# FM HELP DESK : USER COMPLAINT SYSTEM AS AN FM APPROACH FOR FACILITIES MANAGEMENT SERVICES IN UNIVERSITI TUN HUSSEIN ONN MALAYSIA (UTHM)

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### **DEDICATION**

For my beloved mother and father, and also my lovely brother and sister, thanks for your huge support.

All my loyalty colleagues and lecturers in UTHM,

Hj Soeb Pawi Nurbaity Aqmar Ihfasuziella Ibrahim Ehzwan Nur Muhammad Firdaus Muhammad Azwan Nurulhuda bt Taha Amilia Hasbullah Nurfazliana Dr Noralfishah bt Sulaiman En. Kamaluddin En. Mat Tawi En. Abdul Jalil Omar

And unforgettable both of the cute little babies

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### ABSTRACT

An efficient and effective facilities management contributes to the productivity of an organisation in achieving its core activities. Higher educational institutions (HEIs), with teaching and learning as their core activities, have several physical and nonphysical facilities to manage. In reality, this involves with complex challenges in meeting the needs and demands of dynamic and demanding stakeholders. Therefore, a mechanism must be identified and developed to meet their demands. Facility management (FM) help desk has been identified as an online system for the university community to channel any complaints about the university facilities. This system is able to handle the complaints by managing, recording and maintaining them in a systematic and effective manner. Through this system, complaints should be resolved within one day, three days or seven days depending on the degree of urgency of the cases. This research focuses on how the FM help desk system can help the university to manage its facilities and to determine FM satisfaction indicators for facilities management services delivered through the FM help desk system. This research also suggested the improvement of this system based on the FM satisfaction indicators. Mixed method was used in this research. Via quantitative approach, 317 sets of questionnaires were distributed to respondents representing various levels of the university staff. Semi-structured interview technique focusing on the officers who directly involved in the management of university facilities, on the other hand, was carried out to obtain qualitative data. The results showed that the majority of users were satisfied with the implementation of FM help desk system as a user complaint system to improve the efficiency of the university facilities management. Furthermore, it has been suggested that this system can be improved based on the FM satisfaction indicators i.e., people, IT and technology, place and process. Thus, FM help desk system has been identified as an important mechanism in enhancing the management of complaints towards a better implementation of a quality facilities management system in the university.



### ABSTRAK

Pengurusan fasiliti yang cekap dan efektif menyumbang kepada produktiviti organisasi dalam mencapai aktiviti terasnya. Institusi pengajian tinggi (IPT) yang memfokuskan aktiviti terasnya kepada pengajaran dan pembelajaran, mempunyai pelbagai fasiliti dalam bentuk fizikal dan bukan fizikal secara realitinya berhadapan dengan cabaran yang begitu kompleks dalam memenuhi keperluan dan permintaan *stakeholder* yang dinamik dan mendesak. Sehubungan itu, satu mekanisme perlu dikenal pasti dan dibangunkan bagi memenuhi tuntutan ini. Facility management (FM) help desk telah dikenal pasti sebagai satu sistem atas talian bagi warga universiti mengemukakan sebarang aduan tentang fasiliti universiti. Sistem ini berupaya mengendali, merekod dan menyelenggara aduan secara sistematik, efisien dan teratur. Melalui sistem ini, aduan-aduan pengguna fasiliti perlu diselesaikan dalam tempoh satu hari, tiga hari atau tujuh hari mengikut darjah kesegeraan kes. Kajian ini memfokuskan kepada persoalan sejauhmana sistem FM help desk boleh membantu sistem pengurusan fasiliti universiti dan menentukan indikator kepuasan dalam perkhidmatan pengurusan fasiliti terhadap sistem tersebut. Kajian ini juga telah mencadangkan penambahbaikan berdasarkan indikator kepuasan FM. Kaedah campuran telah digunakan dalam penyelidikan ini. Melalui pendekatan kuantitatif sebanyak 317 borang kaji selidik telah diedarkan kepada responden iaitu staf pelbagai peringkat di UTHM bagi mendapatkan maklum balas. Manakala teknik temubual secara separa berstruktur telah dijalankan bagi mendapatkan data secara kualitatif dengan memfokuskan responden iaitu pegawai-pegawai yang terlibat secara langsung dalam pengurusan fasiliti universiti. Hasil kajian menunjukkan bahawa majoriti pengguna berpuas hati dengan pelaksanaan sistem FM help desk dan ia diterima sebagai satu saluran aduan yang dapat meningkatkan kecekapan sistem pengurusan fasiliti universiti. Seterusnya, telah dicadangkan bahawa sistem ini masih boleh dipertingkatkan melalui indikator kepuasan FM iaitu terdiri daripada sumber manusia, IT dan teknologi, tempat and proses. Dengan demikian sistem FM help desk telah dikenal pasti sebagai satu mekanisme penting dalam meningkatkan sistem pengurusan aduan ke arah pelaksanaan sistem pengurusan fasiliti yang berkualiti di UTHM.



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## LIST OF SYMBOLS & ABBREVIATIONS

BIFM	-	British Institute of Facilities Management
BIM	-	Building Integration Model
CAFM	-	Computer Aided Facilities Management
CFM	-	Centre for Facilities Management
DLP	-	Defects Liability Period
EPS	-	Estate and Property Services
FHDS	-	Facilities Help Desk System
FM	-	Facility/Facilities Management
HEI	-	Higher Educational Institutions
IFMA	-	International Facilities Management Association
PIT	-	Project in Time
PPF	-	Pejabat Pengurusan dan Fasiliti
РРН	-	Development and Property Management Office
PTM	-	Centre of Information Technology Office
QA	5-0-5	Quality Assurances
UTHM	-	Universiti Tun Hussein Onn Malaysia



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- **K** Survey on the Terms of Using the Help Desk and Helpdesk
- L List of Author Publications
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- N 👂 Full Master Thesis in CD

### CHAPTER 1

### INTRODUCTION

#### **1.1** Introduction

Managing facilities in organisations especially higher educational institutions (HEIs) is very crucial. It requires an efficient and effective facilities management in terms of providing the best services to the users. If the buildings and other facilities are not properly managed, it will have a negative impact on the organisation's performance (Brian & Adrian, 2005).

Therefore, the study on the facility management (FM) help desk or an effective complaint system in an organisation is very important, especially in HEIs like Universiti Tun Hussein Onn Malaysia (UTHM). With 14,500 numbers of students as well as more than 1,800 academic and non academic staffs it must have a good and efficient facilities management system. All the facilities and equipment, assets and premises which are used for the teaching and learning purposes should be in a good condition and fully functional. Any complaints of damage and malfunction of the system should involve comprehensive network system integration, so that any remedial action can be implemented quickly and effectively.

In view of the above constraints, the administration of UTHM has identified a FM help desk as a useful mechanism or user's complaint system in managing the facilities. There are various applicable models or systems which have been used as a mechanism in handling complaints. These mechanisms are called the FM help desk which is used locally and internationally (Barrett & Baldry, 2003). FM help desk is a system which can handle, resolve, record and maintain a complaint systematically and

efficiently. The report can be generated automatically either monthly or annually where it will help the management of administrator to manage and control the facilities issues in the university orderly.

### **1.2 Background of Research**

Facilities management (FM) services are important to universities in supporting their core business i.e., teaching and learning activities. HEIs are among those organisations in a service industry. Like any other organisations, they realize that the mission of a university is to provide a high quality teaching and learning environment. Universities are providing various infrastructures and facilities to their communities in ensuring a conducive working and living environment. In this regard, there should be an effective facilities management system and good mechanism in facilitating the complaints (Sapri & Pitt, 2005).

Complaint handling becomes an important mechanism for minimizing dissatisfaction among the users in an organization both in private and public sectors (Najar, 2009). According to International Facilities Management Association, IFMA (2005), facilities management is defined as a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating the four main resources i.e., people, place, process and technology. The role of the facility manager is to coordinate these types of the main resources effectively. In an organisation like a university, there are various parties involved with a wide range of demands and requirements, and these come under facilities management issues which must be fulfilled accordingly.

Therefore, the purpose of this research is to examine the role of FM help desk as a user complaint system in improving the delivery of FM services in UTHM. The application of FM help desk has been implemented since September 2009 in Development and Property Management Office (PPH) of UTHM.

This research began in the early on 2009, where the FM help desk system was still not yet implemented in PPH. As, the FM help desk system has only started in late



2009, this research therefore would examine the needs, role, contributions and suggestions to improve the system in PPH.

### **1.3 Problem Statement**

Managing facilities in HEIs are very critical due to the various stakeholders involved in the organisation (Sapri, Kaka & Finch, 2009). In the facilities management field, there are various parties and a wide range of expertise involved in an organisation to manage the facilities. While in organisations like HEIs, an efficient and effective facilities management in terms of providing the good services to the users is required. If the building and other facilities are not managed properly, it will affect the organisation's performance (Brian & Adrian, 2005).

There is no specific approach to managing facilities. Each organisation, even within the same sector, will have different needs. Understanding those needs is the key in providing the best services in managing facilities in HEIs (Sapri, Kaka & Finch, 2009). It is due to the various parties involved in an organisation. One of the parties refers to the users of the facilities in an organisation. For the university, the complex problem faced is to manage the complaints regarding the facilities by the students and staff. In some situations, users get frustrated waiting for effective services after lodging a complaint on facilities breakdown. It happens when problems or issues reported are not properly managed and coordinated.

According to *Perancangan Strategik UTHM 2011-2016*, UTHM have set up their strategic plan which need to be implemented by improving accountability, quality and facilities provided with a sustainable learning environment for teaching and learning process among the students. To ensure effective and efficient environment, the university should establish and improve the existing mechanisms to be more effective and efficient in meeting the needs of students and staff for establishing its existing facilities services. At the same time, when there is no integrated system as a one of the communication channels among the campus community, so the problem will arise where the systematic system or centralized system not implemented consistently in the university.



On the other hand, by referring to the *Laporan Bahagian Pengurusan Fasiliti*, *PPH* (2010), a phenomenon that often occurred in the university's issues refer to the complaints against the facilities are very high, involving a total number of 30 complaints in one day, especially in the early hours of the teaching and learning process begins. A total of two (2) technicians involved cannot address the complaints for the lecturers, especially in the early morning during the lecturing period. When the technician in PPH received calls, they can only resolved 2 complaints from the whole, while 28 complaints yet unresolved (Wan Zahari, 2010).

Thus, it is necessary to find an effective mechanism or system where it can help in improving the quality of learning and teaching at the university to produce a conducive and effective learning environment. The SIRIM audit which was carried out in 2010 also have expressed the interest in the issue to the uses of facilities at the university complaints toward dissatisfaction among lecturers with the teaching and learning facilities provided which refers to the *Unit Kemudahan Pembelajaran* & *Pengajaran (UKPP)* of university in addressing complaints regarding facilities efficiently and effectively. Thus, a framework of facilities management systems in university regarding the teaching and learning need to be developed to address these issues. Therefore, this study leads to the formation of a conceptual framework for a facilities complaint system called the FM help desk where it has been developed based on the theoretical framework of facilities management and help desk concept to see the effectiveness of this system among the users in UTHM (Wan Zahari, 2010).



Effective complaints system in an organisation is very important, especially in HEIs like UTHM. With the population of 14,500 and 1,800 students and staff respectively, there is a need for a good management and efficient facilities. Facilities and equipment as well as a variety of teaching and learning assets and premises shall always be in good condition and fully functional. These include the equipment of teaching and learning using the latest technology such as projector, LCD, visualizer projector and so on. Any complaints of damage and malfunction of the system should involve comprehensive network system integration, so that any remedial action can be implemented quickly and effectively. It also helps the PPH to provide the best service to the UTHM communities (Wan Zahari, 2010).

Research into the FM help desk has been primarily directed towards the technical performance of setting up operational management within organisations. Nevertheless, the contributions of the FM help desk are not fully dealt with in the existing literature. In addition, from the literature review it was found that not enough studies have been conducted on the FM help desk. There are several research focuses on the topic of the help desk including call center, IT help desk, online customer complaint system, support system and information system. However, for the FM help desk issues, they have been discussed limitedly. There are a lot of researches have been discussed about the help desk and identified being widely carried out in the various topics. Nevertheless, there has been a small amount of research looking at the benefits of FM help desk (May, 2010).

Due to this, the administration of UTHM acknowledged that FM help desk, in the form of the user's complaint system is one of the mechanisms in managing the facilities. Generally, there are various applicable of help desk models or systems implemented locally and abroad. FM help desk is a user's complaint system which can handle record and maintain a complaint systematically and efficiently in PPH. Through the system, a report can be automatically generated monthly or annually. This will help the administrator in managing the facilities in UTHM effectively.

Based on these issues, there is a need to work on how to handle the user complaints accordingly and systematically. An effective facilities management user complaints system should be available to ensure user's satisfaction in the university. FM help desk becomes an integral system in a university to support the core business i.e., teaching and learning. It is seamlessly managed and reports on all requested complaint of the maintenance activities that are being seen as a service function which is responsible for bringing multiple resources to solve related issues towards the user's satisfaction (Niedzwiecki & Peterson, 2002). Hence, the administration of UTHM has been seen the FM help desk as one of a mechanism in managing the facilities and become on a user complaint system with efficiently and systematically.



A survey was conducted as a preliminary study in early 2009. The result showed that there is a need to improve user's management complaint system. This result showed the overall level of satisfaction among UTHM users on the services provided by the university. The result from the initial survey was done through online among UTHM staff suggested that there is a strong need for a systematic mechanism in managing facilities complaint to be established. Therefore this study will focus on the application of a new system i.e., FM help desk system and to determine satisfaction indicators of facilities management services delivered through the FM help desk system in UTHM.

The result indicated that the percentage of user satisfaction level in UTHM is not at a high level. Most of the respondents 57% (138) considered that the university needs to improve its services and 13% (31) of them were satisfied, 14% (35) are moderate and 16% (39) opined that the services provided are good.

Furthermore, during the research period there was no other research conducted on a user's complaint system that could provide a measure of the level of user's satisfaction on UTHM facilities and services. This is attributed to the lack of research and specific issues discussed on the FM help desk at the time of the study. The study on the FM help desk is very important to help the PPH in providing the best services to its users. Through the FM help desk, an effective management of the user complaints system can help to improve the productivity and image of UTHM community. As mentioned by May (2010), there has been a small amount of research conducted looking at benefits of help desk in managing facilities. Therefore, this study will focus on the benefits of using the FM help desk in handling user complaint on facilities in UTHM.



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