SUCCESS FACTORS DRIVING E-MBA ACCEPTANCE

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By

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LIST OF ABBREVIATIONS

A   Attitude

BBA   Bachelor of Business Administration

BI   Behavior intention

BIT   Bachelor of Information Technology

DV   Dependent variable

e-MBA   Electronic Masters of Business Administration

EOU   Perceived ease of use

ICT   Information communications technology

IDL   Internet distance learning

IHL   Institution of higher learning

IV   Independent variable

IS   Information system

IT   Information technology

MLEs   Managed learning environments

MMU   Multimedia University

MSc   Masters of Science

MV   Mediator variable

PBC   Perceived behavior control

PIKOM   Computer Industry Association of Malaysia

PU   Perceived usefulness

SN   Subjective norm

TAM	Theory of acceptance model
TDL	Traditional distance learning
TPB	Theory of planned behavior
TRA	Theory of reasoned action
UiTM	Universiti Teknologi MARA
UNITAR	Universiti Tun Abdul Razak
UNITEM	Open University Malaysia
UPM	Universiti Putra Malaysia
USM	Universiti Sains Malaysia
WebCT	Web Course Toolbox

ABSTRAK

E-pembelajaran menekankan penggunaan teknologi komunikasi maklumat (ICT) dalam proses pembelajaran, melebihi daripada yang diamalkan di dalam kelas konvensional. Maka, tujuan kajian ini dijalankan untuk menyelidik apakah faktor-faktor yang signifikan dalam mempengaruhi kecenderungan sikap pengguna untuk menerima perlaksanaan e-MBA di Malaysia. Kajian ini telah dijalankan berdasarkan model "theory of planned behaviour", yang telah diperkenalkan oleh Ajzen. Pembolehubah tidak bersandar adalah tanggapan berguna, peluang mencuba, keputusan yang dipantau, imej, keseronokan, kepercayaan norma, perubahan dalam teknologi, kos dan tanggapan mudah digunakan, manakala pembolehubah bersandar adalah kecenderungan sikap pengguna untuk menerima perlaksanaan e-MBA. Terdapat juga pembolehubah perantara (mediator), iaitu sikap, norma subjektif dan tanggapan pengawalan kelakuan. Borang soalselidik telah digunakan untuk mengumpul data daripada 200 individu di sekitar Pulau Pinang dan 169 telah dikembalikan, memberikan kadar respon sebanyak 84.5%. Sebanyak 23 hipothesis telah diuji, dan 18 hipothesis telah diterima. Hasil daripada analisis mendapati peluang mencuba, keputusan yang diperolehi, kepercayaan norma, kos, tanggapan mudah memberikan pengaruh positif kepada kecenderungan sikap pengguna kepada perlaksanaan e-MBA. Pembolehubah mediator juga memberikan kesan pada pembolehubah tidak bersandar yang signifikan terhadap pembolehubah bersandar. Faktor-faktor yang menghadkan skop kajian, implikasi dan cadangan-cadangan untuk kajian yang akan datang turut dibincangkan.

ABSTRACT

E-learning describes the use of information communications technology (ICT) for learning beyond the boundaries of the conventional classroom. Thus, the objective of this study is to determine what are the factors that are significant in explaining intention towards e-learning, particularly e-MBA adoption in Malaysia. This study carried out by applying the theory of planned behaviour, which was introduced by Ajzen. The independent variables, i.e. perceived usefulness, trialability, result demonstrability, image, enjoyment, normative belief, rapid change in technology, cost and ease of use, while the dependent variable is the behavior intention towards towards e-MBA adoption. This study also had the mediator variables consists of attitude, subjective norm and perceived behaviour control. A questionnaire survey was used to collect data from 200 individuals in Penang, and 169 were returned back, giving response rate at 84.5%. There are 23 hypotheses that have been tested and 18 hypotheses were accepted. The findings showed that trialability, result demonstrability, normative belief, cost and ease of use were significant influencing behaviour intention towards e-MBA adoption. The mediator variables also had shown their own impact either as fully mediating, partial mediating or no mediating effects at all between each significant independent variables and dependent variables. The limitations and implications of the study are further explored and the suggestions for future research are discussed.

Chapter 1

INTRODUCTION

1.1 Introduction

Education plays a vital role in the development of the socio-politics and economy of a country. A well-educated population can enhance the social harmony and promote economic growth. It is no surprise that a large portion of the national budget of many developing nations has been allocated for education. Lately, a considerable amount of this education budget has been allocated for the development of information communications technology (ICT) in schools and colleges.

As we moves from e-economy and k-economy, life long education will becomes more prominent that ever (Asirvatham, 2003). Sharing of knowledge is a vital recipe for the success of k-economy. The belief that hoarding of knowledge is power is over. In the k-economy, for organization to be successful, emphasis should be given to knowledge sharing and knowledge creation. The environment must be conducive for people to share knowledge. Institution for higher learning and industries should work together to create knowledge sharing community. E-learning can promote this culture.

E-learning delivers accountability, accessibility and opportunity. It allows people and organizations to keep up with changes in the global economy. E-learning will be the great equalizer in the next century. By eliminating of time, distance and socio-economic status, individuals can now take charge of their own lifelong learning (Asirvatham, 2003). The information age with its technological developments has strongly affected education in general and higher education in particular: learning has become an ongoing

process, the learners population has grown, flexible learning is demanded (in time, place and pace), and easy accessibility to education is required (Marom et al., 2001). The Internet is a tool that empowers society by opening the doors of the knowledge to the people. E-learning brings learning to the people. Well-designed e-learning environment can provide a mixture of synchronous and asynchronous learning activities. It provides collaboration facilities that allow interaction between teachers and learners. Digital contents that are designed using good teaching methodologies or instructional models can have positive impact on the learners. Multimedia-rich content can be engaging while simulated experiment and game-based learning can be fun for learners.

There were several countries in Asia implemented e-learning at their institutions of higher learning. For example in China, the Shanghai TV University is offering four courses over the web, including the teaching of English. In Thailand, Sukhotai Thammathirat Open University has initiated plans to provide some of its distance education program over the web. The Asian Institute of Technology is offering courses using video streaming technology and also supports web-based courseware development using Web Course Toolbox (WebCT). Hong Kong has many virtual universities, many of them are supported by face to face lectures. The Open University is currently preparing to offer more than 100 of its courses over the Internet using the WebCT delivery system (Asirvatham, 2001).

E-learning is the future learning methodology for mass education. It promises education and training at convenient times and places at minimal cost to the user and provider (Azmi, 2002). Opinions about e-learning are vary. To some, e-learning is only about making learning materials such as handout or presentation slides available on the

web. Others see e-learning as online learning with media-rich content, animation, high quality graphics, audio and video streaming, and synchronous interaction with instructors (Azmi, 2002).

1.2   Overview of E-learning in Malaysia

The learning process does not limited to the students, but also to the corporate as well. New educational and training media such as the Internet, web-based application, one and two ways video, and other electronic media allow delivery of instruction independently of time and distance.

As important to the e-learning approach, the teachers who do a teaching must be continuously learned through professional development initiatives. The Internet, with its capacity for creating connections and sharing resources, holds promise to host effective teacher education and training programmes.

Malaysia is envisioned to be a regional hub for a world-class education (Asirvatham, 2003). Various steps have been taken to achieve this goal. Many private universities and colleges have been established over the last few years. English has been reintroduced as a medium of instruction for the teaching of science and mathematics in schools and higher education. Investment in ICT saw a generous growth of 9.2% per annum from RM3.8 billion in 1995 to RM5.9 billion in 2000. The growth in manufacturing, ICT and education was encouraging, as shown in Table 1.

Table 1.1
ICT Expenditure by Sector 1995 and 2000 (Selected Sectors only) (RM million)

Sector	1995	2000	Average Annual Growth Rate (%)
Banking & Finance	1,026	3,723	-4.2
Manufacturing	494	4,641	19.0
Government	380	2,062	6.9
Telecommunication	-	2,323	-
Professional ICT & Other services	125	236	13.5
Education & Research	114	1,008	15.6
Transportation	114	1,147	9.1

Source: Computer Industry Association of Malaysia (PIKOM)

For e-learning to be successful, ICT usage among the people should be significant. ICT usage for many developing countries has been encouraging. This trend is expected to continue over the next few years. Although e-learning will not replace the classroom instructions, its popularity will continue to grow among the learners. Institutions that adopt e-learning early will lead and push for higher standards in education.

The rapid growth of Internet users will push institutions of higher learning to adopt e-learning solutions. Data for 2001 shows that there are approximately 2.61 million Internet subscribers, representing a penetration rate about 10.5 percent, whilst PC ownership stands at 12.5 people for every 100 inhabitants (Sharifah, 2003). The Internet penetration rate is expected to increase to 25% by the year 2005 (Teo, 2001). Institutions that adopt e-learning early will lead and push for higher standards in education. Table 1.2 is adopted from Malaysian Communications and Multimedia Commission (MCMC) shows the number of online users for Malaysian from 1995 to first quarter of 2003.

Table 1.2
Yearly Malaysian Online Users

Year	Number of Users
1995	42,000
1996	192,000
1997	615,000
1998	1,215,000
1999	2,004,000
2000	4,977,000
2001	6,345,000
2002	7,842,000
2003 (Q1)	8,037,000

Source: http://www.mcmc.gov.my/mcmc/facts_figures/stats/index.asp

1.3   The Emergence of E-Learning in Malaysia

In Malaysia, discussion, debate and deliberation on e-learning as an option to enhance traditional classroom face-to-face training are being widely encouraged and promoted by the government and by private sector organizations. E-learning is not mean to replace traditional classroom face-to-face training but rather to complement it. As e-learning is an infant technology, its impact and acceptance by the users are still in some doubt as many still prefer classroom training for various reasons. However for the purpose of positioning Malaysia to meet the challenges of the k–economy, Azmi (2002) reported that the government has promoted e-learning at both the policy and infrastructure level. In general, pioneering e-learning initiatives and support in Malaysia can be divided into initiatives taken by:

(i)   the institutions of higher learning (IHL) ;

(ii)   government organizations;

(iii)   the corporate sector; and

(iv)   government policy support

Distance learning in Malaysia has been in vogue for the last four decades or so. It started with the external degree programmes offered by established universities in UK such as the University of London. Such programmes were popular among the working individuals who were looking for opportunities to improve themselves. This was later followed by off-campus programmes offered by a local university, namely Universiti Sains Malaysia (Othman, 2002). The mode of delivery was naturally print-based because of the absence of the Internet at that time and most of the tuition was conducted face-to-face.

The advent of Internet in the early 1980's did not however, attract e-learning instantaneously. Othman (2002) found that two reasons might be suggested for such lack of enthusiasm in e-learning. Firstly, the Internet was still not very stable and its lack of penetration would not attract the critical mass required. Secondly, face-to-face teaching and learning is still very much preferred for lack of confidence in independent study.

E-learning was introduced by Universiti Tun Abdul Razak (UNITAR) in September 1998. Only 162 students registered for the two undergraduate degree programmes namely Bachelor of Business Administration (BBA) and Bachelor of Information Technology (BIT). At least half of that number who registered were from working individuals who have either failed to get a place in other universities or who

have had some post secondary qualification and intended to improve themselves. They were strongly encouraged by the flexibility offered by UNITAR through its e-leaning programme.

Being the first university in the country (in fact in the region) that offers e-learning, UNITAR experience has been both conceptually and operationally challenging. Unlike most of the institutions, that depends heavily on the internet to deliver materials and provide active interaction between students and faculty, UNITAR offers a hybrid model that combines three important components. The three components are the interactive, multimedia content on CD's and on the web, the face-to-face meetings and the internet-based support system that provides continuous interaction between the students and faculty.

Instead of UNITAR, there were other universities in Malaysia providing e-learning programs such as Multimedia University (MMU), Universiti Sains Malaysia (USM), Open University Malaysia (UNITEM), Universiti Teknologi MARA (UiTM), and Universiti Putra Malaysia (UPM).

1.4   Research Problem

The rapid growth of Internet users will push institutions of higher learning to adopt e-learning solutions. Although e-learning has a potential to be the learning methodology for mass education in the future, the provider must understand what are the factors will influence the users' intention to adopt with the new technology. In term of new technology adoption and acceptance in education discipline, the program provider

might face difficulties to predict why the potential user will accept or reject it. So, this study will explore what are the factors will influence their acceptance or rejection.

The present available research materials are mainly centered on e-learning development, the user satisfaction on e-learning, the performance of e-learning and the capability of the resources in providing e-learning. They are lack of studies investigating in term of assessing the users' intention to adopt this new technology, particularly focused in this study is on electronic Masters in Business Administration (e-MBA) adoption by students or universities. It is important that this study can give better understanding on what influence users intention to use e-learning methodology. The study would help public and private universities and colleges to understand what factors and causes is deterring users from adoption of e-learning and plan out paths to encourage the adoption of e-learning in higher learning institutions in Malaysia.

1.5   Research Objectives

This study will help to determine what are the factors that are significant in explaining intention towards e-learning, particularly e-MBA adoption in Malaysia. An attempt is made whether attitude, subjective norm and perceived behavior control has a mediating effect in between the relationship.

1.6   Research Questions

This study will try to find the answers to the following questions:

1) Will attitudinal belief influence attitude towards the intention on e-MBA adoption?

2) Will normative belief influence subjective norm towards the intention on e-MBA adoption?

3) Will control belief influence perceived behavior control towards the intention on e-MBA adoption?

4) Will attitude mediate the relationship between attitudinal belief and intention to e-MBA adoption?

5) Will subjective norm mediate the relationship between normative belief and intention to e-MBA adoption?

6) Will perceived behaviour control mediate the relationship between control belief and intention to e-MBA adoption?

1.7 Research Scope

The scope of this study is to explore users' intention towards adoption of e-MBA among bachelor degree students and bachelor degree holders in Penang, Malaysia. This is quantitative study, which was conducted at Penang, covered island and Prai. Data was collected by means self-administered questionnaires and statistical tools were used to analyze and test the hypotheses.

1.8 Definition of Key Term

The following definition is the description of the key term used in this study:

e-learning – is refer to the meaning of becoming literate, involving new mechanisms for communication: computer networks, multimedia, content portals, search engines, electronic libraries, distance learning and web enabled

classrooms. E-learning is characterized by speed, technological transformation and mediated human interactions.

e-MBA – the program of Masters of Business Administration offered online by the institution of higher learning.

1.9 Significance of Study

From the result of this study, we will able to understand better the factors affecting users' intention to adopt with e-learning, particularly with e–MBA. This is important to higher learning institutions either public or private to embark on programmes that would be effective in encouraging Malaysian, especially young generation to adopt with e-learning in order to face globally competitiveness.

The present research available focused on how to develop the system to provide e-learning program at the particular institution, evaluating students satisfaction towards the e-learning implemented, evaluating the performance and efficiency of the program and evaluating the capability of the resources in providing e-learning program at the institution. So, this study will focused on what are the success factors that contributing to the behaviour intention of potential user to adopt with e-learning, particularly in e-MBA program. This research was applied the theory of planned behavior (TPB) introduced by Ajzen (1991) and the model of study was adopt from Choi et al. (2002). He was used the model to examine what are the factors contributing to the behavior intention of potential user towards the adoption of information appliances with a focus on interactive TV.

It is expected that the feedback from the survey will give an actual snapshot on the intention to use or adopt e-MBA in Malaysia and determine factors affecting intention

to use or adopt e-MBA. It is hoped that the result of this study will serve as future reference on the challenges ahead for all e-learning adoption.

1.10   Organization of This Report

This research paper is organized into five chapters. Chapter one provides an overview of the study. Literature review in chapter two discussed the related studies done by previous researches, hypothesis and theoretical framework of the study. Chapter three discusses the research methodology of the study while chapter four presents the results of statistical analysis of the study. In conclusions, chapter five includes discussions of findings, limitations, implications of this study and offers some suggestions for future research.

Chapter 2

LITERATURE REVIEW

2.1   Introduction

In the past few decades, many studies, based on different theoretical approaches, have been made for predicting, explaining and increasing user acceptance of new technology. The intention-based information technology (IT) adoption i.e. the theory of reasoned action (TRA) (Fishbein & Ajzen 1975; Davis et al. 1989), the technology acceptance model (TAM), (e.g. Davis et al. 1989; Venkatesh & Davis 1996, 2000), the theory of planned behavior (TPB), (e.g. Ajzen, 1991, Mathieson 1991, Taylor & Todd 1995a, Venkatesh & Brown 2001), have shown that user adoption and usage of IT innovations is ultimately determined by the person's beliefs and attitudes toward the information systems.

In each of the theories, behavior, i.e. the adoption and use of new technology, is viewed as the consequences of a set of beliefs about technology and a set of affective responses (attitude) to the behavior. Ilan (2003) found that, if we know the beliefs and external variables that determine them, we could better understand why an individual adopts or rejects a new technology. However, Rogers (1995) and others have argued that it is reasonable to expect that the nature and importance of the antecedents to adoption will vary across adoption setting. Since attitudes and beliefs about new technology adoption are antecedents of user intention and usage, it is critical to understand the external variables that influence the formation and change of attitudes and beliefs (Davis et al., 1989).

TRA is a general well-researched intention model that has been applied extensively in predicting and explaining behavior across many domains – "virtually any human behaviour" (Ajzen & Fishbein, 1980). According to TRA, the specific behaviour of a person is determined by his or her behaviour intention (BI) to perform the behaviour, and BI is determined jointly by the person's attitude (A) and subjective norm (SN) regarding the behavior question. A is determined by his or her salient beliefs about the results of performing the behaviour multiplied by the evaluation of those results. SN is determined by a multiplicative function of his or her normative beliefs, i.e. perceived expectations of specific referent individuals or group, and his or her motivation to comply with these expectations. Salient beliefs can be obtained by taking the beliefs most frequently elicited from a respective sample of the population (Ilan, 2003).
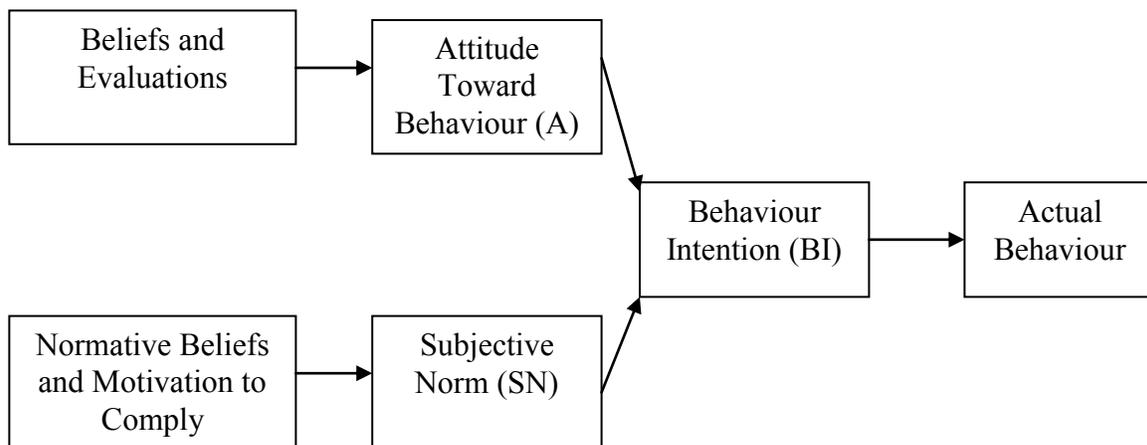
Figure 2.1. Theory of reasoned action framework.

TAM is an adaptation of TRA that has been specially introduced to explain computer usage behavior. TAM uses TRA as a theoretical basis for identifying the strong links between two key beliefs, perceived usefulness (PU) and perceived ease of use

(EOU), and user's A, BI and actual computer adoption behavior (Davis, 1989). According TAM, computer usage is determined by BI, but differs in that BI is viewed as being jointly determined by the person's A towards using the system EOU have been hypothesised to have positive influences on A. EOU influences A and behavior through two mechanism: self-efficacy and instrumentality. The easier a system is to interact with, the greater should be the user's sense of efficacy (Bandura, 1982) and personal control regarding his or her ability to carry out the sequences of behavior needed to operate the system. EOU affects A towards the behavior more significantly in users who use the system for the first time than in users who have used the system for a long time. To the extent that increased EOU over time leads to improved performance, EOU would have a direct influence on PU. External variables have critical effects on the formation and changes of beliefs construct.
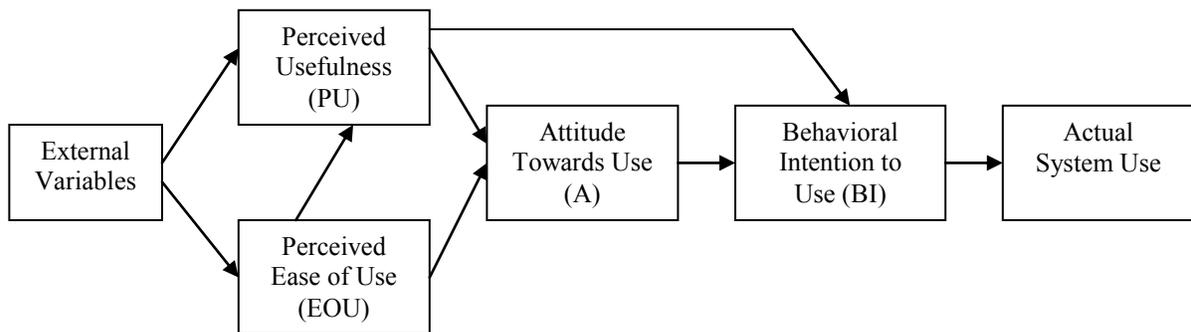

Figure 2.2. Technology acceptance model framework.

TPB was proposed as an extension of the TRA. Because of the limitations of TRA in dealing with behaviors over which people have incomplete volitional control, the TPB introduced a third independent determinant of intention -perceived behaviour control

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(PBC) (Ajzen, 1985, 1991). As in the TRA model, it includes A, SN, intentions to use
and actual use. The components of behaviour A and SN are the same in TPB and TRA.
But the inclusion of behaviour control in the TPB has added to the explanatory power of
TPB (Mathieson, 1991; Taylor & Todd 1995a).   According to TPB, behaviour is
determined by the intention to perform the behaviour. Intention is predicted by three
factors, A towards the behavior, SN, and PBC. Beliefs are antecedents to A, SN and
PBC.
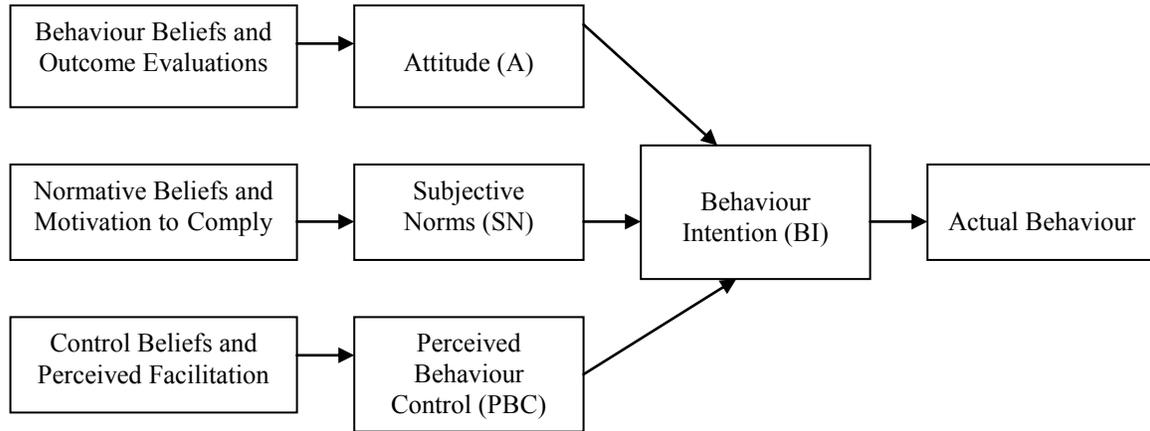
Figure 2.3. Theory of planned behavior framework.

2.2   Theory of Planned Behavior (TPB)

The TPB has been widely used to explain and predict human behavior. As cited
from Moon (2001), TPB has been found to be very successful in predicting a wide range
of behavior, such as predicting user intention to use a new software (Mathieson, 1991), to
perform breast self-examination (Young et al., 1991), to avoid caffeine (Madden et al.,
1992), to examine licit drug use (Godin et al., 1992), to examine the use of soft drugs

(Richard et al., 1996), to examine condom use (Chan & Feishbein, 1993; Reinecke et al., 1996), premarital sex (Chan & Cheung, 1998), attending health checks (Norman & Conner, 1993, 1996), class attendance (Ajzen & Madden, 1986), various class activities (Ajzen & Driver, 1991, 1992), participating in regular exercise (Godin et al., 1993; Van-Rym et al., 1996) pollution reduction preferences (Cordano & Frienze, 2000) and to examine the use of information appliances (Choi et al., 2002).

In Malaysia, the TPB model has been used by Moon (2001) to investigate the factors that influence consumer's BI towards organic foods in Malaysia. Kheng (2003) integrates constructs from the flow of the TPB and career anchors theory to examine the influencing factors of career path decisions among young engineers in Malaysia.

2.2.1   *Key Elements of TPB*

TPB posits intentions to perform behaviours of various kinds can be predicted from A towards behaviours, perceived social pressures to perform the behaviour (called "subjective norms" in the theory), and perceived control over the behavior. BI and PBC are posited to predict actual behavior.

2.2.1.1 Behavior

From the temporal dimensions, behaviour can be divided into two groups. There is initial behaviour i.e. initial adoption, first-time usage, and rejection at the pre-implementation stage. The other is post-adoption or post-implementation behaviour i.e. sustained continuous usage, discontinuous usage (replacement or disenhancement). From the volitional dimension, usage could be mandatory or voluntary. There are two measure

of system usage. One is self-reported current usage, self reported future usage, and the other is computer-recorded system usage (Ilan, 2003).

2.2.1.2 Behavior Intention (BI)

According to intention-based theories, use adoption and usage behaviour are determined by the intention to use IT. This kind of self-prediction, or "behavioral expectation", is one of the most accurate predictors available for an individual's future behaviour (Davis, 1989).

Behavior intention is a measure of the strength of one's intention to perform a specified behaviour. Some empirical studies have designed BI as the outcome construct to be measured. Basically, BI is self-reported based on two statements: (1) Assuming I have access to the system, I intend to use it, (2) Given that I had access to the system, I predict that I would use it. These two statements are intensively applied in different empirical settings (Ilan, 2003).

BI is theorised to mediate the effects of beliefs and A to behavior. The empirical results are mixed. Most research confirms this causal link, but other research indicates that beliefs or external variables may directly affect behaviour. Igbaria (1994) argued that computer skills had a strong positive direct effect on system usage. Some empirical results support these beliefs, e.g. PU had a strong direct effect on system usage (Igbaria & Iivari, 1995).

2.2.1.3 Attitude (A)

Attitude is defined as an individual's positive or negative feelings (evaluative effect) about performing the target behavior (Davis et al.1989; Zanna & Rempel, 1988). From the psychology perspective, A is traditionally defined as psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour. A is formed on the basis of antecedent cognitive, affective, and behavioral processes and are manifested in these three categories of evaluative responses. A is a very important construct in studying a user's intention to use a particular system and even user behavior to actually use the system. Indirectly its effects on behaviour through behavior intention are significant in most empirical cases.

The measurement of A is usually self-reported. These include terms such as extremely negative, positive, or extremely good or bad, extremely harmful or beneficial. Agarwal and Prasad (1998) demonstrated that awareness could be considered as a favourable attitude towards using information system (IS). It is improved Rogers' diffusion in technology (DIT) theory on awareness, which regarded it as the first stage of innovation diffusion.

Most existing theories after TRA model have empirically verified that A has a direct influence on BI toward technology adoption (Ajzen, 1991; Chang & Cheung, 2001; Davis, 1989; Jeong & Lambert, 2001; Karahanna et al., 1999; Kwon & Chidambaram , 2000; Lau et al., 2001; Limayam et al., 2000; Morris & Dillon, 1997; Segars & Grover, 1993; Venkatesh & Brown, 2001; Xia & Lee, 2000; Choi et al., 2002). Behavior intention indicates the strength of the subject's plan to adopt the technology in the future (Chang & Cheung, 2001; Limayam et al., 2000; Taylor & Todd, 1995). A indicates how positively

or negatively the potential user thinks of a particular technology (Ajzen, 1991; Morris & Dillon, 1997).

2.2.1.4 Subjective Norm (SN)

Subjective norm is defined as a person's perception that most people who are important to him or her think he or she should or should not perform the behaviour in question (Fishbein & Ajzen, 1975). Some researches have not found a significant relationship between SN and usage behaviour while others have shown that SN plays a role in determining behaviour (Venkatesh & Morris, 2000). Especially because information tool like web page have never been experienced by users, these social phenomena can more commonly appear in e-MBA adoption.

In addition, because computer with Internet line is for common use in the home environment, when users decide to adopt it, he or she has to consider the opinions of friends and family members. Peer influence and superior influence are important determinants of SN (Mathieson, 1991; Taylor & Todd, 1995a; Choi et al., 2002).

2.2.1.5 Perceived Behavior Control (PBC)

According to Ajzen (1991), perceived behaviour control can influence whether people choose to pursue an outcome, their degree of preparation, the effort they expand, their perseverance, as well as the thought and emotions experienced during the task (Bandura, 1982). PBC encompasses two components. The first component is "facilitating conditions" representing the resources needed to use specific system. The second

component is self-efficacy, which is "an individual's self-confidence in his or her ability to perform a behavior" (Bandura, 1982).

Decomposed TPB (Taylor & Todd, 1995a) points out the self-efficacy, resource-facilitating conditions and technology-facilitating conditions are the most relevant determinants of control behavior.

In addition to the factors of A and SN, the user accepts a technology affected by PBC over the system, i.e. how much control the user thinks he or she will have in manipulating the system. In the TAM theory, ease of use was proposed as a control factor that has an impact on attitude. Ajzen (1991) generalized the conditions and presented the concept of PBC. PBC is defined as the degree to which a person recognises that the use of technology is under his or her own control.

2.2.1.6 Beliefs

An individual might have a great many beliefs about any given behaviour, but he/she can take into consideration only a relatively small number at any given moment. It is the salient beliefs that are considered to be prevailing determinants of an individual's intentions and actions (Ilan, 2003). Identifying these beliefs has been the most important step in previous studies of the acceptance technology.

According to Ajzen (1991), belief can be divided into three categories – attitudinal beliefs, normative beliefs, and control beliefs. Separating these beliefs make it easier for investigators to extract the relevant external variables and formulate strategies for influencing user acceptance via controllable interventions that have measurable influences on particular beliefs.

2.2.1.6 (a)   *Attitudinal Belief*

People want to behave reasonably, and thus a consumer's attitude toward a certain technology is affected by attitudinal belief (Ajzen, 1991; Chang & Cheung, 2001; Davis, 1989; Jeong & Lambert, 2001; Karahanna et al., 1999; Kwon & Chidambaram, 2000; Choi et al., 2002). Attitudinal belief indicates the user's belief that a technology possess a particular attribute or that a particular behavior will cause a particular result (Ajzen, 2001; Chang & Cheung, 2001). Thus, attitude about the technology of e-learning is affected by attitudinal belief.

(1)   *Perceived Usefulness*

A representative construct of attitudinal belief is perceived usefulness (Davis, 1989; Karahanna et al., 1999; Morris & Dillon, 1997; Segars & Grover, 1993; Choi et al., 2002). A person will perceive the new technology as useful when he or she believes the existence of a positive user-performance relationship. A plausible reason is that individuals will use the system only if they perceive that such usage would help them achieve the desired task performance. Therefore, if a user perceives that adopting e-MBA will be more useful than not, he or she will have positive attitudinal belief e-MBA.

(2)   *Trialability*

If a person can try out the technology before deciding to accept e-MBA, he or she will develop a stronger attitudinal belief about the technology, either in a positive or in a negative way depending on the quality of the new technology. (Karahanna et al., 1999; Venkatesh & Brown, 2001; Xia & Lee, 2000; Choi et al., 2002). Therefore, if a user has

an opportunity for trial usage before enroll with e-MBA program, he or she will have positive attitudinal belief e-MBA.

(3)   *Result Demonstrability*

If probable result can be observed and are likely to be communicated by others, the attitude toward the technology will be stronger, either to the positive direction or to the negative direction according to the quality of the new technology (Karahanna et al., 1999; Venkatesh & Brown, 2001; Xia & Lee, 2000). Therefore, if a user perceives to get the result of using e-MBA program explicitly, he or she will have positive attitudinal belief e-MBA.

(4)   *Image*

It is reasonable that, if adopting e-MBA will enhance one's social image, the attitude toward adopting the new technology will be positive (Karahanna et al., 1999; Choi et al., 2002). Therefore, if a user perceives that adopting e-MBA will show his or her good image not, he or she will have positive attitudinal belief e-MBA.

(5)   *Enjoyment*

If the user can experience enjoyment through the adoption of new technology, attitude toward adoption will present positive (Kwon & Chindambaram, 2000; Sheth et al,. 1991; Sweeney & Soutar, 2001; Venkatesh & Brown, 2001; Choi et al., 2002). A person will be motivated to do or repeat an activity which is enjoyable more as compared to the same activity which is not enjoyable. Furthermore, since through adoption of e-

MBA program, user will no need for class attending and they have more time. Therefore, if a user perceives that adopting e-MBA will give the feeling of enjoyment, he or she will have positive attitudinal belief e-MBA.

2.2.1.6 (b)   *Normative Belief*

A person is certain to have subjective norms about a given technology due to individual normative beliefs (Ajzen, 1991; Chang & Cheung, 2001; Jeong & Lambert, 2001; Karahanna et al., 1999; Kwon & Chidambaram, 2000, Morris & Dillon, 1997; Venkatesh & Brown, 2001; Xia & Lee, 2000; Choi et al., 2002). Normative belief indicates a belief about a motive that harmonises with other normative expectations. A subjective norm toward e-learning technology is also affected by normative belief about e-MBA adoption.

As was mentioned before, the social space for e-MBA consists of families and friends. It has been found that the expectations of family members were playing an important role in decision making about technology adoption (Venkatesh & Brown, 2001).

2.2.1.6 (c)   *Control Belief*

Control belief is the degree to which a person believes that he or she can control the promoting or interrupting factors affecting the behavioral outcome in the use of the system (Ajzen, 2001; Chang & Cheung, 2001; Venkatesh & Brown, 2001; Choi et al., 2002). Control belief differs from perceived behavior control in that control belief is a kind of belief that is formed prior to a person's recognition, whereas perceived behavior

control is constructed after the person recognition. Therefore, perceived behavior control is affected by individual control belief towards e-MBA adoption.

(1)   *Rapid Change in Technology*

If the technology of e-learning changes rapidly, the user's fear of that process will be high and perceived behavior control will be low (Lau & Chau, 2001; Venkatesh & Brown, 2001). The fear of rapid change in technology means the fear of resultant obsolescence. Because e-MBA is an inexperienced technology, how or when the technology changes will not be predictable and will be a representative construct which can determine control belief.

(2)   *Cost*

If a cost must be paid for adopting a technology, the perception that the price of the adoption is high or belief that the price will decline will be representative control beliefs which will affect perceived behavior control (Sweeney & Soutar, 2001; Venkatesh & Brown, 2001). One belief about cost means that the current price is too high for adopting the technology and that it will soon decline. Because e-MBA needed the fees payment, such a cost factor will certainly play a significant role.

(3) *Ease of Use*

If using the new technology is perceived as easy, perceived behavior control will be high (Davis, 1989; Karahanna et al., 1999; Morris & Dillon, 1997; Choi et al, 2002). Moreover, in the case of e-MBA for a specific purpose flexible time study, ease of use