

Discovering the Motivational Factors of Adopting E-Textbook in Students' Learning at University

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Abstract

With the development of the internet and information technologies, the usage of electronic textbooks that are also known as e-books, e-text books or digital books have become increasingly popular in the educational setting. Students are therefore very interested in these new technologies for their learning at universities. Besides, there is a tremendous growth of e-textbook towards study habits of undergraduate students as alternatives to printed textbooks. Since the majority of the academic institutions had experienced online learning during the pandemic of covid-19, thus the demand towards online books has also increased drastically. The main aim of this study is to identify the motivational factors that affect the students' adoption towards e-textbook in their learning at university. This study discusses the three elements which include perceived usefulness, perceived value and ease of use which could drive the students to use e-textbook. Next, the future research will further conduct an analysis in detail based on those factors to explore the potential impact towards adoption behaviour in using e-textbook among students.

Keywords: Adoption, E-Textbook, University, Information Technology, Motivation

Introduction

Technology advancement affects many aspects of an individual's life (Stone and Baker, 2013) and yet, it is vital to access all information especially among university students. Due to this, the electronic books which are also known as e-text may provide students, professors, universities, and colleges with additional tools to support process learning in the classroom. Despite the world's rapid advancement of electronic technology, different educational levels have different levels of acceptance for electronic texts (Lau, 2008). Recently, it shows a new paradigm in education particularly in developing nations, is the use of electronic books as textbooks in the classroom. According to Jesse (2014), an e-textbook is any textbook that has been designed to be given digitally and may be "consumed". Reading resources used for academic reasons called "e-textbooks" often update their content (Terpend et al., 2014) to be used in the learning session. Generally, an electronic book can aid students in retrieving and searching information in the classroom and also enhancing their interests in digital

reading. E-books are becoming a more popular alternate means of material delivery in the university (Rowlands et al., 2007). Furthermore, electronic textbooks are offered in a variety of formats to meet student knowledge, traits, abilities, and interests (Hashim & Embong, 2015). Because e-textbooks can generate and distribute information accurately and can vary greatly, electronic textbooks also may assist students and lecturers in getting a variety of information (Raible & denoyelles, 2017). Thus, the usage of electronic textbooks displays an important role in the new teaching and learning environments as they replaced the printed textbooks that have course content and a standard resource for both teachers and students (Shen et al., 2006).

Besides, as can be seen after the pandemic of Covid 19, the market for electronic textbooks is predicted to grow significantly between 2022 and 2029. The market is likely to increase over the anticipated period of time in 2022 because major publishers are adopting strategies at an increasing rate (*The Official Halie - Represent J.A Ft. Chris Money*, 2016). On the other hand, in the eBooks market it is expected that there will be 6.9 million readers by 2027, and the user penetration will be 14.4% in 2022 and 19.8% by 2027 (*EBooks - Malaysia*, 2002.). Therefore, the e-textbooks market also signifies an increasing trend among students due to several advantages they prefer for their learning. This was supported by Casselden & Pears' survey (2020), respondents were favoured e-books for a number of reasons, including portability, navigability, convenience, and the ability to serve as a preview to assess the usefulness of a particular book. Not only that, the other factors also included cost, ease of use, ease of purchase, ability to keep the book, and match to their learning style (Chulkov & VanAlstine, 2013; Dobler, 2015). E-textbooks were not positioned to replace print textbooks for university students in Taiwan, according to Lin et al (2021) and interviews, which revealed that half of the respondents still preferred print textbooks to e-textbooks. Regarding the value of e-books, students appreciated the convenience of not being constrained by physical books.

Furthermore, the most common justifications for students choosing to use e-books as a learning resource include convenience (Enis, 2018) and accessibility (Mizrachi, 2015). Walton (2014) also proved that a student's use of e-books has a positive correlation with convenience. Moreover, e-books provide advantages to students as they can be carried around and are accessible at any time (Frederick, 2015). Their content also can be searched using keywords, and the navigation is improved in a digital environment (Chen, 2011) with features like links to other digital content and the ability to copy and paste text directly from the document. Thus, the use of e-books is growing tremendously as a result of these technological advancements (Safley, 2006). However, using e-books occasionally presented challenges for the students' learning practices, and that the technology involved in accessing the e-books made it difficult for readers to fully engage with the text.

On the other hand, textbooks are very crucial for students learning at university. Nonetheless, the printed textbooks are expensive and some of the students are not able to purchase the textbook. According to Mc Gowen (2020), he stated that the publishers have been able to keep raising prices because students are captive consumers and they have to buy whatever books they are assigned. The costs for higher education textbooks and course materials have skyrocketed since 1986 (Koch, 2006) and the increase in price of the textbooks is due to the high demand from the students who are definitely buying the textbooks for their learning process at university. They spend a lot of money on the new copies of the textbooks for every

semester depending on the number of courses taken. Another issue regarding the textbooks especially at university is photocopying activities of the entire textbook (Stein et al., 2017). This activity is considered illegal but the students are struggling to pay high costs to fulfil the requirements of learning for those subjects. Although the adoption of e-learning has been widely studied, limited research has focused on e-textbooks (Connell et al., 2012). Therefore, the objectives of this study are:

1. To discover the motivational factors of using e-textbook among students at university.
2. To discuss the elements that can drive towards behavioural intention of using the e-textbook such as usefulness, value and ease of use.

Literature Review

Perceived Usefulness

Perceived usefulness is one of the fundamental antecedent factors of technology usage and adoption (Tarhini et al., 2016). Davies (1989) stated that perceived usefulness is 'how well an individual believes that their performance will be improved by using a particular system'. It is defined as the degree to which a person believes that using a particular system will enhance his or her job performance. A previous study showed that perceived usefulness has a positive influence on actual usage within the context of intranet technology (Lee & Kim, 2009). This finding is similar to results in various other studies (Kim et al., 2007; Rahman et al., 2016; Kripanont, 2007; Norzaidi et al., 2007).

Perceived usefulness of electronic textbooks or e-textbooks has influenced students' willingness to purchase e-textbooks to support their education. According to Bradshaw, (2005), electronic textbooks offer the opportunity to use different styles that suit the needs of learners. Learners need to adapt to using an electronic textbook (Thurston, 2000). Electronic textbooks can change the study habits of students to manage with technology. In addition, e-texts are assumed to be the way students' study, as it will provide a constructive connection to the perceived usefulness of e-texts. In this study, it is considered useful to help a student do well in their academic work. According to Kirkwood & Price (2005), students use e-textbooks because the student knows that the technology works and gives good benefits to the students to improve their academic performance.

Meanwhile, Johari et al (2015) found that perceived usefulness significantly influenced students' intention to use online learning and influenced students' attitudes toward accepting online learning. In addition, Farahat (2012) showed a contradictory result in his study. He noted that students realize that online learning can help them improve their learning performance. This factor indicates that perceived usefulness of online learning has increased the usage of e-textbook. Bradshaw (2005) noted that electronic textbooks provide the opportunity to employ a variety of styles suitable for learners' needs. The learner must need to adjust to the use of an electronic textbook (Thurston, 2000). Electronic textbooks can vary students' study habits to manage with technology (Schoch et al., 2006). Besides that, e-text is supposed to be the way students' study because it will give constructive contact on the seeming usefulness of e-text.

Perceived Value

Perceived value is defined as "consumers' overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given" (Zeithaml, 1988), which

reflects the trade-off between perceived benefit and perceived risk. Meaning that Perceived values are a trade-off between benefits and sacrifices associated with interaction between a customer and a product (Tzeng, 2011). Perceived value also can be determined as consumers' overall evaluation of a product's attributes. Perceived values are widely used in information technology discipline to explain how people buy and use technologies (Rakhi and Mala, 2014). Theory of consumption values is one of the most contributed studies in users' perceived values of a product (Wang, et.al, 2013). The theory argues that consumer choices are made based on five value dimensions of a product-functional value, emotional value, social value, epistemic value, and conditional value. However, epistemic value and conditional value are transient and situational factors and are excluded from many studies of consumers' buying decisions (Tseng and Teng, 2014). Although perceived values have been useful in predicting technology adoption, they do not explain why users differentially perceive values of a technology.

Furthermore, Raible & Denoyelles, (2017) stated that it is important to understand what students expressed a mixed but ill overwhelming uneasiness towards electronic textbooks. The cost advantage to students is rationally clear since e-text can be rented, available for free or for half the price of a traditional textbook. Electronic textbooks have become the most popular and important tools for students, and the price is far lower than printed textbooks (Stein et al., 2017). Students might perceive value in different ways. They may decide on a price they are not willing to exceed on any given textbook or set of course materials, regardless of the potential negative effect on their overall grade or their declining satisfaction in a given course. Thus, the perceived value on the cost of the e-textbook will be a crucial discussion as it would affect the students' motivation to use the technology in their learning at university.

Ease of Use

Convenience of using an e-textbook among students is one of the factors that increase the purchase of e-textbook. One of the factors that contributed to convenience can be explained through easy to use or perceived ease of use. Ease of use refers to any technology that is user friendly and perceived ease of use has been acknowledged as a key comparison for investigating and evaluating user adoption of a specific technology (Amin et al., 2014). These elements are explained on the motivational factors towards consumer technology use.

According to Liebana-Cabanillas et al (2014), ease of use is the ability of a person utilizing a certain technology to perform anything effortlessly or simply easily. It is thought to have a stronger influence on individual's willingness to accept new technology. Birnbaum (2004) discovered that when comparing graduate students to undergraduate students, the graduate students liked using the electronic textbook and found it easy to use and navigate. Kirkwood and Price (2005) stated that one of the inputs for student's understanding on using an e-text is how the technology is worked. Also, the majority of the students appreciated the ease of use of the e-textbook in learning (Raible & Denoyelles, 2017). In fact, the electronic textbooks are easy to use since they do not require much time to use, and students may easily search the information and refer to it as needed while the learning process is ongoing in class.

On the other hand, ease to use is one of the important factors that contributed to the motivation to purchase the e-textbook (Stone and Baker, 2013). The results in the Robert et.al

(2021) study also indicated that ease of use has a significant impact on student likelihood to purchase e-textbook. It also delivered that ease of use of e-textbook contributed to a positive attitude on purchasing an e-textbook. This result was also agreed by Masa'deh et.al (2022) in their study. Based on a study by Letchumanan and Muniandy (2013), perceived ease of use affects the attitude towards using e-books. Once a student perceives the e-books as easy to use, he or she will develop a positive attitude towards the use of e-books. Thus, perceived ease of use affects the attitude towards using e-books.

Conclusion

This study has shown that despite the market for e-textbook growing rapidly, little is known about the factors that drive the motivation of students to adopt e-textbook for their learning at university. This paper did an empirical view and revealed the major emphasis on the use and motive of these new electronic readings. With a growing field of digital sources for textbooks, students may be intelligent to apply less effort to save money. Therefore, this study focuses on the elements of students' motivational factors towards adopting e-textbook such as perceived usefulness, perceived value and ease of use. This study also enhance the motivational theories through the behaviour of using e-textbook and it was prevailed that this digital textbook makes students' reading more convenient because it can be downloaded, making the content accessible offline and visible on a variety of electronic devices. Additionally, interactive tools not found in printed educational materials are included in digital textbooks. Therefore future research will continue to focus on statistical analysis by using a survey method so that a clearer understanding and concrete data from the findings will be extracted.

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