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Validating the Measures for Intention to Enroll an Online MBA Program

Lim Lay Lee and Suhaiza Zailani
Graduate School of Business, University Sains Malaysia, 11800 Penang, Malaysia

Abstract: This study to validate the measures for the determinants that influence the student's intention to enroll an online MBA program, in particular USM online MBA. About 180 questionnaires were distributed to the adult who has obtained at least a bachelor's degree and the response rate of 67% was obtained. The analysis was carried out by using factor analysis. It was also found that the initial four constructs with total of 13 items for learner's characteristics had been reduced to 8 items which were grouped under three factors, the original four constructs for institutions characteristics reduced to three, technology characteristics were initially grouped under three constructs had been reduced to 10 items contained in two constructs by combining the construct of perception of usefulness and ease of use into one. The remaining two variables remain the same. Accordingly, the study provides reliable measures so that the relationships between the independent and dependent can further be analysed in order for the Graduate School of Business as well as other policymakers in the field of higher education can have insight into what is taking place in the domain of virtual campuses and means to set up a sustainable initiatives and strategies for a successful online education.

Key words: Determinants, intention, online MBA program, sustainable, initiatives, Malaysia

INTRODUCTION

The educational needs are becoming continuous throughout one's working life as labor markets demand knowledge and skills that require regular updating (O'Neill *et al*., 2004). It is therefore being observed that the demands on tertiary educational needs are increasing rapidly on the heels of the recent economic crisis, especially from non-traditional students, i.e., working adults learners. According to Yee *et al*. (2009), the use of Information Technology (IT) and the internet are the new paradigm of learning in 21st century. Technological advancements allow people to easily access, gather, analyse and transfer data and knowledge (Yee *et al*., 2009). E-learning opens up a new platform for many adults who have been tied up with many commitments in life and enable them to learn anytime and anywhere they want at their convenience without geographical or physical constraints (Goi and Ng, 2009). Accordingly, online learning is an excellent method of catering the adult learners needs.

The development of internet has made it possible for higher institutions to offer online courses (Yee *et al*., 2009). Ohler (1991) defined online education as Distance education occurs when the student is in one place and the teachers, peer learners or resources are in another. Wahlstrom *et al*. (2002) defined distance learning as any type of instruction in which the student and instructor are separated by physical distance. Ally (2004) described that terms commonly used for online learning include e-learning, internet learning, distributed learning, networked learning, tele-learning, virtual learning, computer-assisted learning, web-based learning and distance learning.

He defines online learning as the use of the internet to access learning materials; to interact with the content, instructor and other learners and to obtain support during the learning process in order to acquire knowledge, to construct personal meaning and to grow from the learning experience. Carliner (1999) defines online learning as educational material that is presented on a computer while Khan (1997) defines online instruction as an innovative approach for delivering instruction to a remote audience, using the web as the medium. As a result, there is no common definition for online learning.

According to Mohamed and Hassan (2008), online learning provides the flexibility to those who have competing responsibilities and priorities of work, family and school and hence they are able to obtain degrees without setting their foot in a college campus, avoid travelling long distances leaving work and family and avoid paying any additional costs that they might have incurred through on-campus enrollment. Therefore, online education students can achieve flexibility, convenienc

Corresponding Author: Lim Lay Lee, Graduate School of Business, University Sains Malaysia, 11800 Penang, Malaysia

and cost savings (Furst-Bowe and Dittmann, 2001; Anderson *et al*., 2002). The popularity of web-based learning is derived from its unlimited, anytime-anywhere learning opportunities (Khan, 1997; Moore and Kearsley, 1995; Picciano, 2001). Furthermore, the web-based learning environments promise many advantages allowing more interactive, personalized and independent learning (Brusilovsky, 1999; Chen *et al*., 2000; Khan, 1997; Park and Lee, 2003). Ultimately, the popularity and the advantages of e-learning have led to the significant growth and development of the online courses and web-based training in higher education institutions.

Allen and Seaman (2003)'s report indicated that online was growing rapidly and was perceived positively by faculty and administrators in United States. According to a survey conducted by Allen and Seaman (2003) enrollments in online courses in the state have increased to about 2.4 million in 2003 and the growth has been continuous and has often exceeded the expectations of organizational planners. Many universities and educationally-based industries have set up portals to offer an e-learning environment either as teaching aids to support conventional teaching approach or as a teaching medium for long-distance or off-campus programs (Khalid *et al*., 2006). Similarly in Malaysia, online learning has started and is gaining popularity in many universities in recent years, for example, most of the universities in Malaysia use online learning to supplement regular campus instruction (Ibrahim *et al*., 2002).

Apart from two established distance learning universities, namely Universiti Sains Malaysia (USM) and Open University Malaysia (OUM), Universiti Tun Abdul Razak (UNITAR), Wawasan Open University (WOU) and other private higher education institutions in Malaysia are not lacking behinde in seeking similar oppertunities and have introduced several online and distance education programs to the adult learners. Hashim *et al*. (2010) reported that >5000 students in University Technology Mara (UiTM) Shah Alam campus are following various diploma and undergraduate programs via the e-learning mode.

Currently, online education programs operate in an extremely competitive environment in their attempt to attract a dult students and to increase enrolllment (Furst-Bowe and Dittmann, 2001). Phillips and Peters (1999) believed that it has become necessary for universities to adapt their programs and course offerings to become more in touch with the needs of this changing student market. Accordingly, it is important and essential for the universities or any higher education institutions offering online education programs to recognize the online student's needs, wants and know about how the students perceive their online education programs. This study will explore what are the determinants that will influence the students intention to enroll an online graduate program, particularly focus on an online Master of Business Administration (MBA) program offered in Universiti Sains Malaysia, Penang. The study also aims to help, not only the University but also other universities and colleges, public or private to understand the determinants that significant in explaining the intention towards an online education program.

Statement of problem: Despite of their popularity and advantages, web-based learning environments have many challenges (Dabbagh and Bannan-Ritland, 2005; Smaldino *et al*., 2004). According to Isman *et al*. (2004) and Whipp and Chiarelli (2004), web-based learning requires skills and abilities which are not experienced in traditional classroom environment. Due to lack of face to face interactions in online learning environment, wed-based learners need to develop new self-regulatory abilities to fit the requirements of that learning setting (Dabbagh and Kitsantas, 2004; Picciano, 2001; Rovai, 2003; Saba, 2000).

Unwillingness to change the learning atmosphere, poor level of competency in English, lack of funds and technical resources in universities, lack of confidence to practice computer applications coupled with absence of infrastructure such as electricity and telephone lines in many parts of the country are the most difficult issues to address in implementing e-learning for higher education in Bangladesh (Mahmud and Gope, 2009). Other problems may include such factors as poor attendance, procrastination, feelings of isolation and a general lack of structure in the course (Brown, 2001; Kulik and Kulik, 1991; Fishman, 1999; Oliver, 1999; Olugbemiro *et al*., 1999; Joo *et al*., 2000; Wang and Newlin, 2000). These problems can limit the amount of participation and engagement with the course materials that are offered in the online environment.

Hiltz (1994) points out those students may withdraw from an online course because they do not manage the time required to be successful in the course. Another critical challenge to web-based learning is having very different profiles of students (Dutton *et al*., 2002; Picciano, 2001; Sikora and Carroll, 2003). Wide ranges of ages, married with kids and working part-time or full-time are the main characteristics of the pool of the students in this learning environment. Besides, the problem encountered by online programs was also reflected in a survey of e-learning was carried out by Organization for Economic Co-operation and Development (OECD), in partnership with the UK-based Observatory on

Borderless Higher Education (OBHE) in 19 tertiary education institutions in 13 countries. The result showed that fully online programs account for well under 5% of total enrollments, though the student take-up of e-learning is growing in general (OECD, 2005). Thus, the OECD survey results support the claim that e-learning has not reached its full potential and hence, the e-learning providers might encounter difficulties in predicting the degree of intention to enrolll the e-learning program among potential learners (Abdel-Wahab, 2008; Asirvatham *et al*., 2005) conducted a survey of the readiness of e-learning system in Malaysia, in 2004. The result showed that:

- Malaysia is moderately ready for e-learning
- Malaysia is not environmentally ready
- Malaysia is technically ready
- Enablers are mostly ready, culturally
- Learners are more ready for e-learning compared to the perception of their lecturers
- Malaysia is not seen as financially ready by providers and policy-makers

Juhary (2003) highlights that students' preference to paper tutorial and notes which is opting the traditional method of learning. In addition, some students are still afraid of using the computers where their concerns range from fear of losing information to unfriendly system of e-learning (Abdul Karim and Yusoff, 2003; Manochehri and Young, 2003). The earlier statements describe the challenges and identify rooms for improvement of the online education. Hence, it is essential for online education program providers to understand the importance of exploring the factors that influences the intention to enroll the online program. In this study, a conceptual framework is developed to postulate causal links between the determinants and the intention to enroll an online graduate program, in particular online MBA program.

Literature review of e-learning: In view of the importance of the online education, various studies related to online learning have been carried out. These include a number of surveys that have been carried out to identify critical success factors in e-learning. Laudon and Laudon (1998) identified critical factors for successful implementation of e-learning programs: management support, user participation, degree of complexity and risk according to the new technologies and role of project management in the implementation process. The reliability, quality and medium richness were also key technological aspects considered in defining successful factors for e-learning in study of Lopez and Nagelhout (1995). In a survey done by Volery and Lord (2000) in one online management course at an Australian university, they identified three critical success factors in online delivery: technology, instructor and previous use of the technology from the student perspective. In addition to technology which has been emphasized by some researchers, instructor attitudes toward students, instructor technical competence and classroom interaction are also important (Dillon and Gunawardena, 1995). In the meanwhile, Webster and Hackley (1997) emphasized effectiveness where they used student involvement and participation, cognitive engagement, technology self-efficacy and perceived usefulness of technology employed to measure effectiveness of e-learning.

A survey by Lim (2001) showed that computer self-efficacy is an important factor in adult learners satisfaction and intent to take future web-based courses. Self-efficacy is affected by computer experiences and frequency of computer usage. According to a study done by Hill *et al.* (2003), the quality of the lecturer and the student support systems were the most influential factors in the provision of quality education. Their empirical research made use of focus groups involving a range of higher education students.

While, studying the success of e-learning, there are a number of studies that point out challenges and issues in implementing e-learning. Nanayakkara (2007) introduced a theoretical framework for user acceptance of e-learning and presented the three key groups of factors: individual, system and organisational that affecting the in the tertiary institutions in New Zealand. Bontempi (2002) suggested that barriers such as geographical distance, isolation from instructor and peers, lack of access to support such as libraries, technical assistance, financial aid, tutors and academic advisors, as well as factors that may influence the motivation of distance learners include age, gender, occupation, prior levels of knowledge and design interface should all be considered when designing distance learning programs and the instruction should include elements that address and solve these issues.

Fletcher (1991) and Haziah and Aziah (1997a, b) stated in their studies that in general, students wanted learning that is flexible, relevant to their research situation, current, personalized, portable, focused, timely, affordable and valued. Kochman (1998), Miller *et al.* (1993), Seay and Milkman (1994) and Wheeler *et al.* (1996) are the researchers support the idea that online education system might inhibit a student from asking questions.

Anderson *et al.* (2002) believed that students taking the course via online felt that their knowledge of the subject material increased less and that the course was of less value than students taking the class in the traditional format. Furthermore, Furst-Bowe and Dittmann (2001) stated that online students often experienced some type of technical problem during their courses. Fear of technology seems to be one of the problems in enrolllment in online programs and Omatseye (1999) believed that it occurs because of the fear of unknown as online education development is still relatively in its early stages.

The earlier statements indicated that the online education providers should take into the consideration on the student's perception towards the online program and types of risks that the students may experience in joining the online course. Students tend to return to programs that they perceive as effective and do not return to those that they perceive as ineffective (Johnson, 1998). Anderson *et al.* (2002) further stated that the academic program itself could be affected negatively or even terminated because of adverse student attitudes. They also believed that student's frustration with the delivery system may have influenced their overall opinion of the instructor which will affect course evaluation that consequently will affect the instructor's tenure and promotion decisions.

MATERIALS AND METHODS

There are various research models relating to the adoption of new services or technologies that exist in the literature. Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM) (Davis, 1989), Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh *et al*., 2003), Motivational Model (MM) and Social Cognitive Theory (SCT) are among the well-known models used for studying the user acceptance and adoption. All these had their origins in psychology, socialogy and commmuncations and are used to predict and explain user behaviour using various constructs of the independent variables.

The intention to enroll an online graduate program: Ajzen (1991) defines intention as an indication of a person's readiness to perform a given behavior and it is considered to be the immediate antecedent of behavior. He describes that the intention is based on attitude toward the behavior, subjective norm and perceived behavioral control with each predictor weighted for its importance in relation to the behavior and population of interest. Theory of Reasoned Action (TRA) is a well-researched intention model that has proven successful in predicting and explaining behaviour across a wide variety of domains, including research of technology acceptance (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). According to TRA, a person's performance of a specified behaviour is determined by his or her behavioural intention to perform the behaviour and behaviour is jointly determined by the person's attitude and subjective norms concerning the behaviour in question (Al-GahTani and King, 1999). Intention to perform a particular behavior has been shown to be an effective predictor of the actual behavior itself (Ajzen and Fishbein, 1980).

Theoretical framework: A review of literature is initially used to identify the key variables that affect the intention to enrolll an online MBA program. The independent variables are categorized into four main groups: learner characteristics, institution characteristics, technology characteristics and the perceived risks.

These four main factors are further framed around sub-factors groupings. The sub-factors are adapted from various research models such as TRA, MM, UTAUT, SCT and TAM models. The sub-factors relating to the learner characteristics are referring to individual attitude, intrinsic motivation, social influence and computer self-efficacy.

The sub-factors under institution characteristics are identified asits' facilitating conditions, affordable fees, reputation and financial supports. Sub-factors under technology characteristics factors are ICT infrastructure that is available and the other two usefulness and ease of use.

A theoretical framework is built and shown in Fig 1. The framework (Fig 1) was developed to study the intention to enroll an online MBA program. Accordingly, four hypotheses to be tested as follows:

H_1: Learner characteristics have significant impact on the intention to enroll an online MBA program.
H_2: Institution characteristics have significant impact on the intention to enroll an online MBA program.
H_3: Technology characteristics have significant impact on the intention to enroll an online MBA program.
H_4: There is a negative relationship between the perceived risks and the intention to enroll an online MBA program.

Research design: A population refers to the entire group of people, events or topics of interest that the researcher

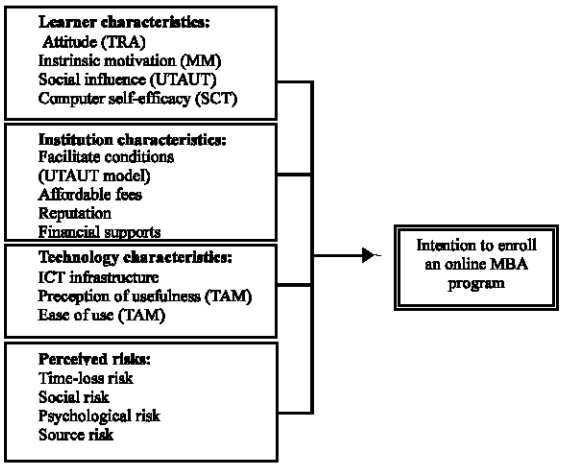

Fig. 1: Framework

wishes to investigate (Sekaran, 2003). The target population of this study is adults in Malaysia. They include the working adults, elders, employed person, married people or any adult who has obtained the first degree and yet with great enthusiasm, to further seek for a graduate degree. In this study, the researchers focus on the online MBA (Master in Business Administration) program, offered by Graduate School of Business (GSB), USM.

As the study aims to investigate the intention to enroll USM Online MBA (OMBA), the targeted group needs to have at least an undergraduate degree i.e., a bachelor degree. Nevertheless, they are savvy group that able to make their own decision to take up any distance education program.

Four independent variables and one dependent variable are explored from the conceptual model of this study. The independent variables are learner characteristics; institution characteristics; technology characteristics and perceived risks while the intention to enroll an online MBA program is the dependent variable. Accordingly, by factor in the number of lost, misplaced, invalid and not responded questionnaires, 180 is the target sample size of this study.

The sampling technique used for this study is based on convenience sampling. An individual is used as the unit of analysis of this study due to the aim of the study which is to understand and identify the determinants that may influence the individual's intention to enroll an online MBA program.

RESULTS AND DISCUSSION

A total of 180 questionnaires were distributed to the target respondents via both email and hardcopy by using convenience sampling technique. Each of the returned questionnaires was checked for the completeness and reasonableness. Out of the 180 questionnaires distributed, 120 questionnaires were received and were usable for the purpose of this study. Hence, the response rate was 67%. The number of male and female respondents is not significantly different. This indicates that the survey was equally responded from the gender perspective. Amongst them, 80.8% of the respondents were Chinese, followed by 12.5% Malay, 5.8% Indian and 0.8% from other races. Majority of the respondents are below 36 years old and with at least a bachelor's degree.

Majority of the respondents were from the field of manufacturing or engineering, of which 63.3% of them were holding a management position. Nearly 16.7% of the total respondents had been attached to the company for >10 years while 61.7% had <5 years working experience with the company.

Factor analysis: Four constructs were initiated under this variable to evaluate the influence of learner characteristics to the intention to enrolll an online MBA program. They are attitude, intrinsic motivation, social influence and computer self-efficacy. After dropping those indicator items that were unable to fulfill the above conditions, the final results as indicated in Table 1.

The result shows that Barlett's Test was significant ($p<0.05$) and inspection of the anti-image correlation matrix showed the value of each diagonal element was also well above acceptable level of 0.50. Nonetheless, according to Igbaria *et al.* (1995) suggested that only variable with the loading greater than 0.50 and cross loading <0.35 were concluded that had unique relationship with the factor.

After reviewing the grouping of the factors by following the mentioned guideline by Igbaria *et al.* (1995), the initial four constructs with total of 13 items had been reduced to 8 items which were grouped under three factors as shown in Table 1.

The label for these three factors was remained unchanged since there was no combined item from other domains. The label for the factors extracted as follows:

- Factor 1: Computer self-efficacy (Included 4 items of computer self-efficacy)
- Factor 2: Intrinsic motivation (Included 2 items from intrinsic motivation)
- Factor 3: Attitude (Included 2 items from attitude)

There were four constructs for institution characteristics, namely facilitating conditions, fees, reputation and financial supports initiated in this variable.

Table 1: Factors loading for learner characteristics

	Factors		
Items	1	2	3
Learner_attitude(L12)	-0.189	-0.008	0.786
Learner_attitude(L13)	0.193	0.134	0.786
Learner_intrinsic motivation (L21)	0.080	0.948	0.045
Learner_intrinsic motivation (L22)	0.078	0.923	0.087
Learner_computer self-efficacy (L41)	0.707	0.309	-0.057
Learner_computer self-efficacy (L42)	0.744	0.169	-0.179
Learner_computer self-efficacy (L43)	0.806	-0.087	0.253
Learner_computer self-efficacy (L44)	0.799	-0.041	0.005
Eigenvalue	2.427	1.901	1.345
Variance % (70.92)	30.330	23.770	16.820

Underline loadings indicate the inclusion of that item in the factor

Table 2: Factors Loading for Institution Characteristics

	Factors		
Items	1	2	3
Institution_facilitating (I11)	0.235	0.872	0.060
Institution_facilitating (I12)	0.303	0.848	0.143
Institution_facilitating (I13)	0.194	0.829	0.135
Institution_facilitating (I14)	0.299	0.796	0.192
Institution_reputation (I31)	0.832	0.186	0.012
Institution_reputation (I32)	0.695	0.211	0.198
Institution_reputation (I33)	0.855	0.248	0.153
Institution_reputation (I34)	0.803	0.297	0.246
Institution_reputation (I35)	0.806	0.294	0.235
Institution_financial supports (I41)	0.195	0.174	0.907
Institution_financial supports (I42)	0.215	0.142	0.917
Eigenvalue	3.560	3.166	1.922
Variance % (78.62)	32.370	28.780	17.470

Underline loadings indicate the inclusion of that item in the factor

The analysis process conducted for the variable, learner characteristics was repeated for this variable. The first factor analysis showed that both Bartlett's test of sphericity was significant ($p<0.05$) and the Kaiser-Mayer-Olkin measure of the sampling adequacy was also >0.50.

Inspection of the anti-image of the correlation matrix was also well above the acceptable level of 0.50. However, second factor analysis was conducted due to failure in meeting the condition of factor loadings for item I21 and 122. Hence, these items had been dropped from further analysis. The final findings for KMO and Barlett's test were showed in Table 2.

Three components with eigenvalue >1 were extracted with total of 78.62% variance had been explained. The factor analysis had helped to reduce the original four constructs to three.Three factors were extracted and 11 items were categorized under them as showed in Table 2. The label of these factors remained as original, i.e.,

- Factor 1: Reputation (5 items that represented reputation were included)
- Factor 2: Facilitating Condition (4 items from facilitating condition)
- Factor 3: Financial Supports (Included 2 items of financial supports)

Table 3: Factors Loading for Technology Characteristics

	Factors	
Items	1	2
Technology_infrastructure (T11)	0.144	0.919
Technology_infrastructure (T12)	0.190	0.941
Technology_infrastructure (T13)	0.208	0.929
Technology_perception of usefulness (T21)	0.750	0.301
Technology_perception of usefulness (T22)	0.738	0.216
Technology_perception of usefulness (T23)	0.853	0.018
Technology_perception of usefulness (T24)	0.860	0.097
Technology_ease of use (T31)	0.800	0.263
Technology_ease of use (T32)	0.793	0.261
Technology_ease of use (T33)	0.765	0.082
Eigenvalue	4.527	2.886
Variance % (75.50)	45.270	28.860

Extraction method: Principal component analysis

There were three constructs for technologies characteristics which consist of ten items, contained in this variable. The respective constructs were ICT infrastructure, perception of usefulness and ease of use. The Bartlett test of sphericity was significant, the Kaiser Meyer Olkin measure of the sampling adequacy (KMO = 0.853) and the anti-image of the correlation matrix were above the acceptable level of 0.50.

Two components with eigenvalue >1 had been extracted and total of 74.1% variance had been explained as the result of the second factor analysis. Ten items that were initially grouped under three constructs had been reduced to ten items contained in two constructs, by combining the construct of perception of usefulness and ease of use into one. The result of factor loadings was shown Table 3.

As a result of this analysis and to reflect the essential contents contained in the variables, a new name, technology acceptance was assigned to the combined construct since it consists of two main constructs from TAM model. The new labels were as follows:

- Factor 1: Technology acceptance (Consisted of 4 items from perception of usefulness and 3 items from Ease of Use)
- Factor 2: ICT infrastructure (Consisted of 3 items from original domain)

There were four constructs contained in this variable. 14 items had been identified as relevant to this variable. Principal component analysis was used in this factor analysis.

The Bartlett's test of sphericity was significant since $p<0.05$. The Kaiser-Meyer-Olkin measure of the sampling adequacy was also acceptable as well as the value for anti-image correlation.

Table 4: Factors loading for perceived risks

	Factors	
Items	1	2
Perceived risks_social (R21)	0.899	0.099
Perceived risks_social (R22)	0.917	0.114
Perceived risks_social (R23)	0.852	0.139
Perceived risks_source (R41)	0.134	0.928
Perceived risks_source (R42)	0.112	0.932
Eigenvalue	2.404	1.773
Variance % (83.54)	48.080	35.460

Extraction method: Principal component anaylsis

Table 5: Factors loading for intention to enroll an online MBA program

Items	Factor 1
Intention to enroll (IE12)	0.821
Intention to enroll (IE13)	0.823
Intention to enroll (IE14)	0.820
Intention to enroll (IE15)	0.846
Eigenvalue	2.738
Variance %	68.450

Extraction method: Principal component analysis.

Table 6: Reliability analysis

Factors	No. of Items	Item	Cronbach's alpha
Attitude	2	2	0.44*
Intrinsic motivation	2	0	0.89
Computer self-efficacy	4	0	0.77
Facilitating condition	4	0	0.91
Reputation	5	0	0.91
Financial supports	2	0	0.90
ICT infrastructure	3	0	0.95
Technology acceptance	7	0	0.92
Social tisk	3	0	0.88
General risk (change to source risk)	2	0	0.87
Intention to Enroll	4	0	0.84

* To be removed from future analysis

Table 7: Summary of the change in the constructs after factor analysis

Variables	Constructs (old) before factor analysis	Constructs (new) after factor analysis
Learner	Attitude	
	Intrinsic motivation	Intrinsic motivation
	Social influence	Computerself-efficacy
	Computer self-efficacy	
Institution	Facilitating condition	Facilitating condition
	Fee	Reputation
	Reputation	Financial supports
	Financial supports	
Technology	ICT infrastructure	ICT infrastructure
	Perception of usefulness	
	Ease of use Technology acceptance	
Perceived risks	Time loss risk	
	Social risk	
	Psychological risk	Social risk
	Source risk	Source risk

However, factor analysis process had been repeated for few times for this variable due to failure of meeting the factor loadings. Accordingly, the factor analysis had reduced the number of items from 14-15 items. Two factors had been extracted with total of 83.54% variance had been explained. Table 4 shows factors loading for perceived risks. The label for both factors remained unchanged:

- Factor 1: Social risk (Contained three items from original social risk)
- Factor 2: Source risk (Contained two items from source risk)

There were six items contained in this dependent variable. Similarly, principal component analysis was used for the purpose of factor analysis. The Bartlett test of sphericity was significant since $p<0.05$. The Kaiser Meyer Olkin measure of the sampling adequacy was above acceptable level of 0.50 i.e., 0.82 and each diagonal element in the anti-image correlation matrix had value >0.50.

All the conditions were met in the factor analysis process except item IE11. Hence, it was dropped. There was only single factor with the eigenvalue >1 been extracted and 68.45% of the variance has been explained. Rotation was not necessary for this case since only a single factor extracted. The factor loading for this single factor was shown in Table 5. The label of the factor remained unchanged.

Reliability analysis: The reliability analysis was done for each construct separately. Table 6 reported that the Cronbach's alpha for each of the factors. Items in the attitude construct were dropped due to the Cronbach's alpha below the acceptable level. The Cronbach's alpha ranged from 0.77-0.95 after removing these items. Hence, total of two items were deleted from further analysis.

Revision of theoretical framework and hypotheses: The factor analysis had helped to reduce a number of institution characteristics were reduced to two and three, respectively (Table 7).

While the three original constructin the domains or constructs in this study. Four constructs in the independent variable, learner characteristics and variable technology characteristics was combined to two, the four constructs in the variable perceived risks were also reduced to two.

The number of items in the dependent variable Intention to enroll was reduced from five to four. The initial theoretical framework has been revised and is shown in Fig. 2.

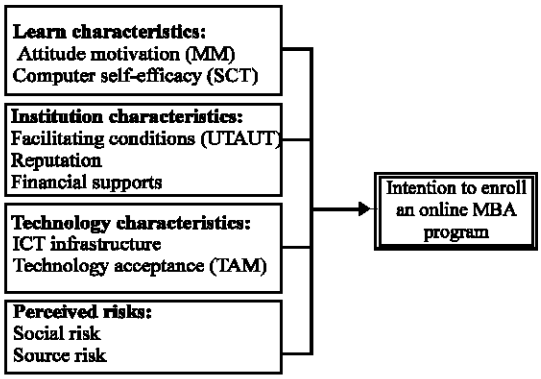

Fig. 2: Revised theoretical framwork

CONCLUSION

The findings of this study revealed that learner characteristics, technology characteristics and perceived risks are determinants of the intention to enroll an online graduate program. Among the constructs of each determinant is intrinsic motivation, computer self-efficacy, facilitating conditions, reputations, financial supports, technology acceptance, technology acceptance as well as social risk and source risk. In conjunction with the Malaysian government's effort to increase higher education enrollment as well as building the world-class human capital as highlighted in 9 MP, there has been considerable growth with the number of Malaysian virtual campuses in the last couple years.

Hence, the findings of this study may serve as foundation and guideline for these online program providers including GSB to develop strategies that could help to increase the online graduate program enrollment. By understanding the key determinants and the strongest predictor of the intention to enroll an online graduate program as well as the moderating effects to the relationship model, priorities and appropriate action plans can be set by the GSB and other online program providers with the ultimate goal to increase the enrollment of the online program.

Notwithstanding the limitation of the sampling approach as stated earlier, indirectly this study contributes towards a better understanding and positive perception of the GSB USM online MBA program. It assists in promoting and creating the awareness of its online MBA program through the distribution of the OMBA brochure to the respondents during the survey with the aim of improving the familiarity of the respondents with the program. While the findings of this study could assist GSB USM and other higher institutions in Malaysia in improving the quality of online MBA program and their learning experiences, it is hoped that transforming the limitations of this study into opportunities and challenges could help to spur further research in the area of online program enrollment. This is because undoubtedly, online education would be one of the pillars of higher education in future (Jefferies and Faiz, 1998).

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