

**IDENTIFYING FACTORS AFFECTING DOCTORS TO ADOPT
INTERNET-BASED HEALTHCARE APPLICATION USING
EXTENDED TAM**

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**IDENTIFYING FACTORS AFFECTING DOCTORS TO ADOPT
INTERNET-BASED HEALTHCARE APPLICATION USING
EXTENDED TAM**

**A thesis submitted to the Faculty of Information Technology in partial
Fulfillment of requirement for the degree
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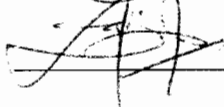
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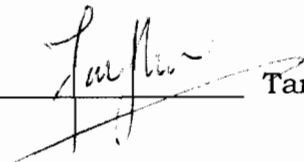
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ABSTRACT

Technology Acceptance Model (TAM) has been developed to explain user acceptance of new information technologies. The objective of this study is to identify factors that affect doctors' adoption of and the reasons of not adopting the internet-based healthcare applications. A survey was carried out that involved 300 doctors in the Alor Setar General Hospital (ASGH) in Malaysia, in order to see whether TAM fits in the health field. In addition, they survey was done to identify factors affecting doctors in adopting the internet-based healthcare application. The core perception variables are perceived ease of use, perceived usefulness, and perceived behavior include, which include a strong determinant of intention to use. The factors identified in this research are (job relevance, output quality, result demonstrability, image, experience, subject norm, learn ability, screen design, self efficacy, support, training, and availability). From the survey, it were found that all factors have influence on doctors in adopting the internet-based healthcare application. This proved that extended TAM is important. In summary, the findings presented in the study suggest various reasons of why doctors do not adopt the internet-based healthcare application in their work. Finally, some recommendations are made for the government in improving the internet-based application in the health field.

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TABLE OF CONTENTS

	Page
PERMISSION TO USE	I
ABSTRACT	II
ACKNOWLEDGEMENT	III
LIST OF TABLES	Vii
LIST OF FIGURES	Viii
 CHAPTER 1: INTRODUCTION	
1.0 Background	1
1.1 Problem statement	4
1.2 Research Questions	5
1.3 Research Objective	5
1.4 Scope of study	5
1.5 Significant of the Study	6
1.6 Expected output	6
1.7 Conclusion	6
 CHAPTER 2: LITERATURE REVIEW	
2.0 Introduction	7
2.1 internet-based healthcare application	7
2.2 Technology Acceptance Model (TAM)	9
2.3 Extended technology Acceptance Model (TAM 2)	14

CHAPTER 3: RESEARCH METHODOLOGY

3.0	Introduction	16
3.1	Preliminary Study	17
3.2	Questionnaire Design	19
3.3	Data Collection	20
3.4	Summary	20

CHAPTER 4: ANALYSIS AND RESULTS

4.0	Introduction	21
4.1	Demographic Information	21
4.2	The Descriptive Analysis of the Factors	24
4.2.1	Perceived Ease of Use	25
4.2.2	Perceived Usefulness	26
4.2.3	Perceived Behavior	28
4.2.4	Actual usage system	30
4.3	correlations between the Factors and Actual usage	31
3.3.1	Correlations for PEOU	31
3.3.2	Correlations for PU	31
3.3.3	Correlations for PB.....	32
4.4	Regression between the Factors and Actual usage	33
4.4.1	Perceived Ease of Use	33
4.4.2	Perceived Usefulness	34
4.4.3	Perceived Behavior	35

4.5 A New version of TAM (TAM X)	37
4.6 Reasons of not using the Internet-based Healthcare Application	39
4.7 Summary.....	39

CHAPTER 5: CONCLUSION AND RECOMMENDATION

5.0 Introduction.....	40
5.1 Limitations of the study.....	40
5.2 Recommendation	41
5.3 Summary	42

REFERENCES	43
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APPENDICES

Appendix A: Study Questionnaire

LIST OF TABLE

TABLE 1	Demographic Information: Gender	22
TABLE 2	Demographic Information: Age	22
TABLE 3	Demographic Information: Marital Status	23
TABLE 4	Demographic Information: Qualification	23
TABLE 5	Demographic Information: Using computer	24
TABLE 6	Summative Perceived Ease of Use	25
TABLE 7	Summative Factors of PEOU	25
TABLE 8	Summative Perceived Usefulness	26
TABLE 9	Summative factors of PU	27
TABLE 10	Summative perceived Behavior	29
TABLE 11	Summative factors of perceived Behavior	29
TABLE 12	Summative factors of Actual Usage of Internet system	30
TABLE 13	Correlation between Factors of PEOU	31
TABLE 14	Correlation between Factors of PU	32
TABLE 15	Correlation between Factors of PU	32

LIST OF FIGURE

FIGURE 2.1: Technology acceptance model (TAM)	11
FIGURE 2.2: Extended Technology Acceptance Model (TAM2)	15
FIGURE 3.1: Research Process.....	16
FIGURE 3.2: Extended Technology Acceptance Model (TAM X)	18
FIGURE 4.1: Mean of Factors of PEOU	26
FIGURE 4.2: Mean of Factors of PU	28
FIGURE 4.3: Mean of Factors of PB	29
FIGURE 4.4: TAM X Mode	38

CHAPTER 1

INTRODUCTION

1.0 Background

The Internet has recently become more important practice in human life including in the health field. In the medical field, the Internet has been recognized as a strategic healthcare tool that can help related organizations to improve their business processes. For example, the Medical Records Institute had indicated that Internet-based health applications (IHA), such as electronic health record e-prescribing and mobile health, helped to improve the effectiveness, efficiency of its administration task. Others contend that the use of the Internet for electronic medical records, e-billing and patient schedule enables the health care industry to reduce its inefficiencies and an error in the care delivery processes (Wiley-Patton & William, 2002).

Information and communication technology (ICT) in the health care industry has existed for about four decades, and has gained widespread usage. For instance electronic patient records offer health care professionals access to vast amounts of patient-related information; decision support systems to support clinical actions, and knowledge servers allow direct access to state-of-the-art clinical knowledge to support evidence-based medical practice. ICT implementation can also radically affect health care organization and health care delivery and outcome (Ammenwerth, E., Iller, C. & Mahler, C, 2006).

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