



HUMAN SCIENCES STUDENTS' ACCEPTANCE OF  
IIUM.FM: A TEST OF THE TECHNOLOGY  
ACCEPTANCE MODEL

BY

MAHAMAN LAHABOU

A dissertation submitted in fulfilment of the requirement  
for the degree of Master of Human Sciences  
(Communication)

Kulliyyah of Islamic Revealed Knowledge and Human  
Sciences

International Islamic University

Malaysia

JULY 2011

## ABSTRACT

The Technology Acceptance Model (TAM) represents an important theoretical contribution towards understanding usage and acceptance behaviors of new technologies. According to TAM, one's actual use of a new technology is influenced directly or indirectly by his or her behavioral intention, attitude, perceived usefulness, and perceived ease of use of the technology. This study investigates Human Sciences (HS) students' acceptance of IIUM.FM, their newly established online campus radio, by using TAM as the theoretical framework whereby the concept of knowledge, as external variable, was added to the original model. The study is based on the assumption that students' knowledge about IIUM.FM will influence their actual listening to it through perceived ease of listening (PEOL), perceived usefulness of listening (PUOL), and attitude towards listening. A cross-sectional survey design is employed to gather data through a self-administered questionnaire to a sample of 467 HS undergraduate students to test six hypotheses generated from literature related to TAM. Both listeners ( $n_1=238$ ) and non-listeners ( $n_2=229$ ) participated in the study. The findings show that listeners are highly knowledgeable about IIUM.FM, have positive perceptions of the radio but have a negative attitude towards listening to it. They mostly listen to music programme at night and from their hostels. Moreover, male students are found to listen more frequently to IIUM.FM than female. Similarly, the seniors tend to listen more to IUM.FM than the juniors. All the six hypotheses are supported in this study. Knowledge about IIUM.FM is found to have an influence on the actual listening via PEOL, PUOL, and attitude towards listening. So the proposed TAM is supported in this study. For the non-listeners, the reasons for not listening were lack of time, reception problems, and lack of knowledge on the existence of IIUM.FM. However, they expressed their intention to listen to it in the future.

## خلاصة البحث

يمثل نموذج قبول التكنولوجيا إسهام نظري هام نحو فهم سلوكيات استخدام التكنولوجيات وقبولها. ووفقاً لهذا المعيار يتأثر الاستخدام الفعلي مباشرة كانت أو غير مباشرة للتكنولوجيا الجديدة لدى الشخص بالنية السلوكية، والموقف من التكنولوجيا، وإدراك الفائدة من وراء استخدامها وإدراك سهولة استخدامها. وهذه الدراسة تحلل مدى قبول الطلاب الجامعيين المتخصصين في العلوم الإنسانية للإذاعة الجامعية، وهي إذاعة جديدة عبر شبكة الإنترنت بالجامعة الإسلامية العالمية بماليزيا، بالاستناد إلى معيار قبول التكنولوجيا مع إضافة الجانب المعرفي عليه. واستندت الدراسة على افتراض أن معرفة الطلاب عن هذه الإذاعة ستأثر على استماعهم الفعلي لها من خلال إدراك سهولة الاستماع، وإدراك فائدة الاستماع، والموقف من الاستماع إليها. استخدمت الدراسة أسلوب المسح المقطعي لجمع البيانات من عينة قدرها 497 طالباً وطالبة في مرحلة البكالوريوس لاختبار ست فرضيات محدّدة في الدراسة. شارك في الدراسة كل من المستمعين 238 وغير المستمعين 229. وأظهرت النتائج أن للمستمعين مستوى عالياً من المعرفة بهذه الإذاعة، وتصوّرات ايجابية عنها، ولكن لديهم موقف سلبي تجاه الاستماع إليها، وهم غالباً يستمعون إليها في الليل وخاصة إلى البرامج الموسيقية وعندما يكونون متواجدين في مساكن الطلاب. كما أظهرت الدراسة فروق ذات دلالة إحصائية حول نسبة الاستماع إلى الإذاعة فنسبة الطلبة الذكور أعلى من نسبة الإناث، ونسبة الطلبة القدامى أعلى من نسبة الطلبة الجدد. وتدعم النتائج فرضيات الدراسة الست، كما تساند الافتراض السابق بأن المعرفة بالإذاعة له تأثير على الاستماع الفعلي من خلال إدراك سهولة الاستماع، وإدراك فائدة الاستماع، والموقف الإيجابي تجاه الاستماع إلى الإذاعة. أما بالنسبة لغير المستمعين، فكانت الأسباب وراء ذلك عدم توفر الوقت، ومشاكل البثّ والاستقبال، وعدم المعرفة بوجود الإذاعة، لكنهم عبّروا عن رغبتهم للاستماع إليها في المستقبل.

## APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Human Sciences (Communication).

.....  
Saodah Wok  
Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Human Sciences (Communication).

.....  
Che Mahzan Ahmad  
Examiner

This dissertation was submitted to the Department of Communication and is accepted as fulfilment of the requirement for the degree of Master of Human Sciences (Communication).

.....  
Che Mahzan Ahmad  
Head, Department of  
Communication

This dissertation was submitted to the Kulliyah of Islamic Revealed Knowledge and Human Sciences and is accepted as fulfilment of the requirement for the degree of Master of Human Sciences (Communication).

.....  
Badri Najib Zubir  
Dean, Kulliyah of Islamic  
Revealed Knowledge and Human  
Sciences

## DECLARATION

I hereby declare that this dissertation is the results of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for my other degree at IIUM or other institutions.

Mahaman Lahabou

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION  
OF FAIR USE OF UNPUBLISHED RESEARCH**

Copyright © 2011 by Mahaman Lahabou. All rights reserved.

**HUMAN SCIENCES STUDENTS' ACCEPTANCE OF IIUM.FM: A TEST  
OF THE TECHNOLOGY ACCEPTANCE MODEL**

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below.

1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieval system and supply copies of this unpublished research if requested by other universities and research libraries.

Affirmed by Mahaman Lahabou.

.....  
Signature

.....  
Date

*This dissertation is dedicated to my mother,  
Hadiza Aboubacar and to my father,  
Mahaman Souley  
for their love, patience, and sacrifice.*

## ACKNOWLEDGEMENTS

All praise and gratitude are due to Allah (S.W.T), the Almighty who has assisted and guided me in completing this dissertation. Peace and blessings of Allah be upon our beloved Prophet Muhammad (S.A.W), who has guided us to the right and straight path.

Based on the Hadith of the Prophet “Do not thank God who does not thank people”, I would like to thank people who have helped and supported me throughout the process of completing this work. First of all, I am deeply indebted to Assoc. Prof. Dr. Saodah Wok, my supervisor, for her assistance, patience, guidance, and her meticulous suggestions and corrections. I express my heartfelt thanks to her and her research assistants at the Women for Progress Research Unit (WFPRU) for providing me with free printing services for all the documents related to this dissertation.

I also extend my thanks to all the lecturers in the Department of Communication for their knowledge and academic support which has helped me complete this dissertation, especially to Prof. Dr. Fazal Rahim Khan, Prof. Dato’ Sri Dr. Syed Arabi Idid, and Dr. Norbaiduri Ruslan.

I also express special thanks to all my classmates, especially to Sadollah Ahrari and Salihou Sabir, for their encouragement and support during the preparation of this dissertation. My thanks are extended to the lecturers of the Human Sciences Division who allowed me to collect data from their students during class time and to the respondents of this study who voluntarily accepted to fill-in my questionnaires.

Last but not least, I would like to express my gratitude to my family for their love, sacrifice, and constant support throughout the whole period of my academic life.



# TABLE OF CONTENTS

Abstract .....	ii
Arabic Abstract .....	iii
Approval Page .....	iv
Declaration Page .....	v
Copyright Page .....	vi
Dedication .....	vii
Acknowledgements .....	viii
Table of Contents .....	ix
List of Tables .....	xi i
List of Figures .....	xiv
List of Abbreviations .....	xv
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
Background of the Study .....	1
Statement of Problem .....	3
Objectives of the Study .....	4
Significance of the Study .....	5
Scope of the Study .....	5
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>6</b>
Introduction .....	6
Internet Radio Reception .....	6
The Technology Acceptance Model (TAM) .....	8
Knowledge about a New Technology .....	10
Perceived Ease of Use (PEOU) .....	10
Perceived Usefulness (PU) .....	11
Attitude towards Usage .....	11
Behavioral Intention to Use .....	12
Actual Use and Its Predictors.....	12
Actual Use .....	12
Knowledge, PEOL, and Actual Listening .....	13
Knowledge, PUOL, and Actual Listening .....	14
Knowledge, Attitude, and Actual Listening .....	15
Theoretical Framework .....	16
Summary of the Hypotheses .....	17
<b>CHAPTER 3: RESEARCH METHODOLOGY .....</b>	<b>18</b>
Introduction .....	18
Research Design .....	18
Locale of the Study .....	18
Population of the Study .....	19
Sampling Procedure .....	19
Sample Size .....	20
Research Instrument .....	21

Pre-testing of the Research Instrument .....	22
Reliability and Validity .....	23
Operational Definitions and Measurements .....	25
Data Collection .....	27
Profile of the Respondents .....	28
Demographic Profile of the Respondents .....	28
Academic Profile of the Respondents .....	30
Computer-Related Profile of the Respondents .....	32
Data Analysis .....	33
Limitations of the Study .....	34
<b>CHAPTER 4: FINDINGS, DISCUSSIONS AND IMPLICATIONS .....</b>	<b>35</b>
Introduction .....	35
Patterns of Listening to IIUM.FM .....	35
Experience of Listening .....	35
Time Spent Listening Per Session .....	37
Frequency of Listening Per Week .....	37
Place of Listening .....	38
Time of Listening .....	38
Programmes Listened .....	38
Reasons for Listening .....	39
Actual Listening .....	39
Summary of Patterns of Listening to IIUM.FM .....	40
Knowledge about IIUM.FM among HS Students .....	41
Perceptions of IIUM.FM among HS Students .....	43
Perceived Usefulness of Listening to IIUM.FM (PUOL) .....	43
Perceived Ease of Listening to IIUM.FM (PEOL) .....	45
Attitude towards Listening to IIUM.FM .....	47
Factors Influencing Listening to IIUM.FM .....	48
Gender .....	49
Level of Study .....	50
Department .....	52
Comments and Suggestions to Help Improve IIUM.FM .....	55
Comments Related to IIUM.FM Staff .....	55
Comments Related to IIUM.FM .....	56
Comments Related to the Free Wireless Connection .....	57
Suggestions Related to IIUM.FM Staff .....	57
Suggestions Related to IIUM.FM Issues .....	58
Suggestions Related to the Free Wireless Connection.....	58
Summary of Comments and Suggestions .....	59
The Non-listeners .....	60
Reasons that Prevent Listening to IIUM.FM .....	60
Behavioral Intention to Listen to IIUM.FM .....	62
Summary of the Non-Listeners of IIUM.FM .....	63
Hypotheses Testing .....	64
Knowledge about IIUM.FM, PEOL, and Actual Listening .....	66
Knowledge about IIUM.FM, PEOL, Attitude towards Listening, and Actual Listening .....	68
Knowledge about IIUM.FM, PEOL, PUOL, and Actual Listening ..	69

Knowledge about IIUM.FM, PUOL and Actual Listening .....	70
Knowledge about IIUM.FM, PUOL, Attitude towards Listening, and Actual Listening .....	71
Knowledge about IIUM.FM, Attitude towards Listening, and Actual Listening .....	72
Discussions .....	75
Summary of Hypotheses Testing .....	76
<b>CHAPTER 5: SUMMARY, CONCLUSIONS AND SUGGESTIONS .....</b>	<b>78</b>
Objectives of the Study .....	78
Findings of the Study .....	78
Profile of the Respondents .....	78
Patterns of Listening to IIUM.FM .....	79
Knowledge about IIUM.FM .....	79
Perception of IIUM.FM among Students .....	79
Attitude towards Listening to IIUM.FM .....	80
Factors Influencing Listening to IIUM.FM .....	80
Comments and Suggestions of IIUM.FM Listeners .....	80
Non-listeners' Behavioral Intention to Listen to IIUM.FM .....	81
Hypotheses Testing Results .....	81
Conclusions .....	81
Suggestions .....	84
Theoretical Suggestions .....	84
Practical Suggestions .....	85
Future Research .....	85
<b>BIBLIOGRAPHY .....</b>	<b>87</b>
APPENDIX A: LETTER OF REQUEST.....	91
APPENDIX B: QUESTIONNAIRE .....	92
APPENDIX C: CONSENT LETTER .....	100

## LIST OF TABLES

<u>Table No.</u>		<u>Page No.</u>
3.1	Sample Distribution Based on Department	20
3.2	Reliability Test for Scaled Variables	24
3.3	Demographic Profile of the Respondents	29
3.4	Academic Profile of the Respondents	30
3.5	Computer-Related Profile of the Respondents	32
4.1a	Patterns of Listening to IIUM.FM	36
4.1b	Actual Listening to IIUM.FM	40
4.2a	Knowledge about IIUM.FM	42
4.2b	Level of Knowledge about IIUM.FM	42
4.3a	Perceived Usefulness of Listening (PUOL) to IIUM.FM	44
4.3b	Perceived Ease of Listening (PEOL) to IIUM.FM	46
4.4	Attitude towards Listening to IIUM.FM	47
4.5a	t-test Showing the Differences between Female and Male in Terms of Listening to IIUM.FM	49
4.5b	F-test and Post Hoc Scheffe Showing the Differences between Levels of Study in Terms of Listening to IIUM.FM	51
4.5c	F-test Showing the Differences between the Departments in Terms of Listening to IIUM.FM	53
4.6	Listeners' Comments and Suggestions to IIUM.FM	55
4.7a	Reasons Preventing Listening to IIUM.FM	61
4.7b	Level of Behavioral Intention to Listen to IIUM.FM	62
4.8	Zero-order Correlations among the Variables of the TAM	65
4.9	Beta Weight for Mediating Role of PEOL between Knowledge and	66

Actual Listening	
4.10 Beta Weight for Mediating Role of PEOL and Attitude towards Listening between Knowledge and Actual Listening	68
4.11 Beta Weight for Mediating Role of PEOL and PUOL between Knowledge and Actual Listening	69
4.12 Beta Weight for Mediating Role of PUOL between Knowledge and Actual Listening	70
4.13 Beta Weight for Mediating Role of PUOL and Attitude towards Listening between Knowledge and Actual Listening	71
4.14 Beta Weight for Mediating Role of Attitude towards Listening between Knowledge and Actual Listening	72
4.15 Summary of Hypotheses Testing	74
4.16 Regression Results Showing the Contribution of Each Variable in the Model of the Study	75

## LIST OF FIGURES

<u>Figure No.</u>	<u>Page No.</u>
2.1 Technology Acceptance Model	9
2.2 TAM for students' acceptance of IIUM.FM	17

## **LIST OF ABBREVIATIONS**

**HS:** Human Sciences

**IIUM:** International Islamic University Malaysia

**TAM:** Technology Acceptance Model

**PEOU:** Perceived Ease of Use

**PEOL:** Perceived Ease of Listening

**PU:** Perceived Usefulness

**PUOL:** Perceived Usefulness of Listening

**BI:** Behavioral Intention

# **CHAPTER ONE**

## **INTRODUCTION**

### **BACKGROUND OF THE STUDY**

IIUM.FM is a university radio station broadcasting from Gombak campus of the International Islamic University Malaysia (IIUM). IIUM.FM was founded on April 19, 2010 and officially launched on May 26, 2010 to inform campus community, the public, and IIUM alumni around the world about the university's activities and programmes. It operates from the Human Sciences (HS) building of the Kulliyah of Islamic Revealed Knowledge and Human Sciences (KIRKHS) under the Department of Communication. This department has a well equipped audio lab which is meant for teaching radio production under the Electronic Media specialization.

IIUM.FM uses live stream to broadcast channel in the Internet in its attempt to reach IIUM community that consists of academic staff, administrative staff, support staff, and IIUM students, who are housed in the university's campuses (Gombak, KL, Petaling Jaya, Nilai, and Kuantan). All IIUM community members are encouraged to tune-in to their campus radio. Additionally, IIUM.FM targets IIUM's alumni in various countries around the world and the public at large to share the latest update of the university's activities and programmes.

The radio is currently run by a pioneering group of fifteen practical students under the guidance of an academic fellow, Mr. Johanni Salleh. The practicum students work daily to prepare and present news, weather forecast, traffic, capsules, public services announcements, station playlist, talkshows, and calls to daily prayers (Azan). IIUM.FM uses English as the medium of communication to broadcast 24-hour daily



programmes with live broadcasting from 9.00 A.M to 9.00 P.M during weekdays and the rest of the hours is on automated system ([www.livestream.iium.edu.my/iiumfm](http://www.livestream.iium.edu.my/iiumfm)). More programme formats are planned and according to IIUM Rector, Prof. Dato' Sri Dr. Syed Arabi Idid, speaking at the official launching ceremony of the radio, other languages will be used in the future to reflect the multicultural and international nature of the campus community.

IIUM.FM is an Internet-only radio that uses live stream to air its programmes. Internet radio is also known as net-radio, web radio, streaming radio, and e-radio (Baker, 2009). It is defined in the Virginia Law Review (Stockment, 2010) as “a non-interactive audio webcast of a digital audio file via the Internet to one or more persons who listen to the file without downloading it”. Internet radio was made possible in 1995 with the arrival of streaming ([www.cw.routledge.com/ref/radio/internet](http://www.cw.routledge.com/ref/radio/internet)). Streaming allows the users to listen to the audio programme as it arrives in real time. This means that users do not have to wait for a complete audio file to download before listening to it as was the case before. According to Baker (2009), Internet radio is popular because of five distinct characteristics of the Internet, namely, (1) It is a multimedia channel; (2) It is interactive; (3) It is a global medium; (4) It provides on-demand access to a 24-hour database; and (5) It is a network of networks in a close-knit, virtual online community.

Internet connection is a prerequisite for listening to Internet radio. This prerequisite is fully fulfilled since IIUM provides many computer labs with Internet connection to staff and students. In addition, a free wireless connection system was introduced in 2008 and it allows students with Laptops to access the Internet 24 hours a day from anywhere in the campus. Hence, IIUM.FM came into being at a time when the necessary facilities to listen to it are in place. Given this availability of means of

access to IIUM.FM, this study investigates the IIUM students' acceptance of the IIUM.FM station.

The Technology Acceptance Model (TAM) was used as a theoretical framework to find out the extent to which perceived usefulness (PU) and perceived ease of use (PEOU) influence attitude towards listening and actual listening (Davis, 1989). Moreover, since the radio is newly introduced in the campus community, an external construct (knowledge) was added to the original TAM to find out the level of knowledge about IIUM.FM among students. This is because one cannot perceive a new technology as useful or easy to use unless he or she knows about it.

## **STATEMENT OF PROBLEM**

The International Islamic University Malaysia (IIUM) is one of the leading universities in Malaysia as well as in the Muslim world. In its effort to provide conducive and comfortable learning and working environment, the university has been introducing new technologies such as wireless connection, e-learning, online registration of subjects, online registration of mahallah, and the latest is IIUM.FM. Whenever a new technology was introduced, it has raised the interest of researchers and academicians who tried to investigate the use of the technology like perceived usefulness of the technology and users' satisfaction (Herman, 2006), the resistance the technology encountered by users (Sulafa, 2008), and the impact of the technology on the university community (Ayub, 2010).

These studies have helped in finding out the positive and negative reactions of users towards the new technology as well as the problems encountered with previous and current technologies introduced in IIUM. The studies have also assisted the

university's administration in policy-making and its implementation with regards to the introduction of new technologies in the campus community. Even though not fully mandatory for students, the technologies investigated were closely related to the students' academic needs. This study by taking TAM as the theoretical framework investigates the students' acceptance of IIUM.FM, a technology which is totally voluntary in nature. IIUM.FM could be considered as the latest technology introduced to the IIUM community, as such an evaluation of the IIUM.FM is required to gauge the acceptability of the radio programmes. In order to do that, research needs to be done so that improvement can be made to tailor to the needs of the listeners.

### **OBJECTIVES OF THE STUDY**

The general objective of this study is to test the Technology Acceptance Model (TAM) on the students' acceptance of IIUM.FM. The specific objectives are:

1. to find out the patterns of listening to IIUM.FM among students,
2. to determine the knowledge about IIUM.FM among students,
3. to find out the perceptions of IIUM.FM among students,
4. to find out the attitude of students towards listening to IIUM.FM,
5. to determine the factors that influence listening to IIUM.FM,
6. to find out the comments and suggestions of students to help improve IIUM.FM,
7. to find out the behavioral intention to listen to IIUM.FM among the non-listeners in the future.

## **SIGNIFICANCE OF THE STUDY**

The main purpose of this study is to investigate the students' acceptance of IIUM.FM based on TAM whereby an external construct (knowledge) was added to the original model. Theoretically, the findings of the study will provide further support for the model in a new setting with a new technology. Likewise, by exploring the listening behavior of the audience, the study will provide those working at IIUM.FM useful insights from the audience. Thus, they will be more prepared to improve and enhance the image and reputation of IIUM.FM on one hand, and on the other hand to face potential challenges that the station might encounter in its early days. Furthermore, the study will enrich the literature on Internet radio in general and that of college and university-affiliated Internet radio in particular. It will also provide feedback from students towards the latest technology installed in their university. Finally, as an exploratory study, this research will provide empirical background for future studies on similar topics.

## **SCOPE OF THE STUDY**

This study tests TAM on the students' acceptance of IIUM.FM. The subjects consist of only undergraduate students of the Human Sciences Division at the Kulliyyah of Islamic Revealed Knowledge and Human Sciences (KIRKHS) at Gombak campus. Therefore, the findings of the study can be generalized to the population of HS students only. A survey research design was employed using questionnaire as the research instrument and data was collected from respondents at one time only.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **INTRODUCTION**

This section discusses Internet radio reception, the Technology Acceptance Model (TAM), knowledge about a new technology, perceived ease of use (PEOU), perceived usefulness (PU), attitude towards usage, behavioral intention (BI) to use, actual use and its predictors, theoretical framework, and summary of hypotheses of the study.

#### **INTERNET RADIO RECEPTION**

Internet radio involves the delivery of audio programming via digital means from one computer to other computers over the Internet. Internet radio streaming can involve both live material and archived clips of audio content recorded earlier. In either case, the user must have special software that matches the software used by the station to encode and transmit the data. The three leading technologies for delivering Internet radio are the RealOne Player, Microsoft Windows Media, and MP3 streaming ([www.cw.routledge.com/ref/radio/internet](http://www.cw.routledge.com/ref/radio/internet)). According to Baker (2009), there are two types of Internet radio, namely, radio online and Internet-only radio. Radio online consists of regulated, traditional radio broadcasting with existing audience, which have incorporated the Internet as an adjunct service. In contrast, Internet-only radio webcasts exclusively over the Internet and it is generally unregulated.

The first Internet radio station was pioneered by Carl Malamud in 1993 when he set up the first community Internet-only radio station called “Internet Talk Radio”

in California (Baker, 2009). However, College radio station, “Radio KJHL” from the University of Kansas in North America, was the first radio online station to webcast 24 hours a day on December 3, 1994. By mid 2006, there were 1659 radio online stations in North America, while Penguin Radio reported that there were about 5000 Internet-only radio stations around the globe by February 29, 2009 (Baker, 2009).

Internet radio listeners are sometimes referred to as “streamies” ([www.cw.routledge.com/ref/radio/internet](http://www.cw.routledge.com/ref/radio/internet)). A study by Arbitron and Edison Media Research shows that by the middle of 2002, 35 percent of Americans had listened to Internet radio, compared with 19 percent in 1998. Another study by Arbitron and Edison in 2010 reveals that the weekly online radio audience in the United States of America amounts to approximately 43 million. About 55 percent of this online radio audience are male with nearly two-thirds (63%) aged between 25-54 years old. Streamies were found to be among the most active group of Internet users, spending more time online than the average Internet users (Arbitron & Edison Media Research, 2010).

In Malaysia, almost all radio stations have radio online. As for college and university-based radio stations, many universities, both public and private, have Internet radio webcasting to their campus communities such as Multimedia University, Limkokwing University, and IIUM. IIUM radio is a live stream Internet radio webcasting from Human Sciences building at IIUM Gombak campus. It was officially launched on 26 May 2010, and as of 2 June 2010, it has an online audience of more than 5000 listeners with more than 2500 members in its group on Facebook ([www.facebook.com](http://www.facebook.com), 2010). Since IIUM.FM is one of the latest technologies introduced in IIUM, the Technology Acceptance Model (TAM) is used in this study to examine the students’ acceptance of this radio.

## **THE TECHNOLOGY ACCEPTANCE MODEL (TAM)**

The Technology Acceptance Model (TAM) is considered as the most influential and commonly employed model for describing an individual's acceptance of information systems (Maslin & Ramlah, 2008). TAM was developed by Davis (1989) and it was adapted from the Theory of Reasoned Action "TRA" (Ajzen & Fishbein, 1980). TRA posits that an individual's willingness, attitude, and subjective norm will affect his/her behavioral intention. Subjective norm refers to an individual's perception that most people who are important to him or her think he or she should or should not perform the behavior in question (Fishbein & Ajzen, 1975). According to TRA, attitude and subjective norm affect intentions.

TAM assumes that an individual's information systems acceptance is determined by two major variables: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). TAM is under information systems theory that examines how users come to accept and to use a computer-based technology. It explains computer-usage behavior and it also suggests that when users are presented with a new software package, a number of factors influence their decision on how and when to use it. According to TAM, one's actual use of a technology system is influenced directly or indirectly by the user's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system. TAM also proposes that external factors affect intention and actual use through mediated effects on perceived usefulness and perceived ease of use (see Figure 1).

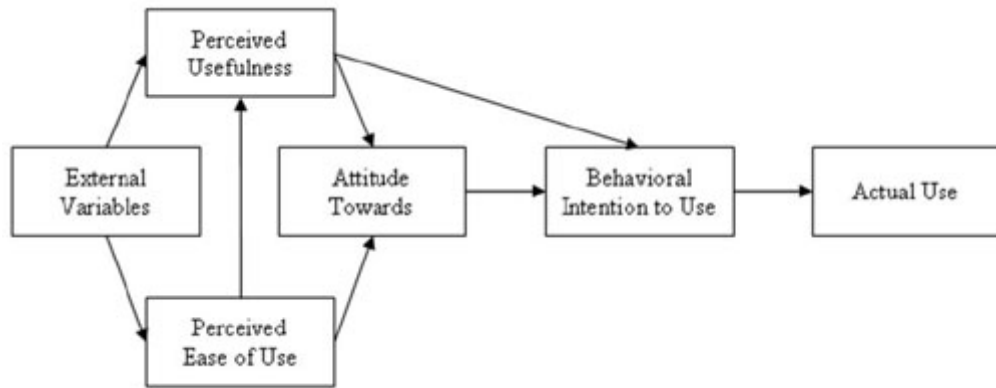


Figure 2.1: Technological Acceptance Model (Davis, 1989)

In Malaysia, TAM has been applied to different technologies such as Internet usage (Ramayah, Muhamad, & Noraini, 2002), Internet banking (Amin, 2007), and e-library (Yusliza et al., 2009). The model has also been applied with different control factors like organizational type and size (Ndubisi & Jantan, 2003a), Master of Business Administration students (Ramayah & Norazah, 2006), undergraduate students (Amin, 2007), and gender (Wahid, 2007).

Among the theories of technology acceptance, TAM was found to be parsimonious and easy to apply across different research settings, easier to use and provides a quick and inexpensive way to gather general information about an individual's perception of a technology, and to be preferred if the central goal is to predict information technology (IT) usage. For the above reasons, TAM is chosen for this study. Besides, additional variables have been incorporated into the original TAM to produce an extended TAM for predicting consumer adoption of emergence of technology. In this study, the concept of "knowledge" was added to the original TAM because the technology of interest, that is, "IIUM.FM" is newly introduced to the campus community.