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## The Nexus Between Factors Affecting eBook Acceptance and Learning Outcomes in Malaysia\*

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### Abstract

This study aims to investigate factors affecting eBook acceptance and learning outcomes among students experiencing online distance learning. As conventional textbooks are now switched into eBooks, the effects of contextual factors including lecturer, student computer competency, content and design of the course, access ability, infrastructure, and university support on eBook acceptance and learning outcome needs to be evaluated. The sample of this study is represented by students at the Universiti Teknologi MARA, City Campus Melaka, undertaking 'strategic management course'. Non-probability random sampling was selected as the sampling technique and a purposive sampling method was chosen to select the samples. The samples comprised 171 students randomly selected through Google Form. The questionnaire data was analyzed by using PLS-SEM. The results indicated that these factors contributed 62.3% variations in the eBook acceptance and 67.1% variations in the learning outcomes. The strongest factor affecting both dependent variables was content and design of course. Managerial implication suggested that the content for all courses taught through the eBook platform needs to be revisited and improved in accordance with the mode of online deliverance. Tutorial on how to navigate the eBook platform is important to all users as this would enhance acceptance and produce better learning outcomes among students.

**Keywords:** eBook Acceptance, Learning Outcome, Open Distance Learning, Malaysia

**JEL Classification Code:** I29, L29, O30

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## 1. Introduction

The COVID-19 pandemic has shifted all conventional methods of teaching at higher learning institutions to an online mode. Since online learning was not originally developed and planned, these online approaches are difficult to adapt to the stakeholders involved, difficult to implement, and pose several challenges (Bozkurt & Sharma, 2020).

The pandemic has affected universities. These effects were on research, seminars and conferences, outbound and inbound mobility, and delivery of education. The challenges of e-learning were related to the use of technology and the ability of educators to deliver the subject matter online. Despite the fact that universities had used e-learning as an additional method before the pandemic, the majority of them were found to be unprepared to use the online method. Thus, optimizing the e-learning process is required for proper education delivery.

Strategic Management is a subject that is recently being offered among students of Universiti Teknologi MARA

(UiTM), Malaysia through an eBook platform. This subject is a compulsory subject for almost majority of Bachelor Degree Students at the Faculty of Business & Management. Not only the students but the lecturers involved in teaching this subject also had to adapt and learn how to apply and teach this subject via the eBook platform.

The purpose of this study was to look into the effectiveness of eBooks as an e-learning method among university students. Several previous studies have been conducted to identify the potential of eBooks in supporting online learning. For example, Shiratuddin et al. (2003) discovered that using eBooks can help distance learners gain access to more teaching and learning materials. A study by Lam et al. (2010) investigated the usability and usefulness of eBooks in an e-learning environment and discovered that using e-learning can help to increase access (more readings, multimedia, and portable resources), enable remote access, and improve reading time.

This research intends to answer the following research questions: 1) What are the impacts of contextual factors on eBook acceptance of Strategic Management course among students? 2) What are the impacts of contextual factors on the learning outcome of Strategic Management course among students? It is expected that the outcome of this study would improve the educational quality of higher educational institutions in Malaysia as this is embedded in the Malaysia Education Blueprint (MEB) 2015–2025 (Higher Education). Furthermore, it is hoped that this study will provide new insights into the effectiveness of eBooks in students' learning styles, thus serving as a guideline for future research in the Malaysian eBook project, as there has been limited research in this area.

## 2. Literature Review

### 2.1. Theoretical Background of eBook and E-learning

Recently, e-learning systems and the use of eBook platforms have emerged as important and essential platforms in the educational sector. Schools and universities are all affected by the implementation of online learning. Many people are turning to the eBook platform since it is recognized as one of the modern technologies that can introduce the subject matter in a more appealing and interactive way than the traditional technique of teaching. Regardless of positive arguments being presented on the eBook platform, researchers have contended that this is not the preferred choice by university students (Shepperd et al., 2008).

Technology has emerged as an important point of discussion among educators as a good and effective tool for teaching people. Somehow, research on the use of eBooks as a learning strategy in the classroom, particularly at the university level, is still limited. eBooks are still considered

novel in classrooms because they have only recently made their way into the teaching and learning environments of some countries and places (Embong et al., 2012).

In 2012, Kang et al. (2009) conducted an Internet survey amongst students and faculty at five universities located in the United States where e-textbook projects were implemented. Their findings revealed that students were open to using eBooks because they were less expensive than paper books; however, many students reported that eBooks were not used to interact with other students or professors and that navigating the eBooks was difficult.

As a result, the current research adopts the unified theory of acceptance and use of technology (UTAUT) model of Pham and Tran (2020) to investigate the acceptance and learning outcomes of eBooks in higher education during the COVID-19 pandemic. The majority of researchers used UTAUT as a foundational theory to investigate e-learning system acceptance (Park & Lee, 2021). The UTAUT model was chosen for this study because it covered the most factors influencing e-learning acceptance, such as performance expectation, effort expectation, social influence, and facilitating conditions. In this study, the researchers will use six factors affecting eBook acceptance and learning outcomes which are lecturer, computer competency of the student, content & design of course, and access ability, infrastructure, and university support.

### 2.2. eBook Acceptance

The accessibility and affordability of some of the technologies, as well as access to the Internet, have all contributed significantly to youths' use of mobile technology, both in and out of school. Many of them use them in school to access knowledge for class assignments and reading. Librarians have observed that over the years a higher percentage of students often gather around the library for Internet access to download information materials. Much of the time, they tend to use their smartphone applications for downloading and reading at leisure, rather than using the library's facilities (Akpokodje & Ukwuoma, 2016). In this research, five factors influence the acceptance of e-learning through eBook which are discussed below.

### 2.3. Learning Outcomes

There are numerous benefits from using e-learning, especially eBooks, in both organizations and classrooms. The success of the e-learning system could be evaluated similarly to any other information system. The success of the e-learning system may include project success, technology acceptance, users' satisfaction, learning outcome, and knowledge transfer. In this study, eBook success was described as eBook acceptance and student

learning outcomes. Learning outcomes are statements that describe the knowledge or skills students should acquire by the end of a particular assignment, class, course, or program, and help students understand why that knowledge and those skills will be useful to them. They focus on the context and potential applications of knowledge and skills, help students connect learning in various contexts, and help guide assessment and evaluation (Nehari & Bender, 1978).

## 2.4. Lecturers

Over the years, lecturers have recognized technology as a valuable and efficient tool for teaching online. Nonetheless, research on the use of eBooks as learning materials in classrooms, especially in schools, is still in its early stages (Embong et al. 2012). The students' eBook acceptance and learning outcomes depend on how effective are the lecturers in promoting, engaging, utilizing, and promoting the eBook platform. Selim (2007) stated that lecturers play important roles in all of those tasks and could generate positive effects. As a consequence, hypotheses H1 and H7 can be described as follows:

*H1: There is a positive effect of the lecturer on eBook acceptance.*

*H7: There is a positive effect of the lecturer on the learning outcomes.*

## 2.5. Student Computer Competency

According to Soong et al. (2001), there is a significant relationship between student computer competency and eBook acceptance. This is also supported by Selim (2007). Furthermore, he confirmed the positive effect of machine competency on learners' learning outcomes using an e-learning framework. As a result, hypotheses H2 and H8 are proposed as follows:

*H2: There is a positive effect of computer competency of students on eBook acceptance.*

*H8: There is a positive effect of computer competency on learning outcomes.*

## 2.6. Content and Design of Course

The term content and design of courses refer to the perception of students on the depth, continuity, and relevancy of the course design. Previous studies (Selim, 2007) demonstrated that this factor would positively influence students' e-learning acceptance outcomes of learning. Thus, hypotheses H3 and H9 can be described as follows:

*H3: There is a positive effect of content and design of courses on eBook acceptance.*

*H9: There is a positive effect of content and design of courses on the learning outcomes.*

## 2.7. Access Ability

The ease with which the eBook platform can be accessed is referred to as access ability. Selim (2007) demonstrated that access ability could be seen by the ease of connecting to the Internet and accessing the university campus's e-learning website. This skill enables students to efficiently use the e-learning system and improve learning outcomes by e-learning. Thus, hypotheses H4 and H10 can be described as follows:

*H4: There is a positive effect of access ability on eBook acceptance.*

*H10: There is a positive effect of access ability on the learning outcomes.*

## 2.8. Infrastructure

It is undeniable that the successful implementation of online learning via eBook platform depends upon the infrastructure. There are three main categories of infrastructure, which include technical, organizational, and the social factors (Keramati et al., 2011). This study will focus only on the technical aspect of infrastructure that includes software, hardware, internet access, and bandwidth. Thus, hypotheses H5 and H11 can be described as follows:

*H5: There is a positive effect of infrastructure on eBook acceptance.*

*H11: There is a positive effect of infrastructure on learning outcomes.*

## 2.9. University Support

Technical and help-desk service, library service, and supporting department are among the criteria representing university support. These support services are important towards the success of the application of eBook platform and e-learning. Selim (2007) contended that effective technical support provided by schools helped to improve the acceptance of the e-learning system that led to improved learning outcomes. Thus, hypotheses H6 and H12 can be described as follows:

*H6: There is a positive effect of university support on eBook acceptance.*

*H12: There is a positive effect of university support on learning outcomes.*

## 3. Research Methodology

This research is quantitative. The unit of analysis is individuals represented by students undertaking Strategic Management course via eBooks at UiTM Melaka. Non-probability random sampling was used as a sampling

technique and purposive sampling is chosen as the sampling method. There were 500 students enrolled in this particular subject last semester, representing the population of this research. To calculate the sample size G\*Power is used in this study. Based on G\*Power with eight predictors, the effect size of 0.15, alpha value of 0.05 (95% Confidence), and the beta value ( $\beta$ ) 0.20 (80%), the minimum sample size comes to 109 students.

As for the research instruments, a survey questionnaire is designed for data collection. To ensure the validity of the questionnaire, all items were adapted from Pham and Tran (2020). There are three sections in the survey questionnaire. Section A focuses only on the demographic questions. Section B focuses on questions relating to the four independent variables of this research which include lecturers, computer competency of students, content and design of the course, and access ability. Section C focuses on questions relating to the dependent variables of this research. All questions in Section B and C were using the 5-point Likert Scale. Likert scale is a type of psychometric response scale in which responders specify their level of agreement to a statement typically in five points: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

This research also has been granted approval from the ethics committee. In this study, the PLS-SEM was selected to predict the contextual factors affecting eBook acceptance and the learning outcome of strategic management course among students at UiTM Melaka during online distance learning (ODL). The PLS path model consists of two elements: the measurement model and the structural model. The measurement model shows the relationship between the construct and the indicator variable, whereas the structural model represents the construct and displays the relationship between constructs.

## 4. Results

### 4.1. Demographic Profile

The Google link to the questionnaire was given to all 500 students. 171 responses were recorded by the participants during the data collection period. This exceeds the minimum sample size required for this study and yielded a 34.2% response rate. In terms of age, the majority of the respondents were aged between 23 to 24 years old (77.8%,  $n = 133$ ), followed by those aged between 20 to 22 years old (17.5 %,  $n = 30$ ), and then 25 to 26 years old (4.7%,  $n = 8$ ). Of the respondents, 88.9% were females ( $n = 152$ ) and 11.1% were males ( $n = 19$ ). Furthermore, the Human Resource Management program has 36.8% ( $n = 63$ ) of the participants who responded to the questionnaires, followed by the Finance program with 15.2% ( $n = 48$ ), International Business program with

19.9% ( $n = 34$ ), and Office System Management program with 28.1% ( $n = 26$ ).

### 4.2. Assessing Structural Model Results

This study first examines the structural model for multicollinearity before conducting structural model analyses. The reason for this is that if the estimation involves critical levels of collinearity among the predictor's construct, the path coefficients may be biased. Table 1 presents the outcome of the lateral collinearity test. The variance inflation factor (VIF) is used as an indicator of multicollinearity. A rule of thumb commonly used in practice is if a VIF is  $>10$ , you have high multicollinearity. The inner VIF values for the independent variables that must be assessed for lateral multicollinearity (lecturer, student competency, content and design course, access ability, infrastructure, and university support) are less than 5, indicating that lateral multicollinearity is not a problem for this study.

### 4.3. Assessing Reflective Measurement Model

The reflective measurement model evaluates two types of validity which are convergent validity and discriminant validity. Discriminant validity is the degree to which two conceptually similar concepts are distinct. In this study, the discriminant validity was assessed by using Fornell and Larcker's criterion. Fornell and Larcker (1981) indicated that a latent variable should explain more variance on its own indicators than the variance of other latent variables. Table 2 shows that all reflective constructs have sufficient or satisfactory discriminant validity, where the square root of AVE (diagonal) is greater than the correlations (off-diagonal).

Convergent validity refers to the extent to which indicators of a specific construct converge or share a high proportion of variance (Hair et al., 2010). Based on Hair et al. (2017), the factor loadings and Average Variance

**Table 1:** Lateral Collinearity Assessment

Construct	eBook Acceptance (VIF)	Learning Outcomes (VIF)
Lecturer	2.159	2.159
Student computer competency	2.491	2.491
Content and design course	3.988	3.988
Access ability	4.287	4.287
Infrastructure	2.692	2.692
University support	3.311	3.311

**Table 2:** Discriminant Validity

	DV1	DV2	IV1	IV2	IV3	IV4	IV5	IV6
DV1	<b>0.860</b>							
DV2	0.841	<b>0.879</b>						
IV1	0.619	0.661	<b>0.793</b>					
IV2	0.642	0.697	0.604	<b>0.825</b>				
IV3	0.750	0.762	0.687	0.736	<b>0.826</b>			
IV4	0.663	0.669	0.499	0.649	0.743	<b>0.795</b>		
IV5	0.518	0.543	0.396	0.564	0.590	0.787	<b>0.844</b>	
IV6	0.705	0.733	0.667	0.679	0.784	0.721	0.543	<b>0.864</b>

Extracted (AVE) are used to analyze convergent validity. The results were summarized in Table 3. The indicator loadings, composite reliability, and AVE of the reflective construct are shown in Table 3. All loadings are found to exceed the recommended value of 0.5. According to the rule of thumb, the loading values equal to and greater than 0.5 are acceptable represents that the construct extracts sufficient variance from that variable. Items DV1\_1 and DV2\_3 with low loading were removed. Furthermore, all eight constructs meet the threshold value for composite reliability and AVE, with all composite reliability greater than 0.7 and all AVEs greater than 0.5, as Hair et al. (2017) proposed. Therefore, it can be concluded that all eight constructs meet reliability and convergent validity requirement at this stage.

As a result, the proposed conceptual model was found to be acceptable, with confirmation of adequate reliability, convergent validity, discriminant validity, and research model verification. The next step is to address the assessment of the structural model results involving examination of the relationship between constructs.

In this study, there are 12 direct hypotheses developed between the constructs. To test the significance level, *t*-statistics for all paths are generated using SmartPLS 3.0 using bootstrapping functions with 5000 subsamples with no sign changes. Based on the assessment of the path coefficient presented in Table 4, out of the 12 direct hypotheses proposed, eight relationships are found to have a *t*-value  $\geq$  of 1.645, thus significant at either 0.05 or 0.1 level significance. Specifically, the predictors lecturer ( $\beta = 0.141$ ,  $p < 0.05$ ), content and design course ( $\beta = 0.327$ ,  $p < 0.05$ ), access ability ( $\beta = 0.178$ ,  $p < 0.1$ ) and university support ( $\beta = 0.173$ ,  $p < 0.05$ ) are positively related to eBook acceptance, which explains 62.3% of variances in eBook acceptance. In addition, it is also found that the predictors lecturer ( $\beta = 0.180$ ,  $p < 0.05$ ), student computer competency ( $\beta = 0.183$ ,  $p < 0.05$ ), content and design course ( $\beta = 0.250$ ,  $p < 0.05$ ) and university support ( $\beta = 0.198$ ,  $p < 0.05$ ) are positively related to learning outcomes, which

explains 67.1% of variances in learning outcomes. The  $R^2$  values of 62.3% and 67.1% are above the 0.26 values proposed by Cohen (1988), which indicates a substantial model.

Next, the effect sizes ( $f^2$ ) are assessed. In order to measure the  $f^2$ , this study used a guideline as proposed by Cohen (1988). The values of 0.02, 0.15, and 0.35 represent small, medium, and large effects respectively. From Table 4, the result shows that student computer competency (0.009) and infrastructure (0.000) have a very small effect in producing the  $R^2$  for eBook acceptance. In addition, the result that indicates lecturer (0.024), content and design course (0.071), access ability (0.020), and university support (0.024) have a small effect in producing the  $R^2$  for eBook acceptance. Furthermore, the results for access ability (0.009) and infrastructure (0.001) have a very small effect in producing the  $R^2$  for learning outcomes. Besides, lecturer (0.046), student competency (0.041), content and design course (0.048), and university support (0.036) indicate a small effect in producing the  $R^2$  for learning outcomes.

Finally, the predictive relevance of the model is assessed by using the blindfolding procedure. Based on Hair et al. (2017), if the  $Q^2$  value is larger than 0, the model has predictive relevance for a specific endogenous construct. Table 4 shows that the  $Q^2$  values for eBook acceptance ( $Q^2 = 0.430$ ) and learning outcomes ( $Q^2 = 0.499$ ) are more than 0, which was higher than the threshold limit indicating that the model has sufficient predictive relevance.

## 5. Discussion

Countries all over the world are currently experiencing unprecedented conditions as a result of the coronavirus pandemic (Hutahayan, 2021). This pandemic has had a significant impact on education sectors, particularly schools, universities, teachers, and students. This has piqued the researchers' interest in going deeper into these issues. Investigating students' perceptions of their online learning experiences during the COVID-19 pandemic revealed that

**Table 3:** Reflective Measurement Model

Construct	Items	Convergent Validity		Internal Consistency Reliability
		Outer Loadings > 0.4	AVE > 0.5	CR > 0.7
IV 1 (Lecturer)	IV1_1	0.777	0.63	0.921
	IV1_2	0.554		
	IV1_3	0.847		
	IV1_4	0.829		
	IV1_5	0.845		
	IV1_6	0.791		
	IV1_7	0.865		
IV2 (Student Computer Competency)	IV2_1	0.880	0.68	0.913
	IV2_2	0.581		
	IV2_3	0.902		
	IV2_4	0.887		
	IV2_5	0.833		
IV3 (Content and Design of Course)	IV3_1	0.812	0.68	0.928
	IV3_2	0.874		
	IV3_3	0.809		
	IV3_4	0.888		
	IV3_5	0.742		
	IV3_6	0.825		
IV4 (Access Ability)	IV4_1	0.772	0.63	0.911
	IV4_2	0.877		
	IV4_3	0.860		
	IV4_4	0.725		
	IV4_5	0.688		
	IV4_6	0.831		
IV5 (Infrastructure)	IV5_1	0.663	0.71	0.907
	IV5_2	0.897		
	IV5_3	0.892		
	IV5_4	0.899		
IV6 (University Support)	IV6_1	0.825	0.75	0.921
	IV6_2	0.839		
	IV6_3	0.91		
	IV6_4	0.877		
DV1 (eBook Acceptance)	DV1_2	0.887	0.74	0.894
	DV1_3	0.917		
	DV1_4	0.769		

**Table 3:** Continued

Construct	Items	Convergent Validity		Internal Consistency Reliability
		Outer Loadings > 0.4	AVE > 0.5	CR > 0.7
DV2 (Learning Outcomes)	DV2_1	0.874	0.77	0.945
	DV2_2	0.858		
	DV2_4	0.882		
	DV2_5	0.88		
	DV2_6	0.903		

Items Removed: DV1\_1 and DV2\_3.

**Table 4:** Structural Model Analysis

Hypothesis	Construct	t-statistics	p-values	Decision	R <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>
H1	IV1–DV1	2.136**	0.033	Supported	0.623	0.024	0.430
H2	IV2–DV1	1.189	0.234	Not Supported		0.009	
H3	IV3–DV1	3.622***	0.000	Supported		0.071	
H4	IV4–DV1	1.889*	0.059	Supported		0.020	
H5	IV5–DV1	0.221	0.825	Not Supported		0.000	
H6	IV6–DV1	2.205**	0.027	Supported		0.024	
H7	IV1–DV2	2.453**	0.014	Supported	0.671	0.046	0.499
H8	IV2–DV2	2.450**	0.014	Supported		0.041	
H9	IV3–DV2	2.595**	0.009	Supported		0.048	
H10	IV4–DV2	0.991	0.322	Not Supported		0.009	
H11	IV5–DV2	0.259	0.796	Not Supported		0.001	
H12	IV6–DV2	2.197**	0.028	Supported		0.036	

they had a positive learning experience with e-learning due to its assistance and usefulness during the pandemic crisis (Allo, 2020).

Thus, due to the pandemic, all courses began to recognize the relevance of the eBook, and individuals and organizations began to use it for academic and leisure purposes. In the education industry, the adoption of eBooks has opened up a new communication channel. A study conducted by Roslina et al. (2003) showed that most of the respondents are willing to do their assignment with the use of eBook as opposed to the conventional methods. However, after previously implementing all classes through the traditional method or face-to-face, the success of the transition to e-learning systems, particularly in the eBook platform experience by students, has yet to be investigated. Pham and Huynh (2017) contended that it is a difficult task to ensure the success of an e-learning system. Despite the evidence

that e-learning is an effective method of learning especially when using eBooks, there is scant evidence about what is already working, particularly from a Malaysian perspective. The existing literature lacks a theoretical approach to understand what predicts the use of eBooks as well as their functions and outcomes.

Based on the findings, it can be concluded that factors such as lecturers (H1 & H7), content and design of course (H3 & H9), and university support (H6 & H12) have positive effects on eBook acceptance and learning outcomes. These findings indicated the important roles of these three factors in ensuring the successful implementation of the eBook platform and the effectiveness of online learning. The difficulties of adapting to online learning could be moderated and minimized if the lecturers are able to convince and engage students in an interactive teaching environment; the faculty takes initiatives to revamp the course content (slides, media information, case studies, and assessments)

to suit the needs of an online mode; and the university support especially technical support for adapting to the eBook platform is provided to the students. A previous study by Muhsin et al. (2020) highlighted that lecturers' teaching quality and learning facilities are significant predictors of student satisfaction.

Access ability significantly affects eBook acceptance (H4) but not the learning outcomes (H10). It is understandable that access ability has a big impact on students' ability to use and understand the eBook platform, even if it has no bearing on their learning outcomes. The students were provided other means to complete all of their assignments should they have difficulties accessing the eBook platform.

Student computer competency has no significant effect on eBook acceptance (H2), but it has a significant positive effect on learning outcomes (H8). This finding is contrary to the study findings of Pham and Tran (2020). This indicates students lack confidence when using the eBook platform for strategic management courses. Perhaps more training should be given to students to increase their confidence to use any online platform and increase their acceptance level in the future. However, there is no significant effect of infrastructure (H5 & H11) on eBook acceptance and learning outcomes.

The findings also indicated that the strongest factor affecting eBook acceptance is the course content and design. This is followed by, access ability, university support, and lectures. Also, the strongest factor affecting learning outcomes is the course content and design. This is followed by university support, student computer competency, and lecturer.

## 6. Implications

Thus, there are three managerial implications suggested ensuring an effective application of the eBook platform. First, the faculty needs to continuously revise and strengthen the content and design of online teaching for the strategic management course since it has been proved to be the most important factor affecting the eBook acceptance and learning outcome of the strategic management course. As the mode of teaching has turned into online teaching, the content especially assessments need to be modified to suit online teaching.

Second, the faculty needs to focus on providing training or briefing to all students undertaking the strategic management course at the very beginning of every semester. Tutorial videos on how to navigate the eBook platform being used for this course could improve the acceptance of the eBook platform among students. The support from the university in the form of technical support also could enhance a better acceptance among students towards the eBook platform.

Third, there were some students who were having difficulties accessing online learning. Therefore, the support from the university such as allowing those in need to use the college Internet seems to be very helpful and could improve the learning outcomes among the students.

## 7. Conclusion

Since the usage of eBooks for this course was recently introduced, this research is expected to shed light on eBook acceptance and student learning outcomes toward the strategic management course. To conclude, 62.3% of the variations in eBook acceptance could be explained by the combination of lecturers, content, and design of the course, access ability, and university support. Whereas, 67.1% of the variations in the learning outcomes could be explained by the combination of lecturers, student computer competency, content and design of the course, and university support. It is intended that the understanding developed as a result of this research will fill in the gaps among students at the UiTM Melaka branch. Identifying contextual elements that contribute effectively to eBook acceptance and learning outcomes could help the program, faculty, and campus improve course delivery to meet the preferences and capabilities of students.

This study is not without limitations. First, is the sample size. Perhaps future research should include more samples of students in different branches all over the country. Engagement from more samples and branches would provide a better generalization of the findings. Second, it is suggested that future research measure the demographic (age, gender, and program) effect on eBook acceptance and learning outcomes.

## References

- Akpokodje, V., & Ukwuoma, S. C. (2016). Evaluating the impact of ebook on reading motivation of students of higher learning in Nigerian Universities. *IFLA World Library and Information Congress, 82nd IFLA General Conference and Assembly*, Columbus, Ohio, United States of America, 13–19 August 2016 (pp. 1–15). <http://library.ifla.org/1506/1/189-akpokodje-en.pdf>
- Allo, M. D. G. (2020). Is online learning good in the midst of the COVID-19 Pandemic? The case of EFL learners. *Journal of Sinesthesia*, 10, 1–10. <https://doi.org/10.11251/jos.2020.07.114>
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to coronavirus pandemic. *Asian Journal of Distance Education Asian Journal of Distance Education*, 15(1), 1–6. <https://doi.org/10.5281/zenodo.3778083>
- Byrne, B. M. (2016). *Structural equation modeling with AMOS basic concepts, applications, and programming* (3<sup>rd</sup> ed.). New York: Routledge.

- Cohen, J. (1988). *Statistical power analysis* (2<sup>nd</sup> ed.). Hillsdale NJ: Erlbaum.
- Embong, A. M., Noor, A. M. Hashim, H. M., Ali, R. M., & Shaari, Z. H. (2019). E-books as textbooks in the classroom. *European Journal of Dentistry*, 13(1), 53–57. <https://doi.org/10.1016/j.sbspro.2012.06.903>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modeling in the Journal of Advertising: Review and recommendations. *Journal of Advertising*, 46(1), 163–177. <https://doi.org/10.1080/00913367.2017.1281777>
- Hutahayan, B. (2021). The effect of changes of learning systems on learning outcomes in COVID-19 pandemic conditions. *Journal of Asian Finance, Economics, and Business*, 8(3), 695–704. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0695>
- Kang, Y. Y., Wang, M. J. J., & Lin, R. (2009). Usability evaluation of e-books. *Display*, 30(2), 49–52. <https://doi.org/10.1016/j.displa.2008.12.002>
- Keramati, A., Afshari-Mofrad, M., Amir-Ashayeri, D., & Nili, A. (2011). The intervening role of infrastructures in e-learning performance. *Communications in Computer and Information Science*, 194, 646–652. [https://doi.org/10.1007/978-3-642-22603-8\\_56](https://doi.org/10.1007/978-3-642-22603-8_56)
- Lam, P., Lam, J., & Mcnaught, C. (2010). How usable are eBooks in an eLearning environment? *International Journal of Continuing Engineering Education and Life-Long Learning*, 20(1), 6–20. <https://doi.org/10.1504/IJCEELL.2010.031645>
- Muhsin, S. Nurkhin, A., Pramusinto, H., Afsari, N., & Arham, A. F. (2020). The relationship of good university governance and student satisfaction. *International Journal of Higher Education*, 9(1), 1–10. <https://doi.org/10.5430/ijhe.v9n1p1>
- Nehari, M., & Bender, H. (1978). Meaningfulness of a learning experience: A measure for educational outcomes in higher education. *Higher Education*, 7(1), 1–11. <https://doi.org/10.1007/BF00129786>
- Park, M. J., & Lee, J. K. (2021). Investigation of college students' intention to accept online education services: An application of the UTAUT model in Korea. *Journal of Asian Finance, Economics, and Business*, 8(6), 327–336. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0327>
- Pham, Q. T., & Huynh, M. C. (2017). Impact factor on learning achievement and knowledge transfer of students through e-learning system at Bach Khoa University, Vietnam. *Proceedings of the International Conference on Computing Networking and Informatics CCNI*, Cagliari, Italy, July 1–4 2020 (pp. 394–409). [https://doi.org/10.1007/978-3-319-95171-3\\_31](https://doi.org/10.1007/978-3-319-95171-3_31)
- Pham, Q. T., & Tran, T. P. (2020). The acceptance of e-learning systems and the learning outcome of students at universities in Vietnam. *Knowledge Management & E-Learning*, 12(1), 63–84. <https://doi.org/10.34105/j.kmel.2020.12.004>
- Roslina, W., Fahmy, S., Fariha, Z. Haslinda, N. Yacob, A., Sukinah, N., & Suhana, N. (2003). The Effect of E-book on Students' Learning Styles a Study in Terengganu, Malaysia. *Information and Communication Technology*, 10(4), 411–429. <https://doi.org/10.2991/icaicte.2013.45>
- Selim, H. M. (2007). Critical success factors for e-learning acceptance: Confirmatory factor models. *Computers & Education*, 49(2), 396–413. <https://doi.org/10.1016/j.compedu.2005.09.004>
- Shepperd, J. A., Grace, J. L., & Koch, E. J. (2008). Evaluating the electronic textbook: Is it time to dispense with the paper text? *Teaching of Psychology*, 35(1), 2–5. <https://doi.org/10.1080/00986280701818532>
- Shiratuddin, N. Landoni, M., Gibb, F., & Hassan, S. (2003). E-Book technology and its potential applications in distance education. *Journal of Educational Technology & Society*, 6(4), 112–124, 2003. <http://journals.tdl.org/jodi/article/view/90/89>
- Soong, B. M. H., Chan, H. C., Chua, B. C., & Loh, K. F. (2001). Critical Success Factors for Online Course Resources. *Computer and Education*, 36(2), 101–120.