



E-book Acceptance in DBC20012 Computer Application Classroom

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Abstract

Recently, e-book was used in conducting DBC20012 Computer Application course in Politeknik Ungku Omar. Their thought towards e-book usage is needed since they are the direct users who mostly use it for learning. Thus, the purpose of this study was to determine students' adoption of e-book in DBC20012 Computer Application classroom. The sample of this study was students who took DBC20012 Computer Application course at Politeknik Ungku Omar. The data was collected using questionnaire which contained 6 sections; demographic profile, behavioural intention, performance expectancy, social influence, effort expectancy and facilitating conditions. The data was analysed using descriptive statistic and correlation analysis. Result indicated that performance expectancy, social influence, effort expectancy and facilitating conditions influence the adoption of e-books. The findings of this study could help to improve DBC20012 Computer Application course delivery via e-book in accordance with the preferences and capabilities of students.

Keywords: - e-book, computer application

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1. Introduction

The Covid-19 pandemic affected many sectors, including education. It resulted in the physical closure of educational institutions. (Piramanayagam and Seal 2021). Changes in teaching and learning occurred. It was done online. At the same time, the learning material has been converted to digital learning material. One type of learning material is an e-book.

E-books were recently used in the DBC20012 Computer Application course at Politeknik Ungku Omar. It is a common core subject offered by Jabatan Perdagangan, Politeknik Ungku Omar for the Diploma in Banking and Finance, Diploma in Business Studies, and Diploma in Retail Management.

Therefore, this study was conducted to determine factors influencing the acceptance of e-book that is recently used in conducting DBC20012 Computer Application course. The effectiveness of educational

activity is determined students' perception. The activity become more beneficial when students' perception about it become more positive (Manalu, 2019). Furthermore, it is hoped that this study will provide new insights into the effectiveness of e-books in students' learning styles.

The foundation of this research is Unified Theory of Acceptance and Use of Technology (UTAUT). It has been widely accepted that the UTAUT model contributes to better understanding about the acceptance and use of technologies rather than other similar theories (Dulle and Majanja, 2011).

In the UTAUT, there are four determinants of user acceptance and usage behaviour; performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) (Ventakesh et al., 2003). These determinants will influence the behavioural intentions (Maduku, 2015; Martins et al., 2018; Okocha, 2019; Lin, 2019; Gunawan et al., 2019; Primanayagam and Seal, 2021).

According to Okocha (2019), PE is the students' degree of believe that e-book will improve academic performance and the learning process become better. During the pandemic, the class is conducted online. Therefore, the students do not have an option for printed books or access to the library. They had to choose for e-books (Primanayagam and Seal, 2021).

SI is the influence of surrounding groups believe about the e-book usage (Venkatesh et al., 2003). Surrounding groups consist of peers, colleagues, and the media (Okocha, 2019). SI lead to the intention of usage. Abbad (2020) stated that SI is a significant determinant in the usage of new technology-based products and innovations in a study of hospitality students, e-book is considered to create suitable learning environment (Primanayagam and Seal, 2021).

According to Okocha (2019), EE is the degree of students believe that the adoption of e-books will be free of effort. Primanayagam and Seal (2021) in their study, considers the EE as students' level of expectation regarding easily understand their subject using e-book. This includes their effort to access the e-book compared to printed books.

According to Venkatesh et al. (2003), FC is the degree to which an individual believes that an organisational and technical infrastructure exists to support the use of the system. Primanayagam and Seal (2021) in their study stated that FC is the accessibility of e-books which are either freely downloadable from various websites or institutional support for providing e-books to the students.

Research by Hsu et al. (2017) and Okocha (2019) on electronic book adoption has shown that PE, EE, SI and FC influence the adoption of e-books.

However, these findings differed from Yoo and Roh (2016); Primanayagam and Seal (2021) study in which EE did not influence intention to adopt electronic books. Lin (2019) conducted a study on e-book usage at Fujian, China. Researcher stated that PE has no positive impact on users' intentions to use e-books. Although the e-books can improve user reading performance, the user does not necessarily more willing to use e-books. Lin (2019) also found that SI has no positive impact on users' intentions to use e-books. It can be interpreted that surrounding groups do not necessarily influenced user on e-book usage. While, EE and FC have significant influence on e-book usage intention. Therefore, the following hypotheses were developed:

H₁: Performance expectancy has positive effect on behavioural intention to use e-book.

H₂: Social influence has positive effect on behavioural intention to use e-book.

H₃: Effort expectancy has positive effect on behavioural intention to use e-book.

H₄: Facilitating conditions has positive effect on behavioural intention to use e-book.

2. Methodology

The respondent of this study consists of DBC20012 Computer Application students for Session II: 2021/2022. The questionnaires were distributed to 118 respondents using online mode. A total of 102 filled questionnaires were received.

The questionnaire consists of 2 sections. Section A collect demographic profile data. Section B collect the data related to construct under the study. The questionnaire was adapted and modified from Primanayagam and Seal (2021). The questionnaire was measured using 4 points Likert scale where 1 denote strongly disagree and 4 denote strongly agree. The data was analysed using Statistical Package for the Social Sciences (SPSS).

Correlation analysis was conducted to test the hypotheses developed in this study. The rule of thumb for interpreting the size of a correlation coefficient by Hair et al. (2010b) is used as guideline. The size of correlation 0.00 to 0.20 (-0.00 to -0.20) is interpreted as weak to no relationship, 0.21 to 0.40 (-0.21 to -0.40) interpreted as weak positive (negative) correlation, 0.41 to 0.60 (-0.41 to -0.60) interpreted as moderate positive (negative) correlation, 0.61 to 0.80 (-0.61 to -0.80) interpreted as strong positive (negative) correlation and 0.81 to 1.00 (-0.90 to -1.00) interpreted as very strong positive (negative) correlation.

3. Result and Discussion

The primary objective of this study is to identify factors influencing e-book acceptance. There were 102 respondents of this study. 28% (27) of the respondents were male and other 73% (74) of the respondents were female. In terms of age, 100% (102) of the respondents were 18-21 years old. DKB1 consist of 33% (32) of the respondents, DPM1 consist of 35% (34) of the respondents and DRM1 consist of 33% (34) of the respondents.

Table 1. Demographic profile

Items		Frequency	Percentage
Gender	Male	28	27
	Female	74	73
Age	18-21	102	100
	22 and above	0	0
Program	DKB1	33	32
	DPM1	35	34
	DRM1	34	33

Correlation analysis was employed to test the hypotheses. For H_1 : *Performance expectancy has positive effect on behavioural intention to use e-book*; showed a significant strong positive correlation between these variables ($r=0.650$). Therefore, H_1 was accepted. It can be concluded that an increasing in performance expectancy will cause the increasing in behavioural intention to use e-book. This study indicates that students' belief that the e-book titled Lab Exercise: Microsoft Word, Excel, PowerPoint are valuable, useful and increases their productivity. It can substitute the printed book. The finding of this study is consistent with Chang et al., (2015); Foluke (2016); Bhimasta & Suprpto (2016); Hsu et al. (2017); Gengfu and Chotiyaputta (2019); Okocha (2019); Pramanayagam and Seal (2021). However, PE has no positive impact on users' intentions to use e-books according to Lin (2019).

For H_2 : *Social influence has positive effect on behavioural intention to use e-book*; showed a significant moderate positive correlation between these variables ($r=0.596$). Therefore, H_2 was accepted. It can be concluded that an increasing in social influence will cause the increasing in behavioural intention to use e-book. This study indicates that students may be easily influenced by people around them in their acceptance towards e-book. People around them are those important to them such as lecturer and friends. The ability of lecturers in engaging, utilizing, and promoting the e-book platform is important in students' acceptance of e-book (Arham et al., 2021). The finding of this study is consistent with Hsu et al. (2017); Gengfu and Chotiyaputta (2019); Okocha (2019); Pramanayagam and Seal (2021). However, Chang et al., (2015); Foluke (2016); Lin (2019); found that SI has no positive impact on users' intentions to use e-books.

For H_3 : *Effort expectancy has positive effect on behavioural intention to use e-book*; showed a significant strong positive correlation between these variables ($r=0.708$). Therefore, H_3 was accepted. It can be concluded that an increasing in effort expectancy will cause the increasing in behavioural intention to use e-book. It is found that the skill required to use e-book is easy for students. The e-book also easy to use, easy to learn on how to use it and the e-book is easily understanding. The finding of this study is consistent with Hsu et al. (2017); Foluke (2016); Okocha (2019); Pramanayagam and Seal (2021). However, these findings differed from Chang et al., (2015); Yoo and Roh (2016); Pramanayagam and Seal (2021) study in which effort expectancy did not influence intention to adopt electronic books.

For H_4 : *Facilitating conditions has positive effect on behavioural intention to use e-book*; showed a significant strong positive correlation between these variables ($r=0.664$). Therefore, H_4 was accepted. It can be concluded that an increasing in facilitating condition will cause the increasing in behavioural intention to use e-book. This study revealed that the facilitating conditions such as high internet access and bandwidth is very important. It will make the e-book easily accessible. The

finding of this study is consistent with Nasri & Abbas (2015); Foluke (2016); Hsu et al. (2017); Voravickositt (2017); Gengfu and Chotiyaputta (2019); Okocha (2019); Pramanayagam and Seal (2021). However, there is no significant effect of FC on e-book acceptance according to study conducted by Chang et al., (2015); Arham, et al., 2021.

The finding of this study is consistent with Hsu et al. (2017) and Okocha (2019) that stated PE, EE, SI and FC influence the adoption of e-books.

This study confirmed the direct impact of behavioural intentions on students' usage of the e-book. This is in accordance with the study conducted by Pramanayagam and Seal (2021) and Martins et al., (2018).

Table 2. Correlation analysis

Items	1	2	3	4	5
Performance expectancy	1	0.657	0.531	0.621	0.650
Effort expectancy	0.657	1	0.575	0.669	0.708
Social influence	0.531	0.575	1	0.693	0.596
Facilitating conditions	0.621	0.669	0.693	1	0.664
Behavioural intention	0.650	0.708	0.596	0.664	1

4. Conclusion

This study concludes that the hypotheses stated were accepted; EE, PE, FC and SI positively influence behavioural intentions to use e-book. EE was the most influential factor. Followed by FC, PE and SI.

The respondents of this study were DBC20012 Computer Application students for Session II: 2021/2022 at Politeknik Ungku Omar. Therefore, the findings could not be generalized to other population from another institution. Different findings may be obtained when it is conducted at another institution. It is recommended for future research to include the population from another institution that offer DBC20012 Computer Application.

It is suggested that these elements which are EE, FC, PE and SI are included in e-book usage during DBC20012 Computer Application classroom. For example, the institution should provide good internet access. Besides that, lecturers should engage, utilizing, and promoting the e-book usage to minimized or eliminated the drawbacks of using e-book. Overall, the findings of this study could help to improve DBC20012 Computer Application course delivery via e-book in accordance with the preferences and capabilities of students.

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