background of the problem which wills emphasis the most problems in the CICT. Then it will describe Problem Statement of the project which includes two main questions that should be answered. After that it will focus on Project Objectives of this research that includes proposing an ITIL-Service Support framework for Infrastructure and service department of CICT and one tool to support it. Then it will clarify the Project Scope of the research and what should be delivered at the end of the project. At the end of this chapter Importance of this Study for defined scope will be claimed.

1.2 Problem Background

Service quality is a challenge in the university and as well CICT. All university authorities emphasize on improves service quality (SQ) in the university and CICT. One of the main objectives of CICT is to become a high quality information technology reference centre. Moreover, because their staffs are more educated in terms of IT technologies and also all other parts of university affect by CICT. So, they need to improve SQ in their organization and ITIL-Service Support is one major framework to follow.

However, one of the ways that can improve the SQ in the CICT is using the ITIL framework that this framework trying to increase the quality with some processes likes service delivery and service support, but there are some considerations on implementing ITIL in the CICT these considerations are include:

- User resistance
- Lack of technology
- User training
- Cultural and Organizational limitations

The CICT managers just decide to start implementation of ITIL in a part of CICT but they phased with above considerations.

1.3 Problem Statement

In order to address the research problems stated in the problem background section, the main problem is focused on:

How to implement ITIL service support in the infrastructure and service department of CICT in order to improve service quality in it?

This main problem will be answering the following research questions:

1) How to prioritize and select ITIL service support processes to implement in the infrastructure and service department of CICT?

Basically, Some consultants believe that ITIL-implementer should start to implement this framework from Incident management, then problem management and etc.(Ricardo Mansur,2007). Some another believes that ITIL implementation should be started from configuration and change management and after that Release Management (Hardik, 2007). Another specialists subject to start with change management because it comes before configuration management during ITIL implementation. They saying: else what keeps the CMDB up to date? Also, configuration management and the CMDB are the most complex, lengthy and expensive of all the processes to implement. Therefore they do not suggest starting with them (Dwight Kayto, 2007). In addition, some of the experts saying that: The easiest way to implement ITIL is to start with "Service Desk" and Incident Management. Their reason is: In this case implementers will give some quick wins. Because at first they need quick wins to confirm business that ITIL is a useful IT assess for them (Vimal, 2007). Furthermore, some professionals mention that they should implement CCR (Change, Configuration and Release) all together. They believe that, we should start with collecting all the data for the Configuration management and set a deadline for the configuration to create a baseline from where we can implement Change Management. And then continue the process till

Release management (Vimal, 2007). There are several issues too (martin Atherton, 2007; Ralph Gray, 2007; Ralph Gray, Hertford, 2007).

In addition, there are different view points to implement all or some ITIL processes in the organizations base on needs, size and management view point, some or all of these processes should be selected to implement in the infrastructure and service department of CICT.

2) What is a tool to support the ITIL service support in the infrastructure and service department of CICT?

1.4 Project Objectives

- To study the current status of quality services at Infrastructure and Service Department of CICT in terms of ITIL-Service Support implementation.

- To propose a guideline to implement ITIL-Service Support framework in the Infrastructure and Service Department of CICT.

- To develop a tool to support the most important parts of proposed framework.

1.5 Project Scope

i) The study only covers the infrastructure and service department of CICT.

ii) The end product will be a documentation that describes how ITIL service support should be implemented in the infrastructure and service department of CICT.

1.6 Importance of Study

This project will give a positive impact to the IT professionals at the infrastructure and service department of CICT .It helps IT professionals to follow a guideline to improve the quality of services in the Infrastructure and services department of the CICT. This is also developing a tool to support the main ITIL service support processes in the infrastructure and service department of CICT to improve quality of service.

1.7 Summary

Service quality has an increasing role in every organization and CICT is an IT department in the UTM that tries to improve its service quality as well. ITIL service Support can give this opportunity to this department to increase its service quality and give better services to other departments and users in the UTM.