Organisation's Support Influences the Acceptance and Use of E-Learning among Academic Staff of Higher Learning Institution in Sabah

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Abstract

E-learning refers to the use of electronic media, digital technology tools such as laptop, smart phone, and interactive Tv in teaching and learning process. Nowadays, it is undeniable that most higher learning institutions choose to implement E-learning in their education system which it becomes the alternative to the traditional learning method in teaching. Through the implementation, education institutions have the potential in establishing more open and flexible teaching and learning environment. However, to drive the a wholistic implementation of E-learning in higher learning institutions, the aspect of organisational support in terms of technicality and infrastructure facilities should be prioritised so that all parties especially the academic staffs can easily adapt and use it. Therefore, this pilot study is aimed to study the level of E-learning usage through the Unified Theory of Acceptance and Used of Technology (UTAUT) Model and the influence of organisational support on the E-learning implementation among academic staff in Sabah. The findings of simple regression analysis showed the influence of organisational support at 66 percents on the implementation of E-learning among the academic staffs, with the model's contribution (R2=.44, k=.00). the findings found that organisational support is the significant factor in influencing the acceptance and implementation process of E-learning among the academic staffs of higher learning institutions in Sabah. Thus, this study proposes each learning institutions in Sabah to increase the organisational support especially in technicality and infrastructure to empower E-learning platforms in future.

Keywords: E-learning; Organisational support; Unified theory of acceptance; Academic staff

1. Introduction

The existence of E-learning in current education world contributes to significant changes on the teaching and learning process. E-learning refers to learning using technology information in education, computer, interactive TV through internet network and other digital applications (Cidral et al., 2018). This online learning platform includes multimedia criteria which ease the users to receive and understand information sources such as audio and visual. According to Kocaleva et al., (2015) E-learning combines modern interactive learning methods and contributes to the better development of knowledge nowadays. In tandem with the digitalisation in education sector, it is a need for each higher learning institution in Malaysia to implement and adapt E-learning so that the process of teaching and learning is wholistic and unlimited. Yet, does each higher learning institution in Malaysia specifically in Sabah has sufficient organisational support in implementing online learning? This pilot study used Unified Theory of Acceptance and Use of Technology (UTAUT) model to evaluate the level of acceptance and usage of E-learning among the academic staffs. Next, it evaluates the influence of organisational support on the acceptance

and usage of E-learning among the academic staff of higher learning institutions in Sabah.

2. Literature Review

E-learning Concept

Currently, technology has taken over most of the industries in Malaysia and one of it is the education sector which the integration of latest information technology is widely used. Information Technology or IT refers to the application of digital technology such as computer and it has been varied through its usage techniques, whether in managing, processing, and sharing information with involved parties. When technology in education is exist, it needs all parties to learn, fulfil and adapt directly in parallel to the current digitalisation era (Ratna and Kaur, 2016). Education sector in Malaysia specifically higher learning, is an essential need for each university in adapting information technology such as E-learning platform in producing more quality productivity in future.

Generally, E-learning is a new learning method that helps an easy teaching and learning process to be conducted without time and space limitations. E-learning is a term used to refer computer-based learning. It uses computer as the base in trainings, teaching sources, online seminars, discussions, e-mails, and other related matters involving the tasks of users in higher learning institutions (Wani, 2013). Concurrently, E-learning also covers the use of multimedia such as audio, visual, and online discussions. All of these coverages happens through computers and Internet network (Cidral et al., 2018). Even though Garrison (2016) stated that E-learning is a form of technological disturbance which changes the teaching and learning approach in education process, it is still undeniable that its existence as a new alternative in knowledge transfer is seen as a mediator for users in chasing the current modern learning development.

It is clearly that E-learning is one of new alternatives in current modern learning which it eases users with information technology advantages. This study views E-learning as a learning method based on technology and internet coverage in conveying and sharing knowledge in teaching and learning process. With the advantage of connecting with each other without any physical encounters, the E-learning system has opened room for the learning process to be widely developed and diversified.

Organisational Support

Innovations in the era of digitalisation is not easily achieved without solid preparations from all parties, especially for the responsible organisation in realising the changes. This study is focusing on the organisational support in viewing the usage and acceptance of E-learning among the academic staffs in higher learning institutions. As discussed by Umbit and Taat (2016) organisational support is the main role in an acceptance of an information technology such as E-learning. Naujokaitiene et al., (2015) argue that users are possible to quit from involving with online learning when they are not supported by family or organisation. The study also stated that organisational support is the significant predictor on the choices of users either to quit or to continue the online learning.

Study by Kustono (2021) stated organisational support is an important variable in influencing lecturer's behaviour to learn and use E-learning. The opportunities and spaces established by organisation is also one form of organisational support towards the academic

staffs. When there is a continuous organisational support, it is viewed as an enormous impact towards the lecturer's behaviour. Psychologically, an employee will voluntarily obey and oblige to the organisation when they receive support, and this increase the involvement in their works as an effort to achieve the organisation's goal (Tian et al., 2018). Therefore, organisational support plays an important role in ensuring any new implementation system can be successfully implemented in any organisations.

In conclusions, organisational support is encouraged within the working environment in terms of infrastructure facilities and technical aids to the academic staffs so that they can accept, use, and adapt to the modern education technology. Infrastructure facilities such as computers and broadband access, supported by technical aids by organisation for the implementation of E-learning will motivate academic staffs to master and adapt with the technology as the working environment is ready and conducive. Thus, unstable organisation support will cause disturbance on the implementation of E-learning and it will be difficult to be executed by respective organisations.

Unified Theory of Acceptance and Use of Technology (UTAUT)

There are various theories that explain about the acceptance of new system and technology among the users, yet Venkatesh has designed a better theoretical model as an effort to study the perception of users towards technology. The UTAUT or Unified Theory of Acceptance and Used of Technology is a model widely used in previous studies to investigate the level of acceptance and usage of new system (Williams et al., 2015). Through the combination of several previous models, including the conceptual criteria and empirical elements of previous theoretical models, the UTAUT model is established which has been improved dimensionally, and able to portray in details the user's tendency towards the existence of technology (Lin et al., 2013) (Venkatesh et al., 2016).

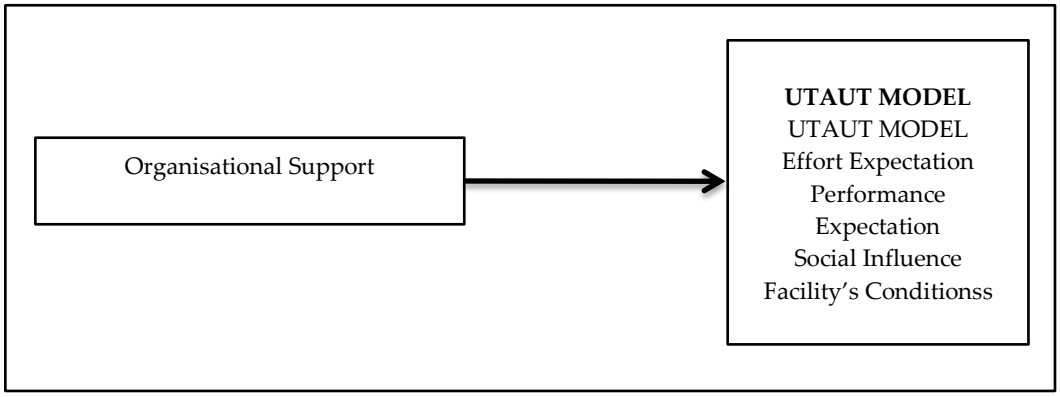
The UTAUT model designed by Venkatesh in 2003 has four main dimensions; performance expectations, effort expectation, social influence, and the condition of facilities that influence an individual's behaviour intention in using technology (Venkatesh et al., 2016). The performance expectation dimension is the individual's perception in viewing the use and involvement of technology will increase their work performances (Venkatesh et al., 2012). In this study, performance expectation refers to the perception of academic staffs who used E-learning, and feel the need or benefits for them to conduct their tasks and produce efficient and systematic work productivities. For the effort expectation dimension, it is an individual efforts which involved the involvement with the technology is easily achieved, learned and become experts (Venkatesh et al., 2012). The effort expectation in this study refers to the perceptions of academic staffs that online learning method involving technology specifically E-learning is easy to be used in the teaching and learning process.

The next dimension is the social influence which refers to individual's perception that community or individual in the working environment encourage them to be involved with technology (Venkatesh et al., 2012). The context of this study is social influence is including colleagues, family and university. While the final dimension is the condition of the facilities which is the user's perception that there are support from the organisation and infrastructure facilities to implement E-learning (Venkatesh et al., 2012). For this study, a part of supports such as infrastructure facilities, technical support also plays its role in the facilities conditions by aiding in terms of handling the E-learning system, designing the content and module of E-learning, and broadband support that influencing the use and acceptance of academic staffs on the E-learning platform.

The existence of the UTAUT model is to explain in details related to the use of new technology, and it is undeniable since this model has been established, it has been used widely in studies on the user's adaptation with new technology (Williams et al., 2015). By focusing on the four respective dimensions, this pilot study is aimed to predict the level of usage and acceptance of E-learning among the academic staffs of public and private higher learning institutions in Sabah. Next, it also looks into the relation of organisational support variable and the acceptance and usage of E-learning among the academic staffs.

Based on previous studies which have widely discussed the importance of organisational support towards the involvement of academic staff to accept and use E-learning, it has opened rooms for this study to investigate the relation between organisational support with the UTAUT model. In understanding the extent of the level of acceptance and usage of E-learning among the academic staffs at their respective institutions, researcher has adapted previous studies by Umbit and Taat (2016) and Venkatesh et al. (2012), and eventually, it leads to a conceptual framework to view the relation between organisation support variable and UTAUT model.

Table 1: The relation of organisational support among academic staffs with UTAUT model



Research Hypothesis

H1: Organisational support has its significant influence on the use of E-learning among the academic staff.

3. Methodology and Data Collection

This pilot study involved 30 academic staffs including lecturers and tutors of higher learning institutions in Kota Kinabalu. The conducted study used quantitative method and questionnaire instrument for the UTAUT model was adapted from Venkatesh et al., (2016). Meanwhile, the instrument for organisational support was adapted from Umbit and Taat (2016). Overall instruments used in this questionnaire were measured at individual level which used the five points Likert Scale which scale 1 is equivalent to strongly disagree until scale 5 is equivalent to strongly agree. The findings of the data is analysed using the Statistical Package for Social Science (SPSS) software version 26.

4. Results

Table 2: Results of reliability test analysis

Factor	Numbers of Items	Alpha (α) Value
Performance Expectation	4	0.72
Effort Expectation	4	0.93
Social Influence	4	0.73
Facility's Conditions	4	0.50
Organisational Support	7	0.91

Based on the reliability value by Sekaran and Bougie (2016), the value less than 0.6 is weak while value 0.6 to 0.7 is defined as acceptable or average, and higher value of 0.8 to 1 showed a higher level. Therefore, each item involved in measuring the level of E-learning usage and the influence of organisational support towards the implementation of E-learning among academic staffs is suitable and applicable for the next analysis.

Based on Table 2, the dimensions in UTAUT model showed that the effort expectation variable stated highest reliability value, 0.93, while performance expectation and social influence both indicated the value of 0.72 and 0.73. meanwhile, the dimension of facility's condition portrayed the lowest reliability value, 0.50, but this variable is still valid to be used as it is an important variable in the UTAUT model. For the organisational support variable, the findings of reliability test analysis indicated highest level; 0.91.

Table 3: Demography of respondents

General Criteria of Respondent	Specific Criteria of Respondent	Percentages %
Gender	Male	23.3
	Female	76.7
Age	21-30 years old	6.7
	31-40 years old	40.0
	41-50 years old	46.7
	51-60 years old	6.7
Marital Status	Single	13.3
	Married	83.3
	Others	3.3
Position	Tutor	3.3
	Lecturer	53.5
	Senior Lecturer	43.3
Status of Position	Permanent	83.3
	Contract	16.7
Length of Service	1-5 years	26.7
	6-10 years	30.0
	11-15 years	23.3
	16-20 years	13.3
	21-25 years	6.7

Table 3 explains the respondents' demographic information who involved in this pilot study in which in terms of gender, 23 percentage (7 people) were male participants and the remaining 76 percent (23 people) were female respondents. In terms of age, 46 percents (14 orang) were between 41-50 years old and 31 to 40 years old were 40 percent; 12 individuals. While the age group of 21-30 years old and 51-60 years old both indicated percentage value of 6; 2 respondents.

The percentages of married respondents were 3 percents; 25 respondents and single

respondents were 4 people with 13 percent. As for the respondents with Lecturer status, the percentage was 53 respondents (16 people), Senior lecturer with 13 individuals which representing 43 percents while only 1 respondent which was 3 percent for the tutor position. Respondents with permanent status were 83 percents (24 people) and 5 people or 16 percents for the contract status. The longest years of services was 6-10 years with 30 percents; 9 people, service of 11-15 years; 23 percents (7 people) and 8 respondents or 26 percents for services of 1-5 years.

Table 4: UTAUT model mean distribution and organisational support

Variable	Mean	Standard Deviation	Level
Performance Expectation	3.880	.743	High
Effort Expectation	3.822	.957	High
Social Influence	4.041	.619	High
Facility's Condition	3.619	.650	Average
Organisational Support	4.114	.699	High

Referring to Mohd Najib (1999) stated that mean level can be categorised according to followings levels; 1.00-2.33 is low, values more than 2.34 to 3.67 is categorised as average while values more than 3.68 to 5.00 is the highest value.

Table 4 explains the average mean value of UTAUT model dimensions in the usage of E-learning and organisational support variable in which the social influence dimension stated the highest level (mean= 4.04), performance expectation and effort expectation also recorded high level (mean= 3.88) and (mean= 3.82). While, only facility's condition dimension stated average mean (man= 3.61). Meanwhile, for the organisational support variable, the mean value also stated as high (mean= 4.11).

This includes the organisational support variable which also at the high level towards the usage of E-learning. Yet, for the facility's condition dimension which at low level, clearly indicated that the facilities and infrastructures in higher learning institutions need to be improved to motivate more usage of online learning.

Table 5: The influence of organisational support on the use of E-learning through simple regression analysis

Model	Standard Coefficient	T	Sig
Organisational Support	.662	4.675	.000
R2	.438		
F	21.85		
Sig	.000		

Notes: Predictor in Model (Permanent): Organisational Support. Dependable Variable: UTAUT model

Based on Table 5, the findings showed organisational support and its influence towards the use of E-learning through UTAUT model (R2= .438, k= .000). This proved that organisational support significantly influenced the use of E-learning among the academic staffs which if the organisational support in each higher learning institution is improved, directly it will increase the tendency of E-learning usage among the academic staffs at 66 percents. These findings explained on how the technical or infrastructure aspects of organisational support influenced the usage of teaching and learning platform of a lecturer or academic staff.

5. Discussions

Unified Theory of Acceptance and Used of Technology (UTAUT) Model by Venkatesh et al., (2016) plays an important role in viewing the level of E-learning usage in this study. The findings of this study through UTAUT model proved the existence of high tendency for respondents to use E-learning in the teaching and learning process. There are four dimensions in the UTAUT model; performance expectation, effort expectation, social influence, and facility's condition. Looking at the findings of the study, dimension with the highest level was social influence (mean= 4.01) followed by performance expectation dimension (mean= 3.88) and effort expectation (mean= 3.82) while facility's condition was at average level (mean= 3.61). All dimensions in UTAUT model that recorded high mean levels were viewed as main factors that motivate towards the use of E-learning among the academic staffs. This study has achieved its objective, to study the level of E-learning usage among academic staffs.

Based on descriptive data, for performance expectation dimension, the item that indicated highest mean was 'I found that E-learning is useful in my works' which the mean score was 4.20, overall respondents gave perception that the use of online platform give advantages in conducting their tasks as lecturer. Next, the item 'my interaction by using E-learning will be clearer and understandable' was the item with average mean score of 3.60. while item that showed lowest mean score was 'if I use E-learning, I will get promotion opportunity' which the mean score was 3.43; respondents have the perceptions that promotion opportunity is not only depending on the use of E-learning but involving other various important factors.

Next, for the effort expectation dimension, item that scored highest mean was 'learning to handle E-learning is easy for me' which the mean score 3.83; respondents involved gave perceptions that it was easy for them to earn and be expert on the usage of E-learning. While, item with lowest mean score was ' I found that E-learning is easy to be used' which the score was 3.76; respondents gave perceptions that teaching and learning platform that is easy to be mastered, it is also practical and easy to be used in learning environment.

For the dimension with highest level, social influence, the item with high mean score was 'generally, university supports the usage of E-learning' with mean score of 4.36, which respondents in overall have the perceptions that online learning platform in higher learning institutions have full supports to be used as alternative towards the traditional teaching method. Average mean score was for item "the university assists me in using E-learning' where the score was 4.10. while item with lowest mean score was 'someone who is important to me will think that I have to use E-learning' with mean score of 3.63, which all respondents have the perceptions that the closest individual such as friends and family members do not influence their decisions to use E-learning as part of their tasks as lecturer in higher learning institutions.

Finally, in overall average mean of the E-learning usage level, only the facility's condition dimension that scored the average level compared to the other three dimensions that scored high level. Referring to the descriptive data, item in facility's condition that showed highest mean was 'I have tolls needed for the use of E-learning' which the mean score was 4.06, and all respondents gave perceptions that everyone who works as academic staff has the needed tools in handling E-learning in teaching and learning process. While, for item with average mean 'certain people (or groups) can be referred to assist in E-learning system issues' which the mean score was 3.70. Meanwhile, for the lowest item 'this E-learning system is not compatible with the LAN (Local Area Network) that I used' with the average mean of 2.73,

where respondents have the perceptions that all of them agreed with not all areas of the academic staff has good network coverage for online learning implementation.

Meanwhile, the second objective, to study the influence of organisational support towards the use of E-learning among academic staffs found that the first research hypothesis is accepted. Based on the research findings, overall contributions of the model that predict the use of E-learning is (R2=.438, k=.000) which 43 percents were influenced by organisational support and the remaining were other factors. 53 percents represent other factors in predicting the level of acceptance and usage. Other than that, for the coefficient value (β= .662) showed that if organisational support is well improved, the use of E-learning among the academic staffs will increase at 66 percents where if the technical and infrastructure aspects of organisational support are well prepared parallel to the needs of the academic staffs, it will directly established the tendency of using E-learning among the academic staffs.

Overall feedback form the academic staff gave the perceptions that each support such as infrastructure facilities, technical aids, and skills provided by the institutions help and motivate them to use E-learning holistically and frequently in the teaching and learning process. Parallel with the study by San Martin et al., (2020) institutional support and additional initiatives on E-learning will establish higher commitment for the lecturers to teach through online learning platform. Study by Nawi et al., (2017) also discussed on similar point where institution need to provide the needs parallel with the use of technology so that the academic staffs are satisfied and can perform better services for the institutions itself.

6. Conclusion and Implications

This pilot study has concluded that the organisational support variable increased the tendency of the academic staffs to use and accept E-learning in teaching and learning process. Based on previous studies (San Martin et al., 2020) (Nawi et al., 2017) and (Rodrigues et al., 2019) all scholars stated that support given by the organisation specifically the higher learning institutions clearly influenced the level of acceptance of technology in teaching and learning process of academic staffs. Thus, the findings of this pilot study are parallel with previous studies that stated organisational support is the significant factor that motivates the use of new technology and motivate users to adapt easily towards the digitalisation era.

Other than that, the practical aspect indicated that organisational support is essential in motivating the use and acceptance of new technology, specifically in this study which is the E-learning platform (Liu et al., 2012) (Feriady et al., 2020). Based on the discussions, it is clearly shown that when there are full organisational support in terms of technical aids or infrastructure facilities that help academic staffs in every aspects, they will not be hesitated to use E-learning as a method in conducting teaching process. An E-learning platform that is fully available and meets the needs will make it easier for academic staff to adapt and be proficient in using it. Organisational support is the important factor in assisting the efforts of academic staffs in understanding the online learning system, thus, it is important for certain parties such as the institution to ensure the organisational support is improved continuously so that the learning system such as E-learning can be used and accepted well by the

academic staffs.

In conclusion, UTAUT model dimensions used in this study are suitable to study the acceptance and use of E-learning among academic staffs. At the same time, with the use of organisational support variable, this pilot study succeeded to view that it is one of the main factors and significant to study the level of acceptance and use of new technology among academic staffs. With the full support of the organisation towards the working environment, continuous support, and infrastructure facilities that accommodate the involvement of academic staffs in E-learning, it is not impossible for the percentage of E-learning platform to increase and become the main option in future modern learning. Therefore, academic staffs have to face the challenges of the education system changes for the quality of future education.

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