UNIVERSITI TEKNOLOGI MARA

EVALUATION OF USER SATISFACTION ON HOSPITAL INFORMATION SYSTEM: A MALAYSIAN CASE STUDY

LIDYAWATI BINTI ABDUL HAMID

IT Project submitted in partial fulfillment of the requirements for the degree of Master of Science in Information Technology

Faculty of Computer and Mathematical Sciences

January 2016

AUTHOR'S DECLARATION

I declare that the work in this IT Project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as reference work. This IT Project has not been submitted to any other academic institution on non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student	:	Lidyawati binti Abdul Hamid			
Student I.D. No.	:	2013452796			
Programme	:	Master of Science in Information Technology			
Faculty	:	Computer and Mathematical Sciences			
IT Project Title	:	Evaluation of User Satisfaction on Hospital			
		[·] Information System : A Malaysia Case Study			
Signature of Student	:	msinte			

Date

26 January 2016

•

ABSTRACT

The advancement of the Hospital Information System in Malaysia begun with a fundamental factual reporting framework utilizing papers to an ICT based Hospital Information System. Hospital Information System (HIS) which has been executed and utilized subsequent to 1998. HIS is an integration of clinical, administrative and financial module developed by the Ministry of Health, Malaysia, to deliver health care services through information technology and a combination of terrestrial lines and satellite communication channels. Hospital Information System is a tool to help in enhancing the quality of care and to provide continuous and seamless care in hospitals, by bringing physician closer to patients. Care providers will be able to access patient's electronic medical records whenever they are in the vicinity of clinics or hospitals. However, not every hospital in Malaysia is using it. Some of the problems are lack of acceptance and under-utilized by the users, users reluctant to gain knowledge of new methods, Negative impacts on the clinician-patient relationship and Development Hospital Information System is not consistent. Thus, more investigation and studies needed to be conducted in order to determine the system in verifying the resume of maintaining the quality of the system and specialist cares' satisfactions. The main objective of this experimental research is to investigate the user satisfaction by difference users and to identify the significant factors for user satisfaction in using Hospital Information System in public hospitals. This research uses quantitative research method and adapted the DeLone and McLean Information Systems Success Model (D&M IS Success Model). The main target group was the end users (doctor, nurses, pharmacists and others) instead of the developer and service managers. In order to confirm the level of customer satisfaction and different satisfaction level among different position of users, data gathered will be analysed by using SPSS software. The data will be assessed with Kruskal-Wallis H test technique. In addition, the result will be compared with existing evaluation studies and recommendation being made to improve HIS in the future. Analysis by Kruskal-Wallis H test is proves that statements are 'Medical Record Officer' had the highest satisfaction across eight groups' users. Samples consist of 124 respondents from 5 hospital such as Sedang Hospital, Sg. Buloh Hospital, Sultan Abdul Halim Hospital, Kepala Batas Hospital and Lahad Datu Hospital where there use the same Hospital Information System version 5.x which in develop by the same vendor. The data was gathered through collection online survey.

ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious, The Most Merciful

First and foremost, the deepest gratitude of all shall be bestowed to Allah the Almighty and The Merciful for all the insight which He gave to us that lead to the completion of this research. Without His blessings and consent, I might not have enough courage and determination to complete this research. All my thanks and appreciation will be lay upon Him.

I am most grateful to Ms Fauziah Binti Redzuan, for all assistance, advice, guidance, encouragement, new ideas and invaluable support given as my project supervisor for a better quality in my research. Thank you for being such a great mentor. I also would like to express my gratitude and sincere appreciation to Dr Jasber Kaur A/P Gian Singh for her invaluable knowledge, comment and recommendation on my analysis research.

My appreciation goes to all the lecturers at Universiti Teknologi MARA and staff of Ministry of Health. I am forever indebted to all the employees of Malaysia's public hospitals, particularly those who participated in the research. Without their help and kind assistance, I would not have been able to complete the study.

Special thanks to all my friends and also to colleagues of whom without their continuous encouragement and support this thesis could not have been complete. I will forever cherish our friendship.

Finally, I would like to express my deepest gratitude to my beloved parents and families for all support and courage towards my success. Without their personal sacrifices and being a constant source for encouragement, especially in the final stages, this thesis would not have been possible.

May Allah reward you all abundantly.

Thank You.

TABLE OF CONTENTS

AUTHOR'S DECLARATION

Page

ii

ABS	ГКАСТ		iii
ACK	iv		
TAB	v		
LIST	ix		
LIST	xii		
LIST	OF ABBR	REVIATIONS	xiii
СНА	PTER ON	IE: INTRODUCTION	1
1.1	Introduc	ction	1
1.2	Researc	h Background	2
1.3	Problem	3	
1.4	Researc	5	
1.5	Researc	5	
1.6	Researc	5	
1.7	Researc	6	
1.8	Summa	7	
1.9	Outline	of the Thesis	8
СНА	PTER TW	VO: LITERATURE REVIEW	9
2.1	Introduction		9
2.2	Healthc	are Innovation	9
	2.2.1	Electronic Health Record (EHR)	11
	2.2.2	Hospital Information System (HIS)	11
2.3	Implem	14	
	2.3.1	Evolution of HIS Implementation in Malaysia	14
2.4	Users' S	Satisfaction	17